Washington Flora Checklist

A checklist of the Vascular Plants of Washington State
Hosted by the University of Washington Herbarium

The Washington Flora Checklist aims to be a complete list of the native and naturalized vascular plants of Washington State, with current classifications, nomenclature and synonymy. The checklist currently contains **3,790** terminal taxa (species, subspecies, and varieties).

Taxa included in the checklist:

- Native taxa whether extant, extirpated, or extinct.
- Exotic taxa that are naturalized, escaped from cultivation, or persisting wild.
- Waifs (e.g., ballast plants, escaped crop plants) and other scarcely collected exotics.
- Interspecific hybrids that are frequent or self-maintaining.
- Some unnamed taxa in the process of being described.

Family classifications follow APG IV for angiosperms, PPG I (J. Syst. Evol. 54:563-603. 2016.) for pteridophytes, and Christenhusz et al. (Phytotaxa 19:55-70. 2011.) for gymnosperms, with a few exceptions. Nomenclature and synonymy at the rank of genus and below follows the 2nd Edition of the Flora of the Pacific Northwest except where superceded by new information.

Accepted names are indicated with blue type, synonyms with gray type.
Native species and infraspecies are marked with **bold-face type**.
*Non-native and introduced taxa are preceded by an asterisk.

Please note: This is a working checklist, continuously updated. Use it at your discretion.

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Ferns and Lycophytes:

Aspleniaceae [FNA2, HC2] Spleenwort Family

Asplenium [FNA2, HC, HC2]
Sp. Pl. 2: 1078. 1753; Gen. Pl. ed. 5, 485, 1754.
spleenwort

Asplenium trichomanes L. [FNA2, HC, HC2]
Sp. Pl. 2: 1080. 1753.
maidenhair spleenwort

ssp. *quadrivalens* D.E. Mey. [FNA2, HC2]
Ber. Deutsch. Bot. Ges. 74: 456. 1962.
maidenhair spleenwort

Tetraploid; taxonomy follows FNA Vol. 2.

ssp. *trichomanes* [FNA2, HC2]
Sp. Pl. 2: 1080. 1753.
maidenhair spleenwort

Asplenium melanocaulon Willd.

diploid

Asplenium viride Huds. [HC, HC2]
Fl. Angl. (Hudson) 385. 1762.
green spleenwort

Asplenium trichomanes-ramosum L. [FNA2]

FNA2: "Hybridization between Asplenium trichomanes-ramosum and A . trichomanes produces the fertile allotetraploid A . adulterinum , which occurs on Vancouver Island."

Athyriaceae [HC2] Lady Fern Family

Athyrium [FNA2, HC, HC2]
Tent. Fl. Germ. 3(1,1): 31, 58. 1799.
lady-fern

Athyrium distentifolium Tausch ex Opiz [HC, HC2]
Kratos 2(1): 14. 1820.
alpine lady-fern

Athyrium alpestre (Hoppe) Clairville [FNA2]

ssp. *americanum* (Butters) Hultén [HC2]
Bot. Not. 126(4): 462. 1973.
American alpine lady-fern

Athyrium alpestre (Hoppe) Clairville var. *americanum* Butters [FNA2]
Athyrium americanum (Butters) Maxon [KZ99, Peck]
Athyrium distentifolium Tausch ex Opiz var. *americanum* (Butters) Cronquist [VPPNW1, HC]

Athyrium filix-femina (L.) Roth ex Mertens [Abrams, FNA2, HC, HC2, Peck]
Arch. Bot. (Leipzig). 2(1): 106. 1799.
lady-fern

ssp. *cyclosorum* (Rupr.) C. Chr. [HC2, ILBC5, KZ99]

Fl. Aleutian Isl. 50 1937.
lady fern, northwestern lady fern

Athyrium alpestre (Hoppe) Clairville ex T. Moore var. *cyclosorum* (Rupr.) T. Moore
Athyrium filix-femina (L.) Roth ex Mertens var. *cyclosorum* Rupr. [FNA2]

FNA2: "Athyrium filix-femina var. cyclosorum is most similar to the European var. filix-femina ; it differs in having broader, nearly equilateral pinnules and medial to supramedial sori. The variety is distributed in northwestern North America with disjunct populations in northwestern Quebec and Ontario."

Azollaceae: see Salviniaceae

Blechnaceae [FNA2, HC2] Chain Fern Family, Deer Fern Family

Struthiopteris [HC2]
hard fern

Struthiopteris spicant (L.) Weiss [Abrams, HC2]
Pl. Crypt. Fl. Gott. 287. 1770.
deer fern

Blechnum spicant (L.) Sm. [FNA2, HC]
Blechnum spicant (L.) Sm. ssp. *nipponicum* (Kunze) A. Löve & D. Löve

Woodwardia [FNA2, HC, HC2]
chain-fern

Woodwardia fimbriata Sm. [FNA2, HC, HC2]
Cycl. 38(76). 1818.
giant chain fern

Woodwardia chamissoi Brack. [Abrams]

Cystopteridaceae [HC2] Fragile Fern Family

Cystopteris [FNA2, HC, HC2]
Neues J. Bot. 1(2): 26. 1806.
bladder-fern

Cystopteris fragilis (L.) Bernh. [FNA2, HC, HC2]
Neues J. Bot. 1(2): 26, plate 2, fig. 9. 1806.
bladder fern, brittle fern, fragile fern

Cystopteris dickieana Sim
Polypodium fragile L.

FNA2: "Especially in the western portion of its North American range (British Columbia, Washington, Montana, Idaho, Oregon, California), Cystopteris fragilis appears to be developing morphologically and ecologically distinctive variants. Hybrid individuals with aborted spores have been discovered, and plants from these areas increasingly tend to grow on both soil and rock and to have slightly different morphologies on the two substrates. These variants intergrade, however, and are not sufficiently distinct to warrant species status. This polymorphic polyploid is probably actively speciating at the tetraploid level, perhaps through gene silencing (C. R. Werth and M. D. Windham 1991)."

Gymnocarpium [FNA2, HC, HC2]
Phytologist. 4: 371. 1851.
oak-fern

Gymnocarpium ×brittonianum (Sarvela) Pryer & Haufler [HC2]
Syst. Bot. 18(1): 168. 1993.
hybrid oak fern

Gymnocarpium disjunctum (Rupr.) Ching [FNA2, HC2]
Acta Phytotax. Sin. 10: 304. 1965.
Pacific oak-fern, western oak-fern

Dryopteris disjuncta (Rupr.) C.V. Morton
Gymnocarpium dryopteris (L.) Newman ssp. *disjunctum* (Rupr.) Sarvela
Gymnocarpium dryopteris (L.) Newman var. *disjunctum* (Rupr.) Ching [VPPNW1]
Polypodium dryopteris L. var. *disjunctum* Rupr.

Gymnocarpium dryopteris (L.) Newman [FNA2, HC, HC2]
Phytologist. 4: app. 24. 1851.
northern oak fern

Dryopteris linnaeana C. Chr. [Abrams, Peck]
Lastrea dryopteris (L.) Bory
Phegopteris dryopteris (L.) Fée
Polypodium dryopteris L.
Thelypteris dryopteris (L.) Slosson

FNA2: "Gymnocarpium dryopteris is a fertile allotetraploid species that arose following hybridization between G . appalachianum and G . disjunctum (see reticulogram). Its wide distribution over much of the north temperate zone has provided ample opportunity for secondary contact between G . dryopteris and each of its diploid parents, thereby resulting in a wide-ranging composite of abortive-spored triploid crosses (G . disjunctum × G . dryopteris and G . appalachianum × G . dryopteris). These relationships are shown on the diagram. Sterile triploid plants are not restricted only to areas where the range of the tetraploid overlaps with that of either diploid. Their broad distribution could be explained in part by their spores, which are of two types: malformed, black, and with very exaggerated perispores, or round with extensive netted perispores (K. M. Pryer and D. M. Britton 1983). The latter spore type is capable of germination and presumably permits the plants to reproduce apogamously. The name G . × brittonianum (Sarvela) Pryer & Haufler has been applied to the G . disjunctum × G . dryopteris hybrid formula (K. M. Pryer and C. H. Haufler 1993). The type of G . × brittonianum has aborted and round spores, and leaves that strongly resemble those of G . disjunctum . They are large, 3-pinnate-pinnatifid, and the second and third pairs of pinnae are sessile with basal basiscopic pinnules markedly longer than the basal acroscopic pinnules. Sterile triploid plants with a morphology similar to the type of G . × brittonianum are frequent. The biology of both of these cryptic hybrid taxa needs further study, which should lead to detailed morphologic descriptions and distribution maps. Gymnocarpium dryopteris also hybridizes with both G . jessoense subsp. parvulum and G . robertianum ."

Dennstaedtiaceae [FNA2, HC2] Bracken Fern Family

Pteridium [FNA2, HC, HC2]
Fl. Carniol. 169. 1760.
bracken, brake-fern

Pteridium aquilinum (L.) Kuhn [FNA2, HC, HC2]
Reisen Ost-Afrika. 3(3): 11. 1879.
bracken, bracken fern

ssp. *pubescens* (Underw.) Piper & Beattie
Fl. N.W. Coast [Piper & Beattie] 4. 1915.
northern bracken, bracken fern

The name Pteridium aquilinum subsp. pubescens (Underw.) J.A.Thomson, Mickel & Mehltr., [Bot. J. Linn. Soc. 157(1): 14 (2008)] is an isonym.

Dryopteridaceae [FNA2, HC2] Wood Fern Family

Dryopteris [FNA2, HC, HC2]
Fam. Pl. 2: 20, 551. 1763.
wood-fern

Dryopteris arguta (Kaulf.) Maxon [FNA2, HC, HC2]
Amer. Fern J. 11: 3. 1921.
coastal fern, marginal wood fern

Aspidium argutum Kaulf.

FNA gives authorship as (Kaulf.) Maxon, a 1921 combination; Watt published in 1866. FNA2: "Dryopteris arguta is somewhat variable. It has been suggested that more than one taxon is involved. No hybrids involving D . arguta are known."

Dryopteris carthusiana (Vill.) H.P. Fuchs [FNA2, HC2]
Bull. Soc. Bot. France. 105: 339. 1959.
spinulose wood-fern, toothed wood-fern

Dryopteris austriaca (Jacq.) Schinz & Thell. var. *spinulosa* (O.F. Muell.) Fiori
Dryopteris spinulosa (O.F. Muell.) Watt
Polypodium carthusianum Vill.
Polypodium spinulosum O.F. Muell.

D. austriaca is European. FNA2: "Dryopteris carthusiana is tetraploid. Dryopteris intermedia is one parent, as indicated by chromosome pairing in their hybrid D . × triploidea Wherry. The other parent is the hypothetical missing ancestral species " D . semicristata " (see discussion for D . cristata). Dryopteris carthusiana hybridizes with five species; hybrids can be separated from D . intermedia by the lack of glandular hairs and by having 2-pinnate leaves."

Dryopteris cristata (L.) A. Gray [FNA2, HC, HC2]
Manual. 631. 1848.
shield fern, crested wood-fern

Polypodium cristatum L.

Dryopteris expansa (C. Presl) Fraser-Jenk. & Jermy [FNA2, HC2]
Brit. Fern Gaz. 11: 338. 1977.
northern fern, spreading wood-fern

Dryopteris assimilis S. Walker
Dryopteris campyloptera (Kunze) Clarkson [FNA2], misapplied
Dryopteris dilatata (Hoffm.) A. Gray [Abrams, Peck], misapplied
Dryopteris dilitata (Hoffm.) A. Gray var. *americana* (Fisch.) Hultén
Nephrodium expansum C. Presl

FNA2: "Dryopteris expansa is diploid and is one of the parents of D . campyloptera . Where their ranges overlap in eastern Canada, these two species are very difficult to distinguish except by chromosome number. The growth habit (D . expansa leaves are more erect) is useful in the field. Three hybrids involving D . expansa are known; all are very rare."

Dryopteris filix-mas (L.) Schott [FNA2, HC, HC2]
Gen. Fil. plate 67. 1834.
male fern

Polypodium filix-mas L.

FNA2: "The taxonomy of Dryopteris filix-mas is not well understood. In North America, this fern has been

considered both an auto- and an allopolyploid and may be composed of at least two closely related taxa. Plants in the northeast and northwest are tetraploid. These differ morphologically and ecologically from a taxon of unknown chromosome number in the southwestern Rocky Mountains. The Rocky Mountain taxon closely resembles the Mexican D . pseudofilix-mas (Fée) Rothmaler. Dryopteris filix-mas also occurs in Europe, and it is known to be an allopolyploid of D . caucasica (A. Braun) Fraser-Jenkins & Corley × oreades Fomin."

Polystichum [FNA2, HC, HC2]
Tent. Fl. Germ. 3: 31, 69. 1799.
holly-fern, sword-fern

Polystichum andersonii M. Hopkins [FNA2, HC, HC2]
Amer. Fern J. 3: 116, plate 9. 1913.
Vancouver holly fern, Anderson's sword fern

Polystichum braunii (Spenner) Fée ssp. *andersonii* (M. Hopkins) Calder & Roy L. Taylor
Polystichum braunii (Spenner) Fée var. *andersonii* (M. Hopkins) Hultén

FNA2: "Polystichum andersonii is an allotetraploid (D. H. Wagner 1979); its diploid parents are P . munitum and P . kwakiutlii . The triploid cross, P . munitum × andersonii , has been analyzed cytologically (W. H. Wagner Jr. 1973). It is the only sterile hybrid in the genus that develops large colonies through vegetative propagation by its bulblets. Hybrids look very much like some of the more deeply incised forms of Polystichum munitum except that they have abundant filiform scales, abortive sori, and nearly triangular lowermost pinnae with Â± equally incised acroscopic and basiscopic auricles."

Polystichum braunii (Spenner) Fée [FNA2, HC2]
Mém. Foug., 5. Gen. Filic. 278. 1852.
Braun's holly-fern

Single specimen from Pend Oreille County at ID with accurate identification confirmed.

Polystichum californicum (D.C. Eaton) Diels [FNA2, HC, HC2]
Nat. Pflanzenfam. 1(4): 191. 1899.
California

Aspidium californicum D.C. Eaton
Polystichum aculeatum (L.) Roth var. *californicum* (D.C. Eaton) Jeps.

FNA2: "Polystichum californicum is an allopolyploid, the evolutionary roots of which include P . dudleyi as the 2-pinnate ancestor. Morphologic and ecological data indicate P . imbricans is ancestor to the northern forms and P . munitum is ancestor to southern forms, suggesting P . californicum is an amalgam of interfertile tetraploids with polyphyletic origins (D. H. Wagner 1979). Cytological analysis corroborates this (A. D. Callan 1972; W. H. Wagner Jr. 1973), but chloroplast DNA studies have detected only the involvement of P . imbricans in the ancestry of P . californicum (P. S. Soltis et al. 1991). The more xeric, rock-inhabiting members of the complex (showing the parental influence of P . imbricans) occupy the northern half of the range whereas plants of more mesic habitats are found to the south. Hybrids with both P . dudleyi and P . munitum are found frequently, because these three species are often sympatric (W. H. Wagner 1973). The hybrid with P . dudleyi (a triploid) will key to that species. The hybrid with P . munitum resembles a less-incised form of P . californicum with aborted sporangia. Polystichum californicum × imbricans has been found only once, in Oregon (A. D. Callan 1972). Another hybrid that will key here, based on its overall appearance, is P . munitum × scopulinum . It lacks filiform microscales and also has malformed sporangia. Such a specimen was the basis of the report of Polystichum californicum in eastern Washington (C. L. Hitchcock et al. 1955--1969, vol. 1). The sterile diploid hybrid between P . dudleyi and P . munitum is indistinguishable from P . californicum except for aborted sporangia and chromosome number (W. H. Wagner Jr. 1973)."

Polystichum californicum (D.C. Eaton) Diels × ***Polystichum munitum*** (Kaulf.) C. Presl

Polystichum imbricans (D.C. Eaton) D.H. Wagner [FNA2, HC2]
Pteridologia. 1: 50. 1979.
imbricate sword-fern, rock sword-fern

ssp. *imbricans* [FNA2, HC2]
Pteridologia. 1: 50. 1979.

imbricate fern, narrow-leaved sword fern

Polystichum munitum (Kaulf.) C. Presl ssp. *nudatum* (D.C. Eaton) Ewan
Polystichum munitum (Kaulf.) C. Presl var. *imbricans* (D.C. Eaton) Maxon [HC, Peck]

FNA2: "Polystichum imbricans subsp. imbricans grows in the Coast Ranges and the Sierra-Cascade axis. It is isolated in the Wallowa Mountains of eastern Oregon. Sun forms of Polystichum munitum are often mistaken for P . imbricans ; characteristics of the distal petiolar scales and indusial margins are more reliable than gross morphologic features for distinguishing them. Polystichum imbricans has narrow distal petiolar scales that fall off early; P . munitum has wide distal petiolar scales (the largest more than 1 mm wide) that are persistent. Polystichum imbricans hybridizes readily with P . munitum , the hybrids usually being sterile but in some places forming hybrid swarms because of partial fertility of the hybrids (D. H. Wagner 1979). The hybrids with P . californicum are discussed under that species."

Polystichum kruckebergii W.H. Wagner [FNA2, HC, HC2]
Amer. Fern J. 56: 4. 1966.
holly fern, Kruckeberg's sword fern fern

FNA2: "Polystichum kruckebergii is widely but sporadically distributed in small numbers in both the Sierra-Cascade and Rocky Mountain systems. Populations sometimes consist of only two or three dwarfed plants that are difficult to distinguish from P . scopulinum , with which they may occur. The spreading teeth of equal size at the pinna apex will usually distinguish this species. Polystichum kruckebergii is a tetraploid presumed to be of hybrid origin, with P . lonchitis and P . lemmonii as its diploid progenitors (W. H. Wagner Jr. 1973), although this hypothesis has not been confirmed. The hybrid with P . munitum has been found in Washington (P. S. Soltis et al. 1987) with both parents, and it is distinguished by intermediate morphology and abortive sporangia."

Polystichum kruckebergii W.H. Wagner × ***Polystichum munitum*** (Kaulf.) C. Presl [FNA2]
hybrid holly fern

reported from WA by Soltis et al. 1987, acc. to FNA

Polystichum lemmonii Underw. [FNA2, HC2]
Native Ferns ed. 6. 116. 1900.
Lemmon's holly fern, Shasta fern

Polystichum mohrioides (Bory) C. Presl [HC], misapplied
Polystichum mohrioides (Bory) C. Presl var. *lemmonii* (Underw.) Fernald [Peck]

FNA2: "Polystichum lemmonii forms sterile hybrids with P . scopulinum and P . munitum . The first hybrid may be abundant where the two parents grow together, which they frequently do in the Wenatchee Mountains of Washington and Siskiyou Mountains of northern California and southwest Oregon. The hybrid is very similar to P . lemmonii but has malformed sporangia and slightly less divided pinnae than P . lemmonii . The P . lemmonii × P . munitum hybrid is morphologically indistinguishable from P . scopulinum ; it is a sterile diploid reported only twice from the Wenatchee Mountains of Washington (W. H. Wagner Jr. 1973; P. S. Soltis et al. 1989). It is possible that this hybrid involves P . imbricans and not P . munitum ; neither study distinguished between them. American authors have misapplied the name Polystichum mohrioides (Bory) C. Presl, a South American species, to P . lemmonii."

Polystichum lemmonii Underw. × ***Polystichum munitum*** (Kaulf.) C. Presl [FNA2]
hidden sword fern

Reported twice from Wenatchee Mountains (Wagner 1973, Soltix et al. 1989) and morphologically indistinguishable from P. scopulinum; parentage possibly P. imbricans ssp. imbricans (not P. munitum) acc. to FNA.

Polystichum lemmonii Underw. × ***Polystichum scopulinum*** (D.C. Eaton) Maxon [FNA2]
serpentine holly fern

Reported from Wenatchee Mountains in FNA; voucher at WTU.

Polystichum lonchitis (L.) Roth [FNA2, HC, HC2]
Tent. Fl. Germ. 3(1): 71. 1799.
mountain fern, northern holly fern

Polypodium lonchitis L.

FNA2: "The spiny spores of P . lonchitis are distinctive and distinguish this from dwarfed forms of other 1-pinnate species."

Polystichum munitum (Kaulf.) C. Presl [FNA2, HC, HC2]
Tent. Pterid. 83. 1836.
common sword fern, western fern
(see also *Polystichum imbricans*)

Aspidium munitum Kaulf.
Polystichum munitum (Kaulf.) K. Presl var. *munitum* [HC]

FNA2: "Polystichum munitum appears to be most closely related to P . imbricans based on morphologic (D. H. Wagner 1979) and electrophoretic (P. S. Soltis et al. 1990) analyses. The chloroplast DNA of P . imbricans , however, is divergent (G. Yatskievych et al. 1988), suggesting a chloroplast origin independent of the nuclear genome. That Polystichum munitum is related to P . acrostichoides is supported by data from chloroplast DNA analysis (G. Yatskievych et al. 1988) but contradicted by data from electrophoretic studies (P. S. Soltis et al. 1990). Polystichum munitum can be distinguished from P . imbricans by its persistent, wide (the largest wider than 1 mm) distal petiolar scales; such scales of P . imbricans are less than 1 mm wide and fall off early. From an evolutionary standpoint, Polystichum munitum is a diploid progenitor of P . andersonii , P . californicum , P . setigerum , and, perhaps, P . scopulinum . Hybrids with all except P . setigerum have been reported, all triploid, attesting to its parental role in the tetraploids (see discussion under each). Hybrids with P . braunii (A. Sleep and T. Reichstein 1967), P . kruckebergii (P. S. Soltis et al. 1987), P . dudleyi (W. H. Wagner Jr. 1973), and P . lemmonii (P. S. Soltis et al. 1989) also have been reported."

Polystichum munitum (Kaulf.) C. Presl × ***Polystichum scopulinum*** (D.C. Eaton) Maxon [FNA2]
hybrid sword fern

FNA cites eastern WA collection treated by FPNW1 as P. californicum

Polystichum scopulinum (D.C. Eaton) Maxon [FNA2, HC, HC2]
Fern Bull. 8: 29. 1900.
mountain holly fern, rock sword fern

Aspidium aculeatum (L.) Sw. var. *scopulinum* D.C. Eaton
Polystichum mohrioides (Bory) C. Presl var. *scopulinum* (D.C. Eaton) Fernald [Peck]

FNA2: "Polystichum scopulinum is widely distributed in the United States west of the 110th meridian, where it occurs in sporadic, usually small populations. The species is abundant only on montane serpentine outcrops. The populations in Newfoundland and Quebec are dramatically disjunct. Polystichum scopulinum is an allopolyploid, believed on morphologic grounds to be derived from P . imbricans × lemmonii (D. H. Wagner 1979). Based on putative hybridization between P . scopulinum and P . munitum (P. S. Soltis et al. 1989; W. H. Wagner Jr. 1973), however, P . munitum may also be involved. This hybrid is discussed under P . californicum ."

Equisetaceae [FNA2, HC, HC2] Horsetail Family

FNA2: "Equisetum occurs in moist places such as riverbanks, lakeshores, roadsides, ditches, seepage areas, meadows, marshes, and wet woodlands. Aerial stems of Equisetum vary considerably in habit and appearance, even on individual plants, because of environmentally induced modifications affecting height and branching. Many taxonomically trivial varieties and forms have been named. For an extended discussion of this, see R.L. Hauke (1966). Four widespread, named hybrids are treated in the key and fully described below. In species descriptions and in the key, length and width are given for the leaf sheath, excluding the free teeth. If the length and width of flattened sheaths are approximately equal and the sides are straight, the sheath is more or less square in face view, i.e., about as long as broad; if the length is greater than the width and the sides are straight, the sheath is more or less elongate in face view, i.e., longer than broad; if the length is greater than the width and the sides are slightly convex, the sheath is elliptic in face view. Stomates are usually visible at 20× magnification. Reticulation in Equisetum is summarized in the reticulograms, which show the known and expected hybrids in North America. Most of those in Equisetum subg. Equisetum are still unknown in North America, but they should be sought, especially north of 45Â° N latitude. According to W.J. Cody and D.M. Britton (1989), E . × font-queri occurs rarely in British Columbia and materials possibly representing E . × arcticum Rothmaler have been taken in the Richardson

Mountain region of Mackenzie. R.L. Hauke (1978) cited collections of E . × font-queri from British Columbia and California."

Equisetum [FNA2, HC, HC2]
Sp. Pl. 2: 1061. 1753; Gen. Pl. ed. 5, 484, 1754.
horsetail, scouring-rush

Equisetum arvense L. [FNA2, HC, HC2]
Sp. Pl. 2: 1061. 1753.
common horsetail, field horsetail

Equisetum arvense L. var. *boreale* (Bong.) Rupr.

FNA2: "Among the many infraspecific taxa that have been named in this species, Equisetum arvense var. boreale Bongard has been most generally accepted and has been applied to plants with tall, erect stems with 3-ridged branches. Because both 3-ridged and 4-ridged branches may occur on a single stem, the variety boreale is not recognized here as distinct (R.L. Hauke 1966)."

Equisetum ×ferrissii Clute [FNA2, HC2]
Fern Bull. 12: 22. 1904.
Ferriss's horsetail, Ferriss's scouring rush
(= *Equisetum hyemale* × *Equisetum laevigatum*)

Equisetum hyemale L. var. *elatum* (Engelm.) C.V. Morton [Peck]

Equisetum fluviatile L. [FNA2, HC, HC2]
Sp. Pl. 2: 1062. 1753.
river horsetail, swamp horsetail, water horsetail

Equisetum limosum L. [Peck]

Equisetum hyemale L. [FNA2, HC, HC2]
Sp. Pl. 2: 1062. 1753.
scouring rush horsetail , common scouring rush

ssp. *affine* (Engelm.) Calder & Roy L. Taylor [FNA2, HC2]
Canad. J. Bot. 43: 1387. 1965.
common scouring rush, Dutch scouring rush, prairie scouring rush

Equisetum hyemale L. var. *affine* (Engelm.) A.A. Eaton [HC]
Equisetum hyemale L. var. *californicum* J. Milde [Abrams]
Equisetum praealtum Raf. [Abrams]

Equisetum laevigatum A. Braun [FNA2, HC, HC2]
Amer. J. Sci. Arts. 46: 87. 1844.
smooth scouring rush

Equisetum funstonii A.A. Eaton [Peck]
Equisetum kansanum J.H. Schaffn. [Peck]

FNA2: "Schaffner named this species Equisetum kansanum because he applied the name E . laevigatum to what we now know is the hybrid E . × ferrissii . The coarser-stemmed, occasionally persistent forms in the southwestern United States have been called Equisetum funstonii."

Equisetum ×litorale Kühlew. ex Rupr. [FNA2]
Beitr. Pflanzenk. Russ. Reiches. 4: 91. 1845.
shore horsetail

FNA2: "Equisetum × litorale is a hybrid between E . arvense and E . fluviatile . It should be expected where the parents coexist. This hybrid has been mistaken for Equisetum palustre ; the solid branches with long first internodes and channeled valleys distinguish it from that species."

Equisetum ×mackaii (Newman) Brichan [FNA2, HC2]
Phytologist. 1: 369. 1843 (Nov. 1842.
small scouring rush

Equisetum hyemale L. var. *mackaii* Newman
Equisetum trachyodon (A. Braun) W.D.J. Koch [ILBC5]

Reported in WA by Lellinger (1985) but not recorded for WA in FNA. FNA2: "The hybrid between Equisetum hyemale and E . variegatum , E . × mackaii , is often mistaken for small forms of E . hyemale."

Equisetum ×nelsonii (A.A. Eaton) J.H. Schaffn. [FNA2, HC2]
Amer. Fern J. 16: 46. 1926.
Nelson's horsetail

FNA2: "Equisetum × nelsonii , the hybrid between E . laevigatum and E . variegatum , is often mistaken for small forms of E . × ferrissii."

Equisetum palustre L. [FNA2, HC, HC2]
Sp. Pl. 2: 1061. 1753.
marsh horsetail

Equisetum palustre L. var. *americanum* Vict.

FNA2: "The name Equisetum palustre var. americanum has been used for specimens from the flora that have longer teeth than those from Eurasia."

Equisetum scirpoides Michx. [FNA2, HC, HC2]
Fl. Bor.-Amer. 2: 281. 1803.
sedgelike horsetail, dwarf scouring rush

Equisetum sylvaticum L. [FNA2, HC, HC2]
Sp. Pl. 2: 1061. 1753.
wood horsetail, woodland horsetail

Equisetum telmateia Ehrh. [FNA2, HC, HC2]
Hannover. Mag. 21: 287. 1783.
giant horsetail

ssp. *braunii* (J. Milde) Hauke [FNA2, HC2]
Nova Hedwigia. 30: 434. 1978.
giant horsetail, great horsetail

Equisetum maximum Lam., misapplied
Should verify status of Equisetum maximum.
Equisetum telmateia Ehrh. var. *braunii* (J. Milde) J. Milde [HC]

Equisetum variegatum Schleich. ex F. Weber & D. Mohr [FNA2, HC, HC2]
Bot. Taschenb. 60, 447. 1807.
variegated horsetail, northern scouring rush

ssp. *variegatum* [FNA2, HC2]
Bot. Taschenb. 60, 447. 1807.
variegated horsetail, northern scouring rush

Equisetum variegatum Schleich. ex F. Weber & D. Mohr var. *variegatum* [HC]

Grammitidaceae: see Polypodiaceae

Hymenophyllaceae [FNA2, HC2] Filmy fern family

Hymenophyllum [FNA2, HC2]
filmy fern

Hymenophyllum wrightii Bosch [FNA2, HC2]

Ned. Kruidk. Arch. 4: 391. 1859.
Wright's filmy fern

Gametophyte stage collected in 2015 on the Olympic Peninsula.

Isoetaceae [FNA2, HC, HC2] Quillwort Family

Isoetes [FNA2, HC, HC2]
Sp. Pl. 2: 1100. 1753; Gen. Pl. ed. 5, 486, 1754.
quillwort

Isoetes bolanderi Engelm. [FNA2, HC, HC2]
Amer. Naturalist. 8: 214. 1874.
Bolander's quillwort

Isoetes bolanderi Engelm. var. *parryi* Engelm.
Isoetes bolanderi Engelm. var. *pygmaea* (Engelm.) Clute [Abrams]
Isoetes californica Engelm.
Isoetes pygmaea Engelm.

FNA2: "Small plants with leaves less than 2.5 cm have been called Isoetes bolanderi var. pygmaea (Engelmann) Clute. Isoetes bolanderi hybridizes with I. echinospora and I. occidentalis."

Isoetes howellii Engelm. [FNA2, HC, HC2]
Trans. Acad. Sci. St. Louis. 4: 385. 1882.
Howell's quillwort

Isoetes melanopoda Gay & Durieu var. *californica* A.A. Eaton
Isoetes nuda Engelm.
Isoetes underwoodii L.F. Hend.

FNA2: "In many respects, Isoetes howellii appears similar to I. melanopoda. Small plants with leaves less than 10 cm and megaspores less than 420 ?m diam. have been called I. howellii var. minima (A. A. Eaton) N. E. Pfeiffer."

Isoetes maritima Underw. [FNA2, HC2]
Bot. Gaz. 13: 94. 1888.
maritime quillwort

Isoetes beringgensis Kom.
Isoetes echinospora Durieu var. *maritima* (Underw.) A.A. Eaton
Isoetes macounii A.A. Eaton

FNA2: "Isoetes maritima hybridizes with I. echinospora and I. occidentalis [= I. truncata (A. A. Eaton) Clute]."

Isoetes minima A.A. Eaton [HC2]
Fern Bulletin 6: 30. 1898.
midget quillwort

Isoetes howellii Engelm. var. *minima* (A.A. Eaton) N. Pfeiff.

BEN 304: "Several field characters distinguish plants of I. minima from plant of I. nuttallii. First, I. minima has an incomplete velum covering up to 75% of the sporangium whereas, I. nuttallii has a complete velum covering 100% of the sporangium. Second, I. minima has spinulose textured megaspores ranging 290-350 mm in diameter. In contrast, I. nuttallii has smooth to tuberculate textured megaspores ranging 360-600 mm in diameter. Third, I. minima is generally a smaller plant with leaves up to only 4 cm long whereas, I. nuttallii is usually larger plant with leaves up to 20 cm long."

Isoetes nuttallii A. Br. [FNA2, HC, HC2]
Amer. Naturalist. 8: 215. 1874.
Nuttall's quillwort

Isoetes suksdorfii Baker

Isoetes occidentalis L.F. Hend. [FNA2, HC2]
Bull. Torrey Bot. Club. 27: 358. 1900.
western quillwort

Isoetes flettii (A.A. Eaton) N.E. Pfeiff. [Abrams]
Isoetes lacustris L. [FNA2, HC], misapplied
Isoetes lacustris L. var. *paupercula* Engelm.
Isoetes paupercula (Engelm.) A.A. Eaton
Isoetes piperi A.A. Eaton [Abrams]

FNA2: "Megaspores of Isoetes occidentalis are variable in wall pattern. Populations exist with rugulate or tuberculate megaspores and other population with cristate to echinate megaspores. Plants with thin-walled megaspores that crack easily have been called I. paupercula. Populations in which megaspores have short ridges and tubercles in a band along the equator have been called I. flettii. Populations with broad-based tubercles on the megaspores have been called I. piperi. The variation in megaspore pattern may indicate multiple allopolyploid origins for I. occidentalis. The general aspect of Isoetes occidentalis and its tough, dark green leaves suggested to early workers an affinity with I. lacustris. Isoetes occidentalis hybridizes with I. bolanderi, I. echinospora, and I. maritima [= I. x truncata (A. A. Eaton) Clute]."

Isoetes tenella Léman [HC2]
Mém. Soc. Linn. Paris 6: 179. 1827.
bristle-like quillwort, spiny spored quillwort

Isoetes braunii Durieu [Abrams]
Isoetes echinospora Durieu [FNA2, HC]
Isoetes echinospora Durieu var. *braunii* (Durieu) Engelm.
Isoetes echinospora Durieu var. *muricata* (Durieu) Engelm.
Isoetes muricata Durieu
Isoetes setacea Lam. [VPPNW1]

FNA2: "North American plants of Isoetes echinospora, which bear stomata, have been called I. muricata or I. echinospora var. braunii to distinguish them from European plants of I. echinospora, which do not have stomata. Isoetes echinospora is a distinct species but has considerable variation, especially in size, color, and form of leaves. It is the most commonly encountered quillwort in oligotrophic, noncalcareous lakes and ponds of northeastern North America. Isoetes echinospora hybridizes with I. bolanderi; I. engelmannii [= I. x eatonii Dodge (later synonym = I. x gravesii A. A. Eaton)]; I. lacustris [= I. x hickeyi Taylor & Luebke]; I. maritima; I. riparia [= I. x dodgei A. A. Eaton]; and I. tuckermanii."

Isoetes ×truncata (A.A. Eaton) Clute
(= *Isoetes maritima* × *Isoetes occidentalis*)

Isoetes maritima Underw. × *Isoetes occidentalis* Hend.

Lycopodiaceae [FNA2, HC, HC2]

Generic ranking is disputed in the family; here we follow Haines (2003) and the Pteridophyte Phylogeny Group (2016) in recognizing segregate genera. Lycopodiaceae is sometimes split into two families, Huperziaceae (containing Huperzia s.l.) and Lycopodiaceae (remaining genera).

Dendrolycopodium [HC2]
tree-clubmoss

Dendrolycopodium dendroideum (Michx.) A. Haines [HC2]
Fam. Huperziac. Lycopodiac. New England 84. 2003.
prickly tree clubmoss, tree ground-pine

Lycopodium dendroideum Michx. [FNA2]
Lycopodium hickeyi W. H. Wagner, Beitel & R. C. Moran [FNA2], misapplied
Lycopodium obscurum L. [FNA2, HC], misapplied

Lycopodium obscurum L. var. *dendroideum* (Michx.) D.C. Eaton

Diphasiastrum [FNA2, HC2]
Preslia. 47: 104. 1975.
clubmoss

Diphasiastrum alpinum (L.) Holub [FNA2, HC2]
Preslia. 47: 107. 1975.
alpine clubmoss

Lycopodium alpinum L. [HC]

Diphasiastrum complanatum (L.) Holub [FNA2, HC2, ILBC5]
Preslia. 47: 108. 1975.
ground cedar, trailing ground-pine

Lycopodium complanatum L. [HC]
Lycopodium complanatum L. var. *complanatum* [Abrams]

Diphasiastrum sitchense (Rupr.) Holub [FNA2, HC2]
Preslia. 47: 108. 1975.
Alaskan clubmoss, Sitka clubmoss

Lycopodium sabinifolium Willd. var. *sitchense* (Rupr.) Fernald [Peck], orthographic variant
Lycopodium sitchense Rupr. [HC]

Diphasiastrum ×takedae Ivanenko
Bot. Zhurn. (Moscow & Leningrad) 77(8): 124. 1992.
hybrid clubmoss

Diphasiastrum alpinum (L.) Holub × *Diphasiastrum sitchense* (Rupr.) Holub [FNA2, HC2]

This is the named hybrid of Diphasiastrum alpinum ×Diphasiastrum sitchense.

Huperzia [FNA2, HC2]
J. Bot. (Schrader). 1800(2): 126. 1801 Gemma fir-moss [for Johann Pete. 1816.
firmoss

Phlegmariurus [FNA2]

Huperzia continentalis Testo, A. Haines & A.V. Gilman [HC2]
Systematic Botany 41(4):894-901. 2016.
alpine firmoss

Huperzia haleakalae (Brack.) Holub [FNA2], misapplied
Lycopodium selago L. [HC], misapplied

Easily confused with Huperzia miyoshiana. Recently (2016) published in Systematic Botany, in which history of name Huperzia haleakelae is explained. Huperzia haleakelae is known only from Hawaii; all reports from North America are referred to H. continentalis.

Huperzia miyoshiana (Makino) Ching [FNA2, HC2]
Acta Bot. Yunnan. 3(3): 303, 304. 1981.
fir clubmoss

Huperzia chinensis (Christ) Czern. [KZ99], misapplied
Lycopodium selago L. [HC], misapplied

Huperzia occidentalis (Clute) Kartesz & Gandhi [FNA2, HC2]
Phytologia. 70: 201. 1991.
western clubmoss

Huperzia porophila (F.E. Lloyd & Underw.) Holub [FNA2], misapplied
Lycopodium selago L. [HC], misapplied
Lycopodium selago L. var. *patens* (P. Beauv.) Desv., misapplied

FNA uses Huperzia occidentalis (Clute) Beitel, but this combination was published in 1992, and is a later isonym (identical epithet & same type) of Huperzia occidentalis (Clute) Kartesz & Gandhi (1991).

Lycopodiella [FNA2, HC2]
Preslia. 36: 20, 22. 1964.
bog clubmoss

Palhinhaea [FNA2]
Pseudolycopodiella [FNA2]

Lycopodiella inundata (L.) Holub [FNA2, HC2]
Preslia. 36: 21. 1964.
bog clubmoss, marsh clubmoss, northern bog clubmoss

Lycopodium inundatum L. [HC]
Lycopodium inundatum L. var. *inundatum* [HC]

Lycopodium [FNA2, HC, HC2]
Sp. Pl. 2: 1100. 1753; Gen. Pl. ed. 5, 486, 1754.
clubmoss
(see also *Dendrolycopodium*, *Diphasiastrum*, *Huperzia*, *Lycopodiella*, *Spinulum*)

Lycopodium clavatum L. [FNA2, HC, HC2]
Sp. Pl. 2: 1101. 1753.
common clubmoss, elk-moss

Lycopodium clavatum L. var. *integerrimum* Spring [ILBC5, Abrams], misapplied
Lycopodium clavatum L. var. *integrifolium* Goldie
Lycopodium clavatum L. var. *subremotum* Vict.

FNA2: "Plants found in eastern North America have been called Lycopodium clavatum var. clavatum; those in the western part of the range, which have been called L. clavatum var. integrifolium Goldie, are distinguished by early shedding of the characteristic hairs on the leaf tips." Sun-exposed plants of Lycopodium clavatum sometimes closely resemble and may be mistaken for Lycopodium lagopus.

Lycopodium lagopus (Laest. ex C. Hartm.) G. Zinserling ex Kuzeneva Prochorova [FNA2, HC2]
Fl. Murmansk. Obl. 1: 80. 1953.
one-cone clubmoss, ptarmigan clubmoss

Lycopodium clavatum L. var. *integerrimum* Spring [ILBC5, Abrams]

Recently (2009) documented from the North Cascades of Washington. It is sometimes confused with Lycopodium clavatum. FNA2: "Lycopodium lagopus is generally more northern than its sister species, L . clavatum. Where they come together, however, they can grow side by side (even in southern Michigan) and maintain their distinctions."

Spinulum [HC2]
bristly clubmoss, stiff clubmoss

Spinulum annotinum (L.) A. Haines [HC2]
interrupted clubmoss, stiff clubmoss

Lycopodium annotinum L. [FNA2, HC]
Lycopodium annotinum L. var. *pungens* (Bach. Pyl.) Desv. [Abrams], invalidly published

FNA2: "This widespread and common club-moss has been divided into various forms or varieties, some of which have been treated as species. Present evidence supports the hypothesis that these are environmentally induced forms, the most distinctive of which has been called Lycopodium annotinum var. alpestre C. Hartman, with leaves only 2.5--6 mm, very leathery, entire-margined, and appressed. Plants intermediate between this and L . annotinum var. annotinum are a form that has been called var. pungens (Bachelot de la Pylaie) Desvaux, an invalid name. Both are found in cold, bleak, northern or high elevation habitats. The species should be studied in detail to determine whether it contains any groups that should be recognized taxonomically."

Marsileaceae [FNA2, HC, HC2] Pepperwort Family, Water-Clover

Family

Marsilea [FNA2, HC, HC2]
Sp. Pl. 2: 1099. 1753; Gen. Pl. ed. 5, 485, 1754.
clover-fern, pepperwort, waterclover

**Marsilea mutica* Mett. [HC2]
Annales des Sciences Naturelles; Botanique, série 4 15: 88. 1861.
Australian waterclover

Known at least from Snohomish and Pacific counties (J. Parsons, personal communication, 2016). Specimen collected from Pacific County in 2016.

Marsilea oligospora Goodd. [FNA2, HC2]
Bot. Gaz. 33: 66. 1902.
Nelson's pepperwort, Pacific clover-fern water-clover

FNA2: "Marsilea oligospora recently has been resegregated from M . vestita (D. M. Johnson 1986), from which it differs consistently in its nodding sporocarps that lack a pronounced distal tooth and its pilose leaves and stems. Where their ranges overlap, M . oligospora also has longer sporocarp stalks than does M . vestita . Plants of this species were recently grown from spores 100 years old (D. M. Johnson 1985)."

Marsilea vestita Hook. & Grev. [FNA2, HC, HC2]
Icon. Filic. 2: plate 159. 1830.
hairy clover-fern, pepperwort, water-clover pepperwort

Marsilea fournieri C. Chr.
Marsilea mucronata A. Braun
Marsilea tenuifolia Engelm. ex A. Braun
Marsilea uncinata A. Braun
Marsilea vestita Hook. & Grev. ssp. *tenuifolia* (Engelm. ex A. Braun) D.M. Johnson
Marsilea vestita Hook. & Grev. ssp. *vestita* [JPM]

FNA2: "A number of segregate species have been named and recognized in regional floras in North America: Marsilea mucronata A. Braun (less hairy, found east of Rocky Mountains), M . uncinata (glabrous, sporocarp stalks long, distal tooth of sporocarp hooked, south central United States), M . tenuifolia (pinnae very narrow, central Texas), and M . fournieri (small plants and pinnae, southwest). The features upon which these species are based intergrade into one another. The species are therefore best treated as conspecific with M . vestita (D. M. Johnson 1986). Putative hybrids between Marsilea macropoda and this species are discussed under the former."

Pilularia [FNA2, HC, HC2]
Sp. Pl. 2: 1100. 1753; Gen. Pl. ed. 5, 486, 1754.
pillwort

Pilularia americana A. Braun [FNA2, HC, HC2]
Monatsber. Königl. Preuss. Akad. Wiss. Berlin. 1863: 435. 1864.
American pillwort

Known in Washington from a single collection in eastern Washington. FNA2: "Pilularia americana also has been reported from Alaska. I have seen no vouchers from Alaska, nor have I seen the Oregon vouchers. Because of its grasslike appearance and subterranean sporocarps, P . americana is probably overlooked and more common than records indicate. The telltale circinate vernation of the leaves is the best characteristic for distinguishing it from similar plants. Pilularia caroliniana A. Braun, an invalid name, has been used for this species and may appear on specimens."

Ophioglossaceae [FNA2, HC, HC2] Adder's-Tongue Family

Botrychium [FNA2, HC, HC2]
J. Bot. (Schrader). 1800(2): 8, 110. 1801.
moonwort
(see also *Botrypus*, *Sceptridium*)

Botrychium ascendens W.H. Wagner [FNA2, HC2]
Amer. Fern J. 76: 36, figs. 1, 2. 1986.
upswept moonwort

Botrychium campestre W.H. Wagner & Farrar var. *campestre*, misapplied

Records of B. campestre var. campestre from WA are misidentified B. ascendens.

var. *lineare* (W.H. Wagner) Farrar [FNA2, HC2]
narrow-leaf grapefern, slender moonwort

Recently described (Wagner and Wagner 1994); in Washington it is known only from Ferry County.

var. *lineare* (W.H. Wagner) Farrar [HC2]
narrow-leaf grapefern, slender moonwort

Recently described (Wagner and Wagner 1994); in Washington it is known only from Ferry County.

Botrychium crenulatum W.H. Wagner [FNA2, HC2]
Amer. Fern J. 71: 21. 1981.
dainty moonwort, scalloped moonwort

Botrychium hesperium (Maxon & R.T. Clausen) W.H. Wagner & Lellinger [FNA2, HC2]
Amer. Fern J. 71: 92. 1981.
western moonwort

Botrychium matricariifolium (Döll) A. Braun ex W.D.J. Koch, misapplied

See also Botrychium michiganense.

Botrychium lanceolatum (S.G. Gmel.) Angström [FNA2, HC, HC2]
Bot. Not. 1854: 68. 1854.
lance-leaved grapefern, red triangle moonwort
(see also *Botrychium viride*)

Botrychium lanceolatum (S.G. Gmel.) Angström ssp. *lanceolatum* [FNA2]
Botrychium lanceolatum (S.G. Gmel.) Angström var. *lanceolatum* [KZ99]

Botrychium lanceolatum sensu stricto corresponds to genotypes with a red stripe down the common stalk, dull yellow-green trophophores, and asymmetrically lobed, upwardly curved lower pinnae in which the basal basioscopic pinnules are much larger than the basal acroscopic pinnules. Most reports of Botrychium lanceolatum in Washington can be referred to Botrychium viride.

Botrychium michiganense W.H. Wagner ex A.V. Gilman, Farrar & Zika [HC2]
Journal of the Botanical Research Institute of Texas 9(2): 300. 2015.
Michigan moonwort

Botrychium matricariifolium (Döll) A. Braun ex W.D.J. Koch, misapplied

Botrychium michiganense is an allotetraploid formerly confused with B. hesperium. The name was recently published (2015).

Botrychium minganense Vict. [FNA2, HC2]
Proc. & Trans. Roy. Soc. Canada. ser. 3, 21: 331. 1927.
Mingan moonwort

Botrychium lunaria (L.) Sw. var. *minganense* (Vict.) Dole
Botrychium onondagense Underw., misapplied

Botrychium minganense is one of our most common and widespread species of moonwort. It shows high morphological variability and is readily confused with several other species.

Botrychium montanum W.H. Wagner [FNA2, HC2]
Amer. Fern J. 71: 29. 1981.
western goblin, mountain moonwort

Botrychium neolunaria Stensvold & Farrar [HC2]
Brittonia 69(2): 168. 2017.
common moonwort

Botrychium lunaria (L.) Sw. [FNA2, HC], misapplied
Botrychium lunaria (L.) Sw. var. *onondagense* (Underw.) House [HC]
Botrychium onondagense Underw.

Recently published (2017) as a North American segregate of the Eurasian Botrychium lunaria. The Botrychium lunaria species complex has in recent years been split up into a number of named species, represented in Washington by Botrychium crenulatum and Botrychium neolunaria. Botrychium neolunaria is a diploid taxon and one of the parents of the allotetraploid Botrychium minganense, with which it is often confused in our area.

Botrychium paradoxum W.H. Wagner [FNA2, HC2]
Amer. Fern J. 71: 24. 1981.
paradox moonwort, two-spiked moonwort

A distinctive species possessing two sporophores of more or less equal size, and no trophophore. Other Botrychium species often produce sporadic individuals in which the trophophore lamina is partly or fully replaced by sporangia; these might be confused with B. paradoxum but generally differ in the shape or degree of branching of the modified trophophore.

Botrychium pedunculosum W.H. Wagner [FNA2, HC2]
Amer. Fern J. 76: 43, figs. 2, 7. 1986.
stalked moonwort

Botrychium matricariifolium (Döll) A. Braun ex W.D.J. Koch, misapplied

Botrychium pinnatum H. St. John [FNA2, HC2]
Amer. Fern J. 19: 11. 1929.
northwestern moonwort, St. John

Botrychium boreale J. Milde [FNA2, HC], misapplied
Botrychium boreale J. Milde ssp. *obtusilobum* (Rupr.) R.T. Clausen

An allotetraploid species derived from Botrychium lanceolatum s.l. and B. neolunaria. FNA2: "Botrychium pinnatum is most commonly associated with B. lanceolatum and B. lunaria [= B. neolunaria]. Specimens of B. pinnatum in North America have been misidentified as Botrychium boreale."

Botrychium simplex E. Hitchc. [FNA2, HC, HC2]
Amer. J. Sci. 6: 103, plate 8. 1823.
least moonwort

var. *compositum* (Lasch) Milde [HC2, JPM]

var. *simplex* [HC2]
Amer. J. Sci. 6: 103, plate 8. 1823.
little grapefern, least moonwort

Botrychium viride Farrar [HC2], unpublished name
green triangle moonwort

Botrychium viride corresponds to genotypes of Botrychium lanceolatum with green common stalks, lustrous green trophophores, and symmetrically lobed lower pinnae in which the basal basioscopic and basal acroscopic pinnules are generally subequal in size. Most reports of Botrychium lanceolatum in Washington can be referred to Botrychium viride.

Botrypus [HC2]
rattlesnake-fern

Botrypus virginianus (L.) Michx. [HC2]
Fl. Bor.-Amer. (Michaux) 2: 274. 1803.
rattlesnake fern, common grapefern, Virginia grapefern

Botrychium virginianum (L.) Sw. [FNA2, HC]
Osmunda virginiana L.

FNA2: "Botrychium virginianum is the most widespread Botrychium in North America."

Ophioglossum [FNA2, HC, HC2]
Sp. Pl. 2: 1062. 1753; Gen. Pl. ed. 5, 484, 1754.
adder's-tongue

Ophioglossum pusillum Raf. [FNA2, HC2]
Précis Découv. Somiol. 46. 1814.
northern adder's-tongue

Ophioglossum vulgatum L. [FNA2, HC], misapplied

FNA2: "Ophioglossum pusillum is inconspicuous and may be much more common than collections indicate. It differs from O . vulgatum in having an ephemeral, membranous basal sheath."

Sceptridium [HC2]
grape-fern

Sceptridium multifidum (Gmel.) Tagawa [HC2]
J. Jap. Bot. 33: 200. 1958.
leathery grapefern

Botrychium californicum Underw. [Abrams]
Botrychium coulteri Underw.
Botrychium multifidum (S.G. Gmel.) Rupr. [FNA2, HC]
Botrychium silaifolium C. Presl [Peck, ILBC5]
Osmunda multifida S.G. Gmel.

Osmundaceae [FNA2, HC2]

Parkeriaceae: see Pteridaceae

Polypodiaceae [FNA2, HC, HC2] Polypody Fern Family

Synonyms:
Grammitidaceae [FNA2]

a number of hybrids between these species are reported in the literature

Polypodium Sw. [FNA2, HC, HC2]
Sp. Pl. 2: 1082. 1753; Gen. Pl. ed. 5, 485, 1754.
polypody

Polypodium amorphum Suksd. [FNA2, HC2]
Werdenda. 1: 16. 1927.
irregular polypody

Polypodium montense F.A. Lang [HC]

FNA2: "The diploid Polypodium amorphum is one of the progenitors of allotetraploid P . hesperium , and these two species are occasionally sympatric. Although P . amorphum can be mistaken for P . hesperium , consistent differences exist for separating these two species (see comments under P . hesperium). Hybridization between P . amorphum and P . hesperium results in triploid individuals with misshapen

spores (F. A. Lang 1971)."

Polypodium glycyrrhiza D.C. Eaton [FNA2, HC, HC2]
Amer. J. Sci. Arts. ser. 2, 22: 138. 1856.
licorice fern

Polypodium aleuticum A.E. Bobrov
Polypodium falcatum Kellogg
Polypodium occidentale (Hook.) Maxon
Polypodium vulgare L., misapplied
Polypodium vulgare L. var. *falcatum* (Kellogg) H. Christ
Polypodium vulgare L. var. *occidentale* Hook. [Peck]

FNA2: "Polypodium glycyrrhiza hybridizes with P . calirhiza and with P . hesperium to produce sterile triploids with misshapen spores. Polypodium glycyrrhiza was involved in the origin of both of these allotetraploid species, and some individuals can be difficult to identify. Free versus anastomosing venation distinguishes this species from P . calirhiza ; the presence of adaxial hairs on the rachis separates it from P . hesperium . An additional character for distinguishing these taxa is spore length, which is less than 58 Âµm in diploid P . glycyrrhiza and more than 58 Âµm in the two tetraploid species."

Polypodium hesperium Maxon [FNA2, HC, HC2]
Proc. Biol. Soc. Wash. 13: 200. 1900.
western polypody

Polypodium prolongilobum Clute
Polypodium vulgare L. var. *columbianum* Gilbert [Peck]
Polypodium vulgare L. var. *hesperium* (Maxon) A. Nelson & J.F. Macbr.

FNA2: "Using morphologic and chromosomal data, F. A. Lang (1971) proposed that Polypodium hesperium originated through allotetraploidy involving P . glycyrrhiza and P . amorphum , a hypothesis recently supported by electrophoretic studies (C. H. Haufler, M. D. Windham, and E. W. Rabe, unpublished). Variations in spore surface morphology and banding patterns observed in isozyme studies indicate that P . hesperium may have originated more than once from different individuals of the same species. Some collections of P . hesperium can be mistaken for P . glycyrrhiza , but the latter species is easily distinguished by its pubescent rachises, linear blade scales, and smaller spores (less than 58 Âµm). Although P . amorphum has sporangiasters and P . hesperium lacks them, misshapen sporangia in P . hesperium can mimic these distinctive soral structures. Therefore, it is often necessary to use a combination of soral, stem scale, and blade scale features (discussed in the key) to separate P . hesperium from P . amorphum . Hybridization occurs between P . hesperium and each of its progenitor diploids to form triploid individuals with misshapen spores (F. A. Lang 1971). Rare, sterile, tetraploid hybrids with P . saximontanum have also been detected (M. D. Windham, unpublished)."

Polypodium scouleri Hook. & Grev. [FNA2, HC, HC2]
Icon. Filic. 1: 56. 1829.
leathery polypody, Scouler's polypody

FNA2: "The distinctive Polypodium scouleri has occasionally been assigned to the genus Goniophlebium because of its anastomosing venation and conspicuous areoles. Its venation pattern can be quite variable, however, and cannot be used as the sole feature distinguishing P . scouleri from P . californicum . Combining venation characteristics with others provided in the key distinguishes it clearly from its congeners in Polypodium . Some evidence suggests that P . scouleri hybridizes with P . californicum (S. A. Whitmore, unpubl.). I. Manton (1951) reported diploid and triploid cytotypes for P . scouleri , and variation in spore size suggests that the species may also include tetraploid populations."

Pteridaceae [FNA2, HC2] Maidenhair Fern Family

Synonyms:
Parkeriaceae [FNA2]
Vittariaceae [FNA2]

FNA2: "Considerable disagreement exists concerning the circumscription and proper name of this family. The taxa

comprising the Pteridaceae in this treatment were assigned to the Sinopteridaceae and Pteridaceae by D. B. Lellinger (1985) and were included in five families by R. E. G. Pichi-Sermolli (1977). The broad concept followed here is similar (except for the exclusion of Ceratopteris) to that espoused by R. M. Tryon and A. F. Tryon (1982), who applied the name Pteridaceae to the group. Until very recently, the newer name Adiantaceae was more commonly used. As represented in North America, Pteridaceae comprise three major evolutionary lines (the adiantoids, the pteroids, and the cheilanthoids). Characteristics holding the family together include abaxial (usually submarginal) sori that lack indusia or are protected by a reflexed or revolute leaf margin, spores that are usually globose-tetrahedral and trilete, and chromosome base numbers of 30 or 29 (rarely 27). The xeric-adapted members of the family (particularly the cheilanthoids) have undergone extensive parallel and convergent evolution, and they have frustrated attempts to produce a natural generic classification based on macromorphologic characteristics alone. Although some workers have aggregated species into a few large genera (e.g., J. T. Mickel 1979b), most tend to recognize smaller segregate genera based on a combination of morphologic, chromosomal, and biochemical data. The latter approach seems to provide a more useful, evolutionarily informative classification and is the one adopted here. Aspidotis and Notholaena are maintained here as distinct from Cheilanthes , and three recently described genera (Argyrochosma , Astrolepis , and Pentagramma) have been incorporated into the treatment. The reasons for these changes in generic circumscription are discussed under the individual genera."

Adiantum [FNA2, HC, HC2]
Sp. Pl. 2: 1094. 1753; Gen. Pl. ed 5, 485. 1754.
maidenhair fern

Adiantum aleuticum (Rupr.) Paris [FNA2, HC2]
Rhodora. 93: 112. 1991.
maidenhair fern, northern maidenhair fern

Adiantum boreale C. Presl
Adiantum pedatum L. [FNA2, HC], misapplied

The combination A. aleuticum var. subpumilum has been published (Alverson, American Fern Journal, 100(4):230-233. 2010), so the full combination here can be var. aleuticum if one recognizes the distinctiveness of var. subpumilum. FNA2: "Although the western maidenhair has traditionally been interpreted as an infraspecific variant of Adiantum pedatum , the two taxa are reproductively isolated and differ in an array of morphologic characteristics. Therefore, they are more appropriately considered separate species (C. A. Paris and M. D. Windham 1988). Morphologic differences between A . pedatum and A . aleuticum are subtle; the two may be separated, however, using characteristics in the key. Adiantum aleuticum occurs in a variety of habitats throughout its range, from moist, wooded ravines to stark serpentine barrens and from coastal cliffs to subalpine boulder fields. Although morphologic differences exist among populations in these diverse habitats, they are not consistent. Consequently, infraspecific taxa are not recognized here within A. aleuticum."

var. *aleuticum* [HC2]
Aleutian maidenhair fern, western maidenhair fern

Adiantum pedatum L. var. *aleuticum* Rupr. [Abrams]

Aspidotis [FNA2, HC, HC2]
Gen. Fil. 68. 1947.
aspidotis, Indian's dream

Aspidotis densa (Brack.) Lellinger [FNA2, HC, HC2]
Amer. Fern J. 58: 141. 1968.
Oregon , Indian's dream, podfern

Cheilanthes siliquosa Maxon [Peck]
Cryptogramma densa (Brack.) Diels [VPPNW1]
Onychium densum Brack.
Pellaea densa (Brack.) Hook.

Cryptogramma [FNA2, HC, HC2]
Narr. Journey Polar Sea. 767. 1823.
parsley-fern, rock-brake

Cryptogramma acrostichoides R. Br. [FNA2, HC2]
Narr. Journey Polar Sea. 754, 767. 1823.
American parsley-fern, American rock-brake
(see also *Cryptogramma cascadensis*)

Cryptogramma crispa (L.) R. Br. ex Hook. ssp. *acrostichoides* (R. Br.) Hultén
Cryptogramma crispa (L.) R. Br. ex Hook. var. *acrostichoides* (R. Br.) C.B. Clarke [HC]

FNA2: "Cryptogramma acrostichoides has often been treated as a variety or subspecies of the strictly European Cryptogramma crispa (Linneaus) R. Brown, which has a chromosome number of 2 n = 120."

Cryptogramma cascadensis E.R. Alverson [FNA2, HC2]
Amer. Fern J. 79: 95. 1989.
Cascade , Cascade rock-brake

FNA2: "Populations of Cryptogramma cascadensis were previously identified as C . acrostichoides."

Cryptogramma stelleri (S.G. Gmel.) Prantl [FNA2, HC, HC2]
Bot. Jahrb. Syst. 3: 413. 1882.
fragile rock-brake, slender rock-brake, Steller's rock-brake

Pteris stelleri S.G. Gmel.

Myriopteris [HC2]
lace-fern, lip fern

Myriopteris gracilis Fée [Grusz & Windham 2013, HC2]
Mém. Fam. Foug. 5: 150, t. 29, f. 6. 1852.
slender lace fern, Fee's lace-fern, Fee's lip fern

Cheilanthes feei T. Moore [FNA2, HC]

Reports of Cheilanthes lanosa (Michx.) D.C. Eaton from the Olympic Peninsula (VPPN1) have not been confirmed by FNA or Buckingham et al. (1995). FNA2: "Cheilanthes feei is an apogamous triploid of unknown parentage. It has small, beadlike blade segments similar to those of subg. Physapteris , but most morphological characteristics suggest a clear relationship to members of subg. Cheilanthes (T. Reeves 1979). The species is most often confused with C . parryi , from which it can be distinguished by its thinner, sparser pubescence and smaller ultimate segments."

Myriopteris gracillima (D. C. Eaton) J. Sm. [Grusz & Windham 2013, HC2]
Hist. Fil. 280. 1875.
lace lip fern

Cheilanthes gracillima D. C. Eaton [FNA2, HC]

FNA2: "Cheilanthes gracillima is a well-marked species, but it apparently hybridizes with C . intertexta (see reticulogram) to produce plants of intermediate morphology with malformed spores that have been called C . gracillima var. aberrans M. E. Jones (A. R. Smith 1974)."

Pellaea [FNA2, HC, HC2]
Fil. Spec. 59. 1841.
cliff-brake

Pellaea brachyptera (T. Moore) Baker [FNA2, HC2]
Syn. Fil. ed. 2. 477. 1874.
Sierran cliffbrake

Platyloma brachyptera T. Moore

FNA2: "The distinctive Pellaea brachyptera reportedly hybridizes with P . mucronata (A. F. Tryon 1957; D. B. Lellinger 1985); the hybrids are morphologically intermediate plants with malformed spores."

Pellaea breweri D.C. Eaton [FNA2, HC, HC2]
Proc. Amer. Acad. Arts. 6: 555. 1865.
Brewer's cliffbrake

FNA2: "Pellaea breweri is distinguished from other North American taxa (except for some populations of P . glabella) by the presence of prominent articulation lines near the base of the petiole. The leaves are

easily detached, and many herbarium specimens consist of separate leaves and stems, the latter covered with petiole bases of approximately equal length."

Pellaea gastonyi Windham [FNA2, HC2]
Contr. Univ. Michigan Herb. 19: 36. 1993.
Gastony's cliff-brake

The specimen at RM was annotated by Michael Windham, author of the taxon, in 2006. FNA2: "Pellaea gastonyi is an apogamous tetraploid that has originated through repeated hybridization between P . atropurpurea and P . glabella . Isozyme studies (G. J. Gastony 1988) indicate that P . glabella subsp. missouriensis was the diploid parent of plants found in Missouri, whereas diploid P . glabella subsp. occidentalis was involved in the origin of P . gastonyi populations occurring in western North America. Pellaea gastonyi is most often confused with P . atropurpurea , from which it differs in having sparsely villous rachises, smaller ultimate segments, and spores averaging more than 62 Âµm in diameter."

Pellaea glabella Mett. ex Kuhn [FNA2, HC, HC2]
Linnaea. 36: 87. 1869.
smooth cliff-brake

ssp. *occidentalis* (E.E. Nelson) Windham [FNA2, HC2]
Contr. Univ. Michigan Herb. 19: 39. 1993.
western smooth cliff-brake

Pellaea glabella Mett. ex Kuhn var. *occidentalis* (E.E. Nelson) Butters [HC]

ssp. *simplex* (Butters) A. Löve & D. Löve [FNA2, HC2]
Taxon. 26: 325. 1977.
simple cliff-brake

Pellaea atropurpurea (L.) Link var. *simplex* (Butters) C.V. Morton
Pellaea glabella Mett. ex Kuhn var. *simplex* Butters [HC]
Pellaea occidentalis (E.E. Nelson) Rydb. ssp. *simplex* (Butters) Gastony
Pellaea suksdorfiana Butters [Abrams]

FNA2: "This western counterpart of Pellaea glabella subsp. glabella is an apogamous tetraploid. A. F. Tryon (1957) and D. B. Lellinger (1985) hypothesized that it might have arisen as a hybrid between the western diploid member of the P . glabella complex (here called subsp. occidentalis) and P . atropurpurea . G. J. Gastony (1988) has shown conclusively, however, that P . glabella subsp. simplex is an autopolyploid derivative of subsp. occidentalis and does not contain genes contributed by P . atropurpurea."

Pentagramma [FNA2, HC2]
Windham, & E. Wollenweber, Amer. Fern J. 80: 15. 1990.
gold-back fern

Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw. [FNA2, HC2]
Amer. Fern J. 80: 15. 1990.
gold fern, gold-back fern

Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw. ssp. *semipallida* (J.T. Howell) Yatsk. [FNA2]
Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw. ssp. *triangularis* [FNA2]
Pityrogramma triangularis (Kaulf.) Maxon [HC]
Pityrogramma triangularis (Kaulf.) Maxon var. *triangularis*

FNA2: "We here restrict Pentagramma triangularis subsp. triangularis to plants with yellow farina and glabrous adaxial leaf surfaces occurring throughout a large region in westernmost North America. This subspecies comprises a complex of morphological, cytological, and phytochemical variants, at least some of which may deserve formal taxonomic recognition, following more detailed studies. Plants with yellow farina reported from Arizona, Nevada, and Utah may represent tetraploid hybrids between P . triangularis subsp. triangularis and P . triangularis subsp. maxonii and are not mapped herein."

Salviniaceae [FNA2, HC, HC2] Floating-Fern Family

Synonyms:
Azollaceae [FNA2] (Mosquito Fern Family)

FNA2: "Agriculturally, Azolla is famous for its symbiosis with the nitrogen-fixing Anabaena azollae Strasburger, a cyanobacterium (blue-green alga) found at the stem apices, beneath indusia, and in cavities of the upper leaf lobes. Because the plants fix nitrogen, they are often used as a green fertilizer or mixed with livestock feed as a nutritional supplement. Azolla pinnata has been cultivated for many centuries in rice paddies of northern Vietnam and southeastern China, where it acts as a fertilizer after it decomposes. Azolla is the most frequently studied genus of ferns in the world because of its economic importance. The three North American species are naturalized in Europe and South Africa, and they have been introduced into Hawaii for horticulture and into Asia for agriculture. All species have been studied for agricultural uses in rice-producing areas. Azolla is usually found in stagnant or slow-moving water of ponds, lakes, marshes, swamps, and streams. Plants turn reddish when under stress, such as from poor nutrition, salinity, or high temperatures. Sporulation needs further investigation."

Azolla [FNA2, HC, HC2]
Encycl. 1: 343. 1783.
mosquito-fern

Azolla filiculoides Lam. [FNA2, HC, HC2]
Encycl. 1: 343. 1783.
duckweed fern, large mosquito fern

FNA2: "Azolla filiculoides is cold tolerant, surviving even in fragmented parts under thin ice. It usually reaches a climax population in late spring, becomes fertile, collapses, and is replaced by other more heat-tolerant aquatics such as Lemna spp. Hybrids between this species (male) and A . microphylla Kaulfuss (female), a species of Central America, South America, and the West Indies, have been reported (Do V. C. et al. 1989). "

Azolla microphylla Kaulf. [HC2]
Enum. Filic. 273. 1824.
Mexican waterfern fern, mosquito fern

Azolla mexicana Schltdl. & Cham. ex Kunze [FNA2, HC]

KZ99 gives authorities as Schlecht. & Cham. ex K. Presl, here we follow H&C and FNA Vol. 2. FNA2: "Azolla mexicana is generally less cold tolerant and has a narrower environmental range than A . caroliniana . Both species are closely related and are similar vegetatively in culture. In the western United States, A . mexicana is often fertile."

Selaginellaceae [FNA2, HC, HC2] Spike-Moss Family

Selaginella [FNA2, HC, HC2]
Prodr. Aethéogam. 101. 1805.
lesser-clubmoss, spike-moss

Selaginella douglasii (Hook. & Grev.) Spring [FNA2, HC, HC2]
Bull. Acad. Roy. Sci. Bruxelles. 10: 138. 1843.
Douglas' clubmoss, lesser clubmoss

Lycopodium douglasii Hook. & Grev.

FNA2: "Selaginella douglasii , with no close relatives in the flora, is easy to identify by its shiny green leaves when young, turning shiny light brown when old, with an orange to red spot at the base, or totally reddish. Its closest relative is the Mexican S . delicatissima Linden ex A. Braun."

Selaginella oregana D.C. Eaton [FNA2, HC, HC2]
Bot. California. 2: 350. 1880.

festoon spikemoss, Oregon spikemoss

FNA2"Pendent on trunks and branches of mossy trees (Acer macrophyllum Pursh, Populus trichocarpa Torrey & A. Gray ex Hooker, and Alnus rubra Bongard) or on deep-shaded and moist rocky banks; of conservation concern; 0--200 m; B.C.; Calif., Oreg., Wash. Selaginella oregana , one of the most distinct species in the flora, is easily distinguished by its usually long, epiphytic-pendent stems, slightly loose strobili, and curled branches (in dry specimens). In the flora, S . oregana is most closely related to S . underwoodii . It is sometimes confused with S . wallacei (see discussion), and it shares some characteristics with the Mexican species, S . extensa L. Underwood. In S . oregana , very often where a branch fork occurs, one of the branches is arrested (R. M. Tryon 1955). The strobili of S . oregana are among the longest in the flora, and they often show several novel features. Very often the apex of a strobilus undergoes a period of vegetative growth, thus becoming a vegetative shoot, and after an interval the apex reverts to the fertile condition, forming a strobilus again. In other cases, the strobilus forks, giving rise to two new strobili."

Selaginella scopulorum Maxon [FNA2, HC2]
Amer. Fern J. 11: 36. 1921.
cliff spikemoss, Rocky Mountain spikemoss

Selaginella densa Rydb. [FNA2, HC, HC2], misapplied
Selaginella densa Rydb. var. *scopulorum* (Maxon) R.M. Tryon [HC]
Selaginella engelmannii Hieron. var. *scopulorum* (Maxon) C.F. Reed

FNA2: "Selaginella scopulorum is a member of the S . densa complex, in which there is a clear need for more systematic studies. Some specimens of S . scopulorum from Montana, Wyoming, and Colorado have more conspicuous whitish bristles than those elsewhere and are difficult to distinguish from S. densa."

Selaginella wallacei Hieron. [FNA2, HC, HC2]
Hedwigia. 39: 297. 1900.
Wallace's spikemoss

FNA2: "Selaginella wallacei is extremely variable depending on its habitat (R. M. Tryon 1955). Plants in dry, exposed conditions have short stems, form compact mats with tightly appressed leaves adnate to the stem, and have a rather keeled, abruptly bristled apex. Plants from moist habitats have long stems, form rather moderately long-creeping mats, and have less appressed, decurrent, fleshy leaves, with a more plane-attenuate apex that gradually tapers into a bristle. Plants from exposed, dry conditions sometimes are confused with S . scopulorum , but they have a keeled apex with well-defined ridges on the abaxial groove whereas in S . scopulorum the leaf apex is Â± plane and attenuate, and the ridges on the abaxial groove are not prominent. Plants from moist habitats somewhat resemble plants of S. underwoodii. R. M. Tryon (1955) found strobili 9 cm long in Selaginella wallacei , the longest strobili known within subg. Tetragonostachys and comparable only to those of S. oregana."

Thelypteridaceae [FNA2, HC2] Maiden Fern Family

Amauropelta
Farnkräuter 1: 86, 109. 1934.
marsh fern

Parathelypteris [HC2]

Amauropelta nevadensis (Baker) S.E. Fawc. & A.R. Sm.
Sida, Bot. Misc. 59: 27. 2021.
Nevada marsh fern, Sierra marsh fern, Sierra wood fern

Parathelypteris nevadensis (Baker) Holttum [HC2]
Thelypteris nevadensis (Baker) Clute ex C.V. Morton [FNA2, HC2]

Oreopteris [HC2]
mountain fern

Oreopteris quelpartensis (Christ) Holub [HC2]
Folia Geobot. Phytotax. 4: 48. 1969.
mountain fern, queen's-veil maiden fern

Oreopteris quelpaertensis (H. Christ) Holub [HC2], orthographic variant
Thelypteris quelpaertensis (H. Christ) Ching [FNA2]

Phegopteris [FNA2, HC2]
Mém. Foug. 5: 242. 1852.
beechfern

Phegopteris connectilis (Michx.) Watt [FNA2, HC2]
Canad. Naturalist & Quart. J. Sci. 3: 29. 1866.
narrow beech fern, northern fern

Dryopteris phegopteris (L.) C. Chr. [Peck]
Phegopteris polypodioides Fée
Polypodium connectile Michx.
Polypodium phegopteris L.
Thelypteris phegopteris (L.) Slosson [HC]

Vittariaceae: see Pteridaceae

Woodsiaceae [HC2] Cliff Fern Family

Woodsia [FNA2, HC, HC2]
Prodr. 158. 1810.
cliff-fern, woodsia

Woodsia oregana D.C. Eaton [FNA2, HC, HC2]
Canad. Naturalist & Quart. J. Sci. n. s. 2: 90. 1865.
Oregon cliff-fern, Oregon woodsia

ssp. *oregana* [FNA2, HC2]
Canad. Naturalist & Quart. J. Sci. n. s. 2: 90. 1865.
Oregon cliff-fern, western cliff-fern

FNA2: "The variability and promiscuity of Woodsia oregana have been major sources of taxonomic difficulties in Woodsia , and more work will be necessary before relationships in this complex are fully resolved. As defined here, W . oregana comprises two subspecies that are chromosomally and biochemically distinct. In addition, the two taxa are nearly allopatric, with the diploid (subsp. oregana) confined to the Pacific Northwest and the tetraploid (subsp. cathcartiana) extending from the southwestern United States to eastern Canada."

Woodsia scopulina D.C. Eaton [FNA2, HC, HC2]
Canad. Naturalist & Quart. J. Sci. 2: 91. 1865.
cliff-fern, woodsia

ssp. *laurentiana* Windham [FNA2, HC2]
Contr. Univ. Michigan Herb. 19: 59. 1993.
Laurentian cliff fern

ssp. *scopulina* [FNA2, HC2]
Naturalist & Quart. J. Sci. 2: 91. 1865.
Rocky Mountain cliff fern, mountain fern

Gymnosperms:

Cupressaceae [FNA2, HC, HC2] Cypress Family

Callitropsis [HC2]
cedar, cypress

Callitropsis nootkatensis (D.Don) Oerst. [HC2]
Frilands-Traevaext. 1: 17. 1864.
Alaskan yellow cedar

Chamaecyparis nootkatensis (D. Don) Spach [FNA2, HC]
Cupressus nootkatensis D. Don [JPM]

Juniperus [FNA2, HC, HC2]
Sp. Pl. 2: 1038. 1753; Gen. Pl. ed. 5, 461, 1754.
juniper

**Juniperus chinensis* L. [HC2]

Juniperus communis L. [FNA2, HC, HC2, VPBC1]
Sp. Pl. 2: 1040. 1753.
common juniper, mountain juniper

var. *depressa* Pursh [FNA2, HC, HC2]
Fl. Amer. Sept. 2: 646. 1814.
common juniper, dwarf juniper, ground juniper, prostrate juniper

Juniperus communis L. ssp. *depressa* (Pursh) Franco [KZ99]

Per FNAV2, "larger individuals of this var. (to 10 m.) have been misidentified as var. communis." WTU voucher [Kartesz]

var. *jackii* Rehder [HC, HC2]
Mitt. Deutsch. Dendrol. Ges. 1907: 70. 1907.
Jack's common juniper, Jack's mat juniper

Juniperus communis L. ssp. *jackii* Rehder

Collected near Silver Star Mountain in Skamania County in 2020.

var. *kelleyi* R.P. Adams [HC2]

Juniperus communis L. var. *montana* Aiton [FNA2, HC], misapplied
var. saxatilis is restricted to Old World; New World plants are not sister.
Juniperus communis L. var. *saxatilis* Pall., misapplied
var. saxatilis is restricted to Old World; New World plants are not sister.

This is one of the only two var. FNAV2 recognizes for WA. The 2nd is var. depressa Pursh. [Hitchcock]. Var. montana replaces var. depressa in the Sierra Nev., Cascade Range and Coast Ranges [IMF]

Juniperus occidentalis Hook. [FNA2, HC, HC2]
Fl. Bor.-Amer. 2: 166. 1838.
western juniper.

Juniperus occidentalis Hook. ssp. *occidentalis* [JPM]
Juniperus occidentalis Hook. var. *occidentalis* [FNA2]

**Juniperus rigida* Siebold & Zucc. [HC2]

*var. *conferta* (Parl.) Patschke [HC2]

*var. *rigida* [HC2]

Juniperus scopulorum Sarg. [FNA2, HC, HC2]

Gard. & Forest. 10: 420, fig. 54. 1897.
Rocky Mountain juniper, seaside juniper, Rocky Mountain redcedar

Juniperus maritima R.P. Adams
Juniperus scopulorum Sarg. ssp. *patens*
Juniperus virginiana L. ssp. *montana* Vasey [IMF1]
Juniperus virginiana L. ssp. *scopulorum* (Sarg.) A.E. Murray [IMF1]

Here we choose to not recognize J. maritima due to the inability of existing keys to reliably distinguish specimens from coastal areas versus montane ones.

Thuja [FNA2, HC, HC2]
Sp. Pl. 2: 1002. 1753; Gen. Pl. ed. 5, 435, 1754.
arborvitae, cedar

Thuja plicata Donn ex D. Don [FNA2, HC, HC2]
Descr. Pinus. 2: [19]. 1824.
canoe cedar, western red cedar

Pinaceae [FNA2, HC, HC2] Pine Family

Abies [FNA2, HC, HC2]
Gard. Dict. Abr., ed. 4. vol. 1. 1754.
fir

Abies amabilis Douglas ex J. Forbes [FNA2, HC, HC2]
Pinet. Woburn. 125, plate 44. 1839.
Pacific silver fir

Abies grandis (Douglas ex D. Don) Lindl. [FNA2, HC, HC2]
Penny Cycl. 1: 30. 1833.
grand fir

Pinus grandis Douglas ex D. Don

FNA2: "Abies grandis is rather uniform morphologically and chemically. At its southern limit in southern Oregon and northern California, it introgresses with A . concolor (J.L. Hamrick and W.J. Libby 1972; E.Zavarin et al. 1975; D.B. Zobel 1973). In the area of introgression, specimens in lower, wetter habitats are best assigned to A . grandis ; those in higher, drier habitats, to A . concolor . Others are best considered to be A . concolor Â´ grandis."

Abies lasiocarpa (Hook.) Nutt. [FNA2, HC, HC2]
N. Amer. Sylv. 3: 138. 1849.
alpine fir, subalpine fir

Abies balsamea (L.) Mill. ssp. *lasiocarpa* (Hook.) B. Boivin
Abies balsamea (L.) Mill. var. *fallax* (Engelm.) B. Boivin
Pinus lasiocarpa Hook.

FNA2: "The only unique populations in this species come from coastal Alaska (A. S. Harris 1965; C. J. Heusser 1954). They are found at lower elevations (0--900 m) and appear to be isolated with no reported introgression between them and the coastal mountain populations. The population on the Prince of Wales Island has distinct terpene patterns and needs morphological and developmental studies to see if these patterns contrast with neighboring populations. Through central British Columbia and northern Washington, Abies lasiocarpa introgresses with A . bifolia . These trees may have morphologic features resembling either species and may have intermediate terpene patterns; they are best classified as interior subalpine fir (A . bifolia Â´ lasiocarpa). At the southern end of its range, A . lasiocarpa possibly hybridizes with A . procera (R.S. Hunt and E.von Rudloff 1979). Abies lasiocarpa shares with A . procera a red periderm, crystals in the ray parenchyma (R.W. Kennedy et al. 1968), and reflexed tips of the bracts, features not shared with A . bifolia . Abies lasiocarpa usually exists in small stands at high elevations and is not often

observed. Its differences in comparison to A . bifolia have prompted studies (W.H. Parker et al. 1979) to see if it is A . bifolia introgressed with the sympatric A . amabilis . Abies lasiocarpa and A . amabilis , however, are separated by many morphologic features, and no hybrids have been found (W.H. Parker et al. 1979)."

ssp. *bifolia* (A. Murray bis) Silba [HC2]
J. Int. Conifer Preserv. Soc. 15(2): 42. 2008.
Rocky Mountain subalpine fir

Abies bifolia A. Murray bis [FNA2]

ssp. *lasiocarpa* [HC2]
subalpine fir

Abies procera Rehder [FNA2, HC, HC2]
Rhodora. 42: 522. 1940.
noble fir

Abies nobilis (Douglas ex D. Don) Lindl.

Larix [FNA2, HC, HC2]
Gard. Dict. Abr., ed. 4. vol. 2. 1754.
larch

Larix lyallii Parl. [FNA2, HC, HC2]
Conif. Nov. 3. 1863.
subalpine larch

FNA2: "Larix lyallii and L . occidentalis (Larix sect. Multiseriales) are similar morphologically and have similar geographic ranges. Just how closely the two species are related has not been determined, but they probably originated from a common ancestor resembling L . potaninii Batalin. Although the geographic ranges of the two species overlap considerably, elevational differences of 150 to 300m usually separate them. Some morphologically intermediate specimens have been collected from Washington and Montana. Because of its restricted distribution and growth at timberline, alpine larch has no commercial importance; it is often dwarfed and misshapen."

Larix lyallii Parl. × ***Larix occidentalis*** Nutt. [HC2]

Larix occidentalis Nutt. [FNA2, HC, HC2]
N. Amer. Sylv. 3: 143, plate 120. 1849.
western larch

FNA2: "Western larch, when forest grown, is usually branch-free over most of its height. This is one of the most valuable timber-producing species in western North America. Its wood is made into framing, railway ties, pilings, exterior and interior finishing work, and pulp. In some localities it is the preferred firewood."

Picea [FNA2, HC, HC2]
Fl. Berlin. 2: 794. 1824.
spruce

Picea ×albertiana S. Br. [HC2]
interior spruce

Picea glauca (Moench) Voss, misapplied

Picea engelmannii Engelm. [FNA2, HC, HC2]
Trans. Acad. Sci. St. Louis. 2: 212. 1863.
Engelmann's spruce

var. *engelmannii* [FNA2, HC2]
Trans. Acad. Sci. St. Louis. 2: 212. 1863.
Engelmann spruce

Picea engelmannii Engelm. var. *glabra* Goodman [HC]

Picea sitchensis (Bong.) Carrière [FNA2, HC, HC2]
Traité Gén. Conif. 260. 1855.

Sitka spruce

Abies falcata Raf.
Abies menziesii (Douglas ex D. Don) Lindl.
Picea falcata (Raf.) Suringar
Picea menziesii (Douglas ex D. Don) Carrière
Pinus menziesii Douglas ex D. Don

Pinus [FNA2, HC, HC2]
Sp. Pl. 2: 1000. ; Gen Pl. ed. 5. 1753; Gen. Pl. ed. 5, 434, 1754.
pine

Pinus albicaulis Engelm. [FNA2, HC, HC2]
Trans. Acad. Sci. St. Louis. 2: 209. 1863.
white-bark pine

Apinus albicaulis (Engelm.) Rydb.

Pinus contorta Douglas ex Loudon [FNA2, HC, HC2]
Arbor. Frutic. Brit. 4: 2292, figs. 2210, 2211. 1838.
lodgepole pine

var. *contorta* [FNA2, HC, HC2]
Arbor. Frutic. Brit. 4: 2292, figs. 2210, 2211. 1838.
shore pine

var. *latifolia* Engelm. [FNA2, HC, HC2]
Botany (Fortieth Parallel). 331. 1871.
lodgepole pine

Pinus contorta Douglas ex Loudon ssp. *latifolia* (Engelm.) Critchfield
Pinus divaricata (Aiton) Sudw. var. *hendersonii* (Lemmon) B. Boivin
Pinus divaricata (Aiton) Sudw. var. *latifolia* (Engelm. ex S. Watson) B. Boivin

FNA2: "Pinus contorta var. latifolia is fire successional. It is the most wide-ranging and commercially utilized variety. Its poor self-pruning character makes it less desirable for lumber but adequate for mine timbers, fences, and pulpwood."

Pinus monticola Douglas ex D. Don [FNA2, HC, HC2]
Descr. Pinus [ed. 3]. 2: unnumbered page between 144 and 145. 1832.
western white pine

Pinus strobus L. var. *monticola* (Douglas ex D. Don) Nutt.
Strobus monticola (Douglas ex D. Don) Rydb.

Pinus ponderosa Douglas ex P. Lawson & C. Lawson [FNA2, HC, HC2]
Agric. Man. 354. 1836.
ponderosa pine, western yellow pine

var. *ponderosa* [FNA2, HC2]
Agric. Man. 354. 1836.
ponderosa pine, western yellow pine

Pinus beardsleyi A. Murray
Pinus benthamiana Hartw.
Pinus washoensis H. Mason & Stockw. [FNA2]

Pseudotsuga [FNA2, HC, HC2]
Traité Gén. Conif., ed. 2. 256. 1867.
Douglas fir, Oregon pine

Pseudotsuga menziesii (Mirb.) Franco [FNA2, HC, HC2]
Bol. Soc. Brot. ser. 2, 24: 74. 1950.
Douglas-fir

Abies menziesii Mirb.
Abies mucronata Raf.

Abies taxifolia Poir.
Pinus taxifolia Lamb.
Pseudotsuga douglasii (Lindl.) Carrière
Pseudotsuga mucronata (Raf.) Sudw.
Pseudotsuga taxifolia (Lamb.) Britton

var. *glauca* (Mayr) Franco [FNA2, HC, HC2]
Bol. Soc. Brot. ser. 2, 24: 77. 1950.
pino real Colorado, Rocky Mountain Douglas-fir

Pseudotsuga douglasii (Lindl.) Carrière var. *glauca* Mayr
Pseudotsuga flahaultii Flous
Pseudotsuga menziesii (Mirb.) Franco var. *flahaultii* (Flous) Silba
Pseudotsuga taxifolia (Lamb.) Britton var. *glauca* (Beissn.) Sudw.

var. *menziesii* [FNA2, HC, HC2]
Bol. Soc. Brot. ser. 2, 24: 74. 1950.
coast Douglas-fir

Tsuga [FNA2, HC, HC2]
hemlock

Tsuga heterophylla (Raf.) Sarg. [FNA2, HC, HC2]
Silva. 12: 73, plate 605. 1898.
western hemlock

Abies heterophylla Raf.

FNA2: "Tsuga × jeffreyi (Henry) Henry was described from southwestern British Columbia and western Washington as a hybrid between T . heterophylla and T . mertensiana . Hybridization is rare, if it occurs at all, and it is therefore of little consequence (R.J. Taylor 1972). At the upper elevational limits of its distribution and under stressful conditions, T . heterophylla tends to resemble T . mertensiana , e.g., leaves are less strictly 2-ranked and stomatal bands on the abaxial leaf surfaces are less conspicuous than at lower elevations."

Tsuga ×jeffreyi (Henry) Henry [FNA2, HC2]
Proc. Roy. Irish Acad. 34: 55. 1919.

FNA2: "Tsuga × jeffreyi (Henry) Henry was described from southwestern British Columbia and western Washington as a hybrid between T . heterophylla and T . mertensiana . Hybridization is rare, if it occurs at all, and it is therefore of little consequence (R.J. Taylor 1972). At the upper elevational limits of its distribution and under stressful conditions, T . heterophylla tends to resemble T . mertensiana , e.g., leaves are less strictly 2-ranked and stomatal bands on the abaxial leaf surfaces are less conspicuous than at lower elevations."

Tsuga mertensiana (Bong.) Carrière [FNA2, HC, HC2]
Traité Gén. Conif., ed. 2. 250. 1867.
mountain hemlock

Abies hookeriana A. Murray bis
Abies mertensiana Bong.
Hesperopeuce mertensiana (Bong.) Rydb.
Picea hookeriana (A. Murray bis) Bertrand
Tsuga crassifolia Flous

FNA2: "M.Van Campo-Duplan and H.Gaussen (1948) postulated that this taxon originated by hybridization between Picea and Tsuga . Although this is unlikely, some characteristics such as leaf arrangement and shape, phenolic chemistry, and pollen grain structure lend some support for this hypothesis."

Taxaceae [FNA2, HC, HC2] Yew Family

Taxus [FNA2, HC, HC2]

Sp. Pl. 2: 1040. 1753; Gen. Pl. ed. 5, 462, 1754.

yew

**Taxus baccata* L. [HC2, Stace 1997]

Sp. Pl. 2: 1040. 1753.

English yew

Recently collected in several places in King Co. as a garden escape.

Taxus brevifolia Nutt. [FNA2, HC, HC2]

N. Amer. Sylv. 3: 86, plate 108. 1849.

Pacific yew, western yew

Taxus baccata L. ssp. *brevifolia* (Nutt.) Pilger
Taxus baccata L. var. *brevifolia* (Nutt.) Koehne
Taxus baccata L. var. *canadensis* Benth.
Taxus bourcieri Carrière
Taxus lindleyana A. Murray bis

FNA2: "The name Taxus baccata Hooker has been misapplied to this species. The leaves of Taxus brevifolia are usually somewhat falcate. The wood of Taxus brevifolia is hard and durable, yet easily worked, making it popular for construction of novelty items by local woodworkers. Because of this, large trees are unscrupulously poached; in some areas the species has been nearly extirpated. The bark of the tree is a promising natural source of taxol, a drug for treating various cancers; exploitation of the species for medicinal purposes is further threatening it."

Dicots:

Aceraceae: see Sapindaceae

Adoxaceae [HC, HC2] Muskroot Family

Sambucus [HC, HC2]
elder, elderberry

Sambucus cerulea Raf. [HC, HC2, VPBC1]
Alsogr. Amer. 48. 1838.
blue elderberry

Sambucus caerulea Raf., orthographic variant
Sambucus caerulea Raf. var. *neomexicana* (Wooton) Rehder, orthographic variant
Sambucus cerulea Raf. var. *cerulea*
Sambucus glauca Nutt.
Sambucus mexicana C. Presl ex DC. [JPM]
Sambucus mexicana C. Presl ex DC. ssp. *caerulea* (Raf.) E. Murray, orthographic variant
Sambucus mexicana C. Presl ex DC. var. *caerulea* (Raf.) E. Murray, orthographic variant
Sambucus neomexicana Wooton
Sambucus neomexicana Wooton var. *vestita* (Wooton & Standl.) Kearney & Peebles
Sambucus nigra L. ssp. *caerulea* (Raf.) R. Bolli [JPM2], orthographic variant

**Sambucus nigra* L. [HC2]
Sp. Pl. 1: 269 (-270). 1753.
black elderberry

*ssp. *nigra* [HC2]

Sambucus racemosa L. [HC, HC2]
Sp. Pl. 1: 270. 1753.
red elderberry

var. *arborescens* (Torr. & A. Gray) A. Gray [HC, HC2, VPBC1]
Syn. Fl. N. Amer. 1(2): 8. 1884.
coast red elderberry

Sambucus pubens Michx. var. *arborescens* Torr. & A. Gray
Sambucus racemosa L. var. *racemosa* [JPM2], misapplied

var. *melanocarpa* (A. Gray) McMinn [HC, HC2]
Man. Calif. Shrubs 529. 1939.
black elderberry

Sambucus melanocarpa A. Gray

Viburnum [HC, HC2]
viburnum

Viburnum edule (Michx.) Raf. [HC, HC2, JPM2]
Med. Repos., ser. 2, 5: 254. 1808.
squashberry

Viburnum opulus L. var. *edule* Michx.
Viburnum pauciflorum Bach. Pyl. ex Torr. & A. Gray

Viburnum ellipticum Hook. [HC, HC2, JPM2]
Flora Boreali-Americana 1: 280. 1833.

western blackhaw, oval-leaved viburnum

Viburnum ellipticum Hook. var. *macrocarpum* Suksd.

**Viburnum lantana* L. [HC2]
Sp. Pl. 1: 268. 1753.
wayfaring-tree

Viburnum opulus L. [HC, HC2]
Sp. Pl. 1: 268. 1753.
cranberry-bush, high-bush cranberry

var. *americanum* Aiton [HC, HC2]
Hort. Kew. 1: 280. 1789.
American cranberry-bush, American high-bush cranberry

Viburnum opulus L. ssp. *trilobum* (Marshall) R.T. Clausen
Viburnum trilobum Marshall

**var. opulus* [HC2, Stace 1997]
Sp. Pl. 1: 268. 1753.
European cranberry-bush, European high-bush cranberry

**Viburnum tinus* L. [HC2]
Sp. Pl. [Linnaeus] 1: 267. 1753.
laurustinus

Amaranthaceae [FNA4, HC, HC2] Amaranth Family

Synonyms:
Chenopodiaceae [FNA4, HC] (Goosefoot Family)

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

Amaranthus [FNA4, HC, HC2]
Sp. Pl. 2: 989. 1753; Gen. Pl., ed. 5, 427. 1754.
amaranth, pigweed

**Amaranthus albus* L. [FNA4, HC, HC2]
Syst. Nat. ed. 10. 2: 1268. 1759.
white pigweed, tumbleweed

Amaranthus albus L. var. *pubescens* (Uline & W.L. Bray) Fernald
Amaranthus pubescens (Uline & W.L. Bray) Rydb.

FNA: "Amaranthus albus and A. blitoides are rather often confused in herbaria. The species are easily distinguished by their seed size and luster."

**Amaranthus blitoides* S. Watson [FNA4, HC2]
Proc. Amer. Acad. Arts. 12: 273. (as Amarantus). 1877.
matweed, prostrate pigweed

Amaranthus graecizans L. [FNA4, HC], misapplied

Often confused with Amaranthus albus L., but differentiated by seed size and luster. Taxonomy follows FNA. Amaranthus graecizans is native to the Mediterranean, and has never been found in the western United States.

**Amaranthus blitum* L. [FNA4, HC2]
Sp. Pl. 2: 990. 1753.
livid amaranth, pale amaranth

Amaranthus ascendens Loisel.

Amaranthus blitum L. ssp. *polygonoides* (Moq.) Cattetero
Amaranthus lividus L.

Amaranthus californicus (Moq.) S. Watson [FNA4, HC, HC2]
Bot. California. 2: 42. (as Amarantus). 1880.
California amaranth

Mengea californica Moq.

**Amaranthus deflexus* L. [FNA4, HC2]
Mant. Pl. 2: 295. 1771.
Argentina amaranth

**Amaranthus hybridus* L. [FNA4, HC2]
Sp. Pl. 2: 990. 1753.
green amaranth, hybrid amaranth, smooth amaranth, green pigweed, smooth pigweed

Often mistaken for Amaranthus powellii or A. retroflexus.

**Amaranthus powellii* S. Watson [FNA4, HC, HC2]
Proc. Amer. Acad. Arts. 10: 347. (as Amarantus). 1875.
green amaranth, Powell's amaranth

Amaranthus bracteosus Uline & W.L. Bray
Amaranthus powellii S. Watson ssp. *bouchonii* (Thell.) Costea & Carretero [KZ99]
Amaranthus powellii S. Watson ssp. *powellii* [KZ99]
Atriplex retroflexus L. var. *powellii* (S. Watson) B. Boivin

**Amaranthus retroflexus* L. [FNA4, HC, HC2]
Sp. Pl. 2: 991. 1753.
redroot pigweed, rough pigweed

Amaranthus retroflexus L. var. *salicifolius* I.M. Johnst.

Atriplex [FNA4, HC, HC2]
Sp. Pl. 2: 1052. 1753; Gen. Pl. ed. 5, 472. 1754.
greasewood, orache, saltbush, shadscale, silverscale
(see also *Grayia*)

Atriplex argentea Nutt. [FNA4, HC, HC2]
Gen. N. Amer. Pl. 1: 198. 1818.
silver orache, silverscale orache

var. *argentea* [FNA4, HC2, KZ99]
Gen. N. Amer. Pl. 1: 198. 1818.
silver saltbush, silverscale

Atriplex volutans A. Nelson

Atriplex canescens (Pursh) Nutt. [FNA4, HC, HC2]
Gen. N. Amer. Pl. 1: 197. 1818.
fourwing saltbush, hoary saltbush, shadscale, wingscale
(see also *Atriplex gardneri*)

Atriplex nuttallii S. Watson [HC]
Atriplex nuttallii Wats. var. *nuttallii* [HC]

var. *canescens* [FNA4, HC, HC2]
Gen. N. Amer. Pl. 1: 197. 1818.
hoary saltbush

Atriplex canescens (Pursh) Nutt. var. *angustifolia* (Torr.) S. Watson
Atriplex canescens (Pursh) Nutt. var. *occidentalis* (Torr. & Frém.) S.L. Welsh & Stutz

FNA4 includes Washington within the range of this taxon, indicating a population in eastern Washington near Spokane.

Atriplex dioica Raf. [FNA4, HC, HC2]

Amer. Monthly Mag. & Crit. Rev. 2(2): 119. 1817.
thickleaf orache, saline saltbush

Atriplex dioica (Nutt.) J.F. Macbr., misapplied
Atriplex patula L. var. *subspicata* (Nutt.) S. Watson
Atriplex subspicata (Nutt.) Rydb.

This is the common native annual of coastal salt marshes and beaches. Taxonomy and nomenclature follow FNA, departing from the treatment in H&C, where plants called Atriplex dioica (Nutt.) J. F. Macbr. (from Montana) are now considered A. suckleyi (Torr.) Rydb. (Bassett et al. 1979). The name Atriplex dioica (Nutt.) J. F. Macbr. was published in 1918; the name Atriplex dioica Raf. was published in 1817. FNA4: "The distribution of the species is evidently bipartite, with an eastern coastal series extending northward mainly from New Jersey to Newfoundland and along the St. Lawrence seaway, and perhaps extending to James Bay of Hudson Bay. The western grouping lies mainly west of the 95th meridian of longitude, where it has been collected since early historical times to the present in saline marshes or other saline sites from the Yukon Territory and Northwest Territories, southward to southern California, northern Arizona, northern New Mexico, and Oklahoma. Rafinesque gave the following information: "Stem upright angular branched, leaves petiolate, deltoid, acute, thick, scaly, the proximal opposite toothed, the distal alternate, hastated, entire: flowers dioical glomerate, male spiked naked, female unequal, sepals deltoid, warty-crested." The name Atriplex dioica Rafinesque antedates Chenopodium subspicatum Nuttall by half a year, being published in December 1817. Hence, it is the correct name for the widely ranging species, which has passed most recently under the name A. subspicata. Nuttall\\\'s description of the habitat of Chenopodium subspicatum is: "In saline soils around Mandan Village, Missouri," a designation of habitat that applies to this day. The species forms a mirror-image set of specimens with the remarkably similar Atriplex prostrata, from which it may be distinguished in most cases by the thickened, merely ovate to lanceolate leaf blades, and less commonly but in some localities exclusively triangular-hastate to lanceolate, mostly scurfy and prominently 3-veined leaf blades. In some specimens, including the types of both Chenopodium subspicatum and Atriplex carnosa, the blades bear a hastate lobe at or above the base and sometimes match triangular-hastate profile of A. prostrata. The leaves of A. prostrata are typically thin-textured, green, not scurfy, and the veins of the blade are obscure. I. J. Bassett et al. (1983) disallowed within A. dioica (as A. subspicata) any but those with lanceolate blades, including those with the proximalmost leaves with a pair of subbasal hastate lobes. However, there are numerous specimens in which the blades are thickened and transitional in that regard to the triangular-hastate profile as in A. prostrata. Certainly those specimens with triangular or triangular-hastate leaves taken prior to the introduction of A. prostrata sometime late in the nineteenth or early twentieth century, clearly belong to the indigenous A. dioica. Whether there are intermediates between diploid (2n = 18) A. prostrata and tetraploid or hexaploid (2n = 36, 54) A. dioica is not known. There does not seem to be any consistent feature or combination of features by which all specimens can be assigned to one or the other of the two taxa. It seems probable, however, that A. prostrata is a late introduction from Europe, and that it, along with the related A. heterosperma, is now invading habitats previously occupied exclusively by the indigenous A. dioica."

Atriplex gardneri (Moq.) D. Dietr. [FNA4, HC2]
Syn. Pl. 5: 537. 1852.
Gardner's saltbush

var. *falcata* (M.E. Jones) S.L. Welsh [FNA4, HC2]
Great Basin Naturalist. 44: 191. 1984.
moundscale, gardner's saltbush, sickle saltbush, saltsage

Atriplex falcata (M.E. Jones) Standl. [KZ99]
Atriplex nuttallii S. Watson var. *falcata* M.E. Jones [HC]

Atriplex gmelinii C.A. Mey. ex Bong. [FNA4, HC2]
Mém. Acad. Imp. Sci. St. Pétersbourg, Sér. 6, Sci. Math. 2: 160. 1838.
Gmelin's orache, Gmelin's saltbush

var. *gmelinii* [FNA4, HC2]
Mém. Acad. Imp. Sci. St. Pétersbourg, Sér. 6, Sci. Math. 2: 160. 1838.
Gmelin's orache, Gmelin's saltbush

Atriplex gmelinii C.A. Mey. ex Bong. var. *zosterifolia* (Hook.) Moq.
Atriplex patula L. var. *obtusa* (Cham.) C.L. Hitchc. [HC]

Atriplex patula L. var. *zosteraefolia* (Hook.) Hitchc. [HC]
Atriplex patula L. var. *zosterifolia* (Hook.) C.L. Hitchc.

**Atriplex heterosperma* Bunge [FNA4, HC, HC2]*
Beitr. Fl. Russl. 272. 1852.
orach, Russian atriplex orach

Atriplex micrantha Ledeb. [KZ99], misapplied

FNA4: "Russian atriplex occurs with greasewood, saltgrass, cottonwood, tamarix, and weedy annuals. It is a handsome, vigorous ruderal, weedy annual indigenous to Europe east to Chinese Turkestan that appears to be invading saline lowland and other disturbed areas throughout much of North America. It is similar to Atriplex prostrata from which it can be distinguished by the entire margin and smooth surfaces of the fruiting bracteoles. Additionally, the leaves are thick-textured and often bear one or more lobes or teeth irregularly along the blade above the subbasal main hastate lobe. The staminate spikes when young are very slender, mainly less than 2.5 mm thick."

**Atriplex hortensis* L. [FNA4, HC, HC2]*
Sp. Pl. 2: 1053. 1753.
garden orache, French spinach

Atriplex nitens Schkuhr

FNA4: "Atriplex hortensis has been widely grown as a potherb, has escaped from cultivation, and is now established especially in moist ruderal sites. It is easily distinguished by its rounded, samaralike, entire, and smooth fruiting bracteoles, and the presence of two kinds of pistillate flowers, the one enclosed by bracteoles and lacking sepals, the other without bracteoles but subtended by sepals. Atriplex nitens (see list of excluded taxa) is distinguished from A. hortensis in Flora Europea (P. Aellen 1964b) by having leaf blades densely white scurfy beneath, the distal surface lustrous, as opposed to green and dull for A. hortensis. Occasional specimens, treated here as A. hortensis, have leaves somewhat scurfy."

**Atriplex littoralis* L. [FNA4, HC2]*
Sp. Pl. 2: 1054. 1753.
grassleaf orache, narrow-leaved orache

Atriplex patula L. var. *littoralis* (L.) A. Gray [HC]

**Atriplex longipes* Drejer [Flora Europaea, HC2]*
Fl. Excurs. Hafn. 107. 1838.
long-stalked orache, Baltic saltbush

Atriplex longipes Drejer ssp. *praecox* (Hülph.) Turesson
Atriplex nudicaulis Boguslaw [FNA4], misapplied
Atriplex praecox Hülph.

**Atriplex oblongifolia* Waldst. & Kit. [FNA4, HC2]*
Descr. Icon. Pl. Hung. 3: 278, plate 211. 1812.
oblongleaf orache

Reported for Washington in Bassett et al. (1983). FNA4: "I. J. Bassett et al. (1983) indicated that Atriplex oblongifolia formed abundant, very fertile hybrids with A. patula in the Botanic Garden at Manchester University. This is a weedy species with facies similar to both A. dioica and A. glabriuscula var. acadiensis. The proximal branches at least are opposite, similar to phases of the nearly allied A. patula, however. It is likewise an introduced ruderal weed of roadsides and other waste places. Its spread in North America awaits documentation. The thin, entire fruiting bracts without appendages are pointed to as diagnostic of this entity from other similar species."

**Atriplex patula* L. [FNA4, HC, HC2]*
Sp. Pl. 2: 1053. 1753.
halberdleaf orache, spear oracle
(see also *Atriplex gmelinii*, *Atriplex littoralis*, *Atriplex prostrata*)

Atriplex hastata L. ssp. *patula* (L.) S. Pons
Atriplex hastata L. var. *patula* (L.) Farw.
Atriplex patula L. var. *patula* [HC]

FNA4: "Atriplex patula appears to have been a rather recent introduction in North America from Eurasia,

not arriving perhaps until sometime in the early to mid-eighteenth century. It simulates depauperate specimens of A. dioica, A. glabriuscula, and other similar species when leaves are reduced to a near-linear profile. Such specimens are difficult if not impossible to assign to any of the species."

**Atriplex prostrata* Boucher ex DC. [FNA4, HC2]
Fl. Franç. ed. 3. 3: 387. 1805.
fat hen, hastate orache, thin-leaf orache

Atriplex triangularis Willd. [JPM]

A common annual introduction in coastal habitats, also found east of the Cascades. FNA4: "Atriplex prostrata often grows with willow, tamarix, Scirpus (Schoenoplectus and Bulboschoenus segregates), Juncus, Distichlis, and Typha. Perhaps the phase along coastal eastern North America is indigenous, but this and the related Atriplex heterosperma evidently moved quickly from one palustrine habitat to another following subsequent introductions from the Old World. They were probably initially introduced as ballast waifs, and subsequently dispersed by waterfowl. The two species are now commonplace in lands within and adjacent to marshes in much of North America west of the initial sites of introduction. The name for the species taken up here follows the nomenclatural interpretation of J. McNeill et al. (1983)."

**Atriplex rosea* L. [FNA4, HC, HC2]
Sp. Pl., ed. 2. 2: 1493. 1763.
red orach, tumbling orach

FNA4: "At least some early collections were from ballast dumps at harbors on both coasts. It seems probable that the plants were quickly spread inland from initial centers of introduction by birds and more recently along railroads."

Atriplex truncata (Torr. ex S. Watson) A. Gray [FNA4, HC, HC2]
Proc. Amer. Acad. Arts. 8: 398. 1872.
wedge orache, wedgeleaf orache, wedgescale orache

Atriplex subdecumbens M.E. Jones
Atriplex truncata (Torr. ex S. Watson) A. Gray var. *stricta* A. Gray

**Bassia* [FNA4, HC, HC2]
Mélanges Philos. Math. Soc. Roy. Turin. 3: 177. 1766.
bassia, smotherweed

**Bassia hyssopifolia* (Pall.) Kuntze [FNA4, HC, HC2]
Revis. Gen. Pl. 2: 547. 1891.
five-hook bassia, five-hook smotherweed

Echinopsilon hyssopifolium (Pall.) Moq.
Salsola hyssopifolia Pall.

**Bassia scoparia* (L.) A.J. Scott [HC2]
Feddes Repert. 81(2?3): 108. 1978.
red belvedere, mock cypress, summer cypress

Chenopodium scoparium L.
Kochia alata Bates
Kochia scoparia (L.) Schrad. [FNA4, HC]
Kochia scoparia (L.) Schrad. f. *trichophylla* (A. Voss) Stapf ex Schinz & Thell.
Kochia scoparia (L.) Schrad. ssp. *scoparia* [FNA4]

**Beta* [FNA4, HC, HC2]
Sp. Pl. 1: 222. 1753; Gen. Pl. ed. 5, 103. 1754.

Blitum [HC2]
goosefoot, povertyweed

Monolepis [FNA4]
Monolepsis [HC], orthographic variant

Blitum capitatum L. [HC2]
Sp. Pl. 1: 4. 1753.

strawberry blite, Indian ink, Indian paint

Chenopodium capitatum (L.) Ambrosi [FNA4, HC]
Chenopodium capitatum (L.) Ambrosi var. *capitatum* [FNA4]

Blitum hastatum Rydb. [HC2]
Bull. Torrey Bot. Club 28: 273. 1901.
Indian ink , Indian-paint, strawberry-blight

Chenopodium capitatum (L.) Ambrosi var. *parvicapitatum* S.L. Welsh [FNA4]
Chenopodium overi Aellen

Blitum nuttallianum Schult. [HC2]
Mant. 1: 65. 1822.
Nuttall's povertyweed

Monolepis chenopodioides Moq.
Monolepis nuttalliana (Schult.) Greene [FNA4]
Monolepsis nuttalliana (Schultes) Greene [HC], orthographic variant

Blitum spathulatum (A. Gray) S. Fuentes, Uotila & Borsch [HC2]
Willdenowia 42(1): 17. 2012.
prostrate monolepis

Monolepis spathulata A. Gray [FNA4]
Monolepsis spathulata Gray [HC], orthographic variant

Not reported in WA by either H&C or FNA, however identification of single specimen collected in WA verified by Noel Holmgren in 2011 in association with publication of final volume of Intermountain Flora. Presence in WA represents significant disjunction from known range from southern ID, southeastern OR south to Baja California.

**Blitum virgatum* L. [HC2]
Sp. Pl. 1: 4-5. 1753.
leafy goosefoot

Chenopodium foliosum (Moench) Asch. [FNA4, HC]
Chenopodium virgatum Thunb. [Abrams]

FNA4: "Chenopodium foliosum is probably native to the mountains of south and central Europe and western Asia. Several closely related segregate species are currently recognized within the C. foliosum group (P. Uotila 1979, 1993, 1997). Chenopodium foliosum listed and illustrated in J. C. Hickman (1993) is in fact C. capitatum var. parvicapitatum."

Chenopodiastrum [HC2]
goosefoot

**Chenopodiastrum murale* (L.) S. Fuentes, Uotila & Borsch [HC2]
Willdenowia 42(1): 14. 2012.
nettleleaf goosefoot, wall goosefoot, sowbane

Chenopodium murale L. [FNA4, HC]
Chenopodium urbicum L. [FNA4, HC], misapplied

KZ notes Chenopodium urbicum was reported from farmyards in Whatcom Co. by Muenscher (1930), whose voucher may be at CU or WS. However, Muenscher (1941) does not list the species again, instead listing C. murale from farmyards. The FNA authors did not find a specimen to verify the Washington report of C. urbicum, or reports from Oregon and British Columbia, so the occurrence of Chenopodium urbicum must remain dubious in the Pacific Northwest. Validated FNA records of C. urbicum are all mapped in the northeastern United States. FNA4: "Chenopodium murale is distinctive and is one of the more common species of the genus in the world, especially in tropical and subtropical regions."

Chenopodiastrum simplex (Torrey) S. Fuentes, Uotila & Borsch [HC2]
Willdenowia 42(1): 14. 2012.
giant goosefoot, maple leaf goosefoot

Chenopodiastrum hybridum (L.) S. Fuentes, Uotila & Borsch, misapplied

Chenopodium gigantospermum Aellen
Chenopodium hybridum L. var. *gigantospermum* (Aellen) Rouleau
Chenopodium hybridum L. var. *simplex* Torr.
Chenopodium simplex (Torr.) Raf. [FNA4]

A forest species that can occur in waste ground. Here we follow the taxonomy of FNA, and consider Chenopodium hybridum L. to be an Old World species not recorded in our area, with differences in the seed coat, pericarp, and chromosome number (Baranov 1964). FNA4: "A closely related Eurasian diploid species, Chenopodium hybridum Linnaeus, probably also occurs in North America as introduced. Its occurrence in the New World needs confirmation. Chenopodium simplex differs from its Eurasian counterpart in having a smoother seed coat, a yellowish pericarp that is more adherent to the seed, and a different chromosome number (A. I. Baranov 1964; R. D. Dorn 1988b)."

Chenopodium [FNA4, HC, HC2]
Sp. Pl. 1: 218. 1753; Gen. Pl. ed. 5. 103. 1754.
goosefoot, lamb's quarters, pigweed
(see also *Blitum*, *Chenopodiastrum*, *Dysphania*, *Oxybasis*)

**Chenopodium album* L. [FNA4, HC, HC2]
Sp. Pl. 1: 219. 1753.
lambsquarters, pigweed

Chenopodium album L. var. *album* [KZ99]
Chenopodium album L. var. *missouriense* (Aellen) Bassett & Crompton [KZ99]
Chenopodium album L. var. *stevensii* Aellen [KZ99]

FNA4: "Chenopodium album, one of the worst weeds and most widespread synanthropic plants on the Earth, in its broad circumscription is also among the most polymorphic plant species. It is a loosely arranged aggregate of still insufficiently understood races. Hundreds of segregate microspecies and infraspecific entities (including nomenclatural combinations) of the C. album aggregate have been described and/or recognized by various authors. Some authors have recognized numerous segregate intergrading species, while others have developed elaborate infraspecific hierarchies with numerous subspecies, varieties, forms, and even numerous subforms (e.g., B. Jüttersonke and K. Arlt 1989), or have combined both approaches. Neither approach has brought satisfactory and uncontroversial results. It is evident that most recent evolutionary processes within the group were greatly affected by anthropic factors, including extensive recent invasions, hybridization between previously geographically isolated taxa, poly-ploidy, intensive selective processes and mutagenesis in synanthropic habitats, gene drift, and so forth. All of these modern factors further complicated the taxonomic situation. Consequently, no infraspecific taxa are formally recognized in the present treatment. We attempt, however, to outline below the most common or noteworthy groups currently placed in Chenopodium album sensu lato. Although we list such groups under binomials, they should be considered here as informal groupings rather than accepted species. It should be also kept in mind that many enigmatic and deviant forms of the Chenopodium album aggregate are in fact hybrids with other (occasionally several) species, and between infraspecific entities. C. album hybridizes with C. suecicum (producing C. ×fursajevii Aellen & Iljin), C. opulifolium (producing C. ×preissmannii Murr), C. strictum [producing C. ×pseudostriatum (Zschacke) Murr], C. ficifolium (producing C. ×jedlickae Dvorák or C. ×zahnii Murr), C. berlandieri (producing C. ×variabile Aellen), and some other species."

Chenopodium atrovirens Rydb. [FNA4, HC2]
Mem. New York Bot. Gard. 1: 131. 1900.
pinyon goosefoot

Chenopodium fremontii S. Watson var. *atrovirens* (Rydb.) Fosberg [HC]

Similar to C. pratericola.

Chenopodium berlandieri Moq. [FNA4, HC2]
Chenop. Monogr. Enum. 23. 1840.
Berlandieri's goosefoot

var. *zschackei* (Murr) Murr ex Graebn. [FNA4, HC2]
Syn. Mitteleur. Fl. 5(1): 81. 1913.
pitseed goosefoot

Chenopodium berlandieri Moq. ssp. *zschackei* (Murr) A. Zobel
Chenopodium zschackei Murr

Very similar in appearance to C. album, but distinguished from that species by having more open inflorescence, honeycomb-pitted pericarp, and strongly carinate (keeled) sepals in fruit. Need mature fruits to distinguish between the two taxa.

Chenopodium fremontii S. Watson [FNA4, HC, HC2]
Botany (Fortieth Parallel). 287. (as fremonti). 1871.
Fremont's goosefoot
(see also *Chenopodium atrovirens*)

Chenopodium fremontii S. Watson var. *fremontii* [HC]

Chenopodium leptophyllum (Moq.) Nutt. ex S. Watson [FNA4, HC, HC2]
Proc. Amer. Acad. Arts. 9: 94. 1874.
narrowleaf goosefoot
(see also *Chenopodium desiccatum*, *Chenopodium subglabrum*)

Chenopodium album L. var. *leptophyllum* Moq.
Chenopodium leptophyllum (Nutt. ex Moq.) S. Watson var. *leptophyllum* [HC]

Chenopodium pratericola Rydb. [FNA4, HC2]
Bull. Torrey Bot. Club. 39: 310. 1912.
desert goosefoot, narrowleaf goosefoot

Chenopodium desiccatum A. Nelson var. *leptophylloides* (Murr) Wahl

**Chenopodium strictum* Roth [FNA4, HC2]
Nov. Pl. Sp. 180. 1821.
white goosefoot

Chenopodium album L. ssp. *striatum* (Kra?an) Murr
Chenopodium album L. var. *microphyllum* Boenn. [KZ99]
Chenopodium album L. var. *striatum* Kra?an [KZ99]
Chenopodium striatum (Kra?an) Murr
Chenopodium strictum Roth ssp. *striatiforme* (Murr) Uotila

FNA4: "Presumed native American plants of Chenopodium strictum were recognized as a separate species, subspecies, or variety [C. glaucophyllum Aellen; C. strictum subsp. glaucophyllum (Aellen) Aellen; C. strictum var. glaucophyllum (Aellen) Wahl]. These plants are very variable, and usually have broader leaves and more lax inflorescences, which might be a result of hybridization with other species of the C. album aggregate. The native status of such forms is very questionable. Typical C. strictum also occurs in North America, but seems to be less common. Some narrow species and hybrids of the C. strictum aggregate are recognized in Eurasia (P. Aellen 1928; F. Dvo ák 1989; P. Uotila 1977, 1993, 1997). Some of these taxa, especially C. striatiforme Murr and C. novopokrovskyanum (Aellen) Uotila, are superficially similar to the native North American taxa of subsect. Leptophylla. Eurasian forms of the C. strictum group usually can be distinguished by their venation pattern (in most cases more than three visible veins even in narrowest leaves). Considering the likely alien status and wide variability of C. strictum in North America, no attempt is made here to subdivide it into infraspecific entities."

Chenopodium subglabrum (S. Watson) A. Nelson [FNA4, HC2]
Bot. Gaz. 34: 362. 1902.
smooth goosefoot

Chenopodium leptophyllum (Moq.) Nutt. ex S. Watson var. *subglabrum* S. Watson [HC]

Corispermum [FNA4, HC, HC2]
Sp. Pl. 1: 4. 1753; Gen. Pl. ed. 5. 5. 1754.
bugseed, tickseed

Corispermum americanum (Nutt.) Nutt. [FNA4, HC2]
Trans. Amer. Philos. Soc., n.s. 5: 165. 1834.
American bugseed

var. *americanum* [FNA4, HC2]

American bugseed

Taxonomy follows FNA, where all members of the genus are considered native in Washington (Bentacourt et al. 1984). Formerly treated as introductions from Europe (Maihle & Blackwell 1978).

Corispermum hookeri Mosyakin [FNA4, HC2]
Novon. 5: 349. 1995.
Hooker's bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

var. *pseudodeclinatum* Mosyakin [FNA4, HC2]
Novon. 5: 350. 1995.
Hooker's bugseed

Known in Washington from the mouth of Okanogan River, and possibly along the Columbia River in Grant County. May intergrade with C. pallasii.

Corispermum pacificum Mosyakin [FNA4, HC2]
Novon. 5: 345, fig. 1A. 1995.
Pacific bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

Our most common species in Washington, on the banks of the Snake and Columbia Rivers. Putative hybrids with C. villosum reported in FNA. FNA4: "Corispermum pacificum seems to be closely related to Siberian C. crassifolium Turczaninov and C. maynense Ignatov. The latter species occurs in the northeastern Russian Far East and may be expected to occur in Alaska. Corispermum pacificum differs from C. maynense by its usually more robust habit, and its wing rounded (rarely rounded-truncate or indistinctly emarginate, but not triangular) at apex. From C. crassifolium it may be distinguished by the constant presence of perianth segments, and more flattened black mature fruits. Corispermum pacificum probably also occurs in adjacent regions of British Columbia. Corispermum pacificum is placed in subsect. Crassifolia (S. L. Mosyakin 1997). This subsection seems to be of Siberian origin, with its central species, C. crassifolium, being closest to the hypothetic ancestral taxon. The presence of perianth segments in C. pacificum may be explained by ancient hybridization with representatives of subsect. Pallasiana. Reproductive isolation between the sympatric species of Corispermum may be achieved by different flowering periods. Occasional hybrids between C. pacificum and C. villosum are similar in their habit to C. pacificum in having usually broad leaves and rather dense inflorescences but they have mostly aborted fruits suggesting that C. pacificum and C. villosum are taxonomically distant species."

**Corispermum pallasii* Steven [FNA4, HC2]
Mém. Soc. Imp. Naturalistes Moscou. 5: 336. 1817.
Pallas' bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

Occurs along the Columbia River Basin and tributaries in Washington, with collections from Okanogan, Grant, and Wahkiakum counties.

Corispermum pallidum Mosyakin [FNA4, HC2]
Novon. 5: 347, fig. 1B. 1995.
pale bugseed

Corispermum nitidum Kit. ex Schult. [FNA4, HC], misapplied

Recently described from sand deposits in Douglas and Grant Cos. (Mosyakin 1995), last collected in 1931. FNA4: "The combination of characteristics of Corispermum pallidum is very distinctive: pale, flattened, and small fruit body; very wide (especially as compared to the fruit dimensions), thin, translucent wing with erose margins, long style bases (ca. 0.7-1 mm, including their parts adnate to wing), distinctly divided in their upper parts to below the edge of the wing. Young bracts and distal leaves of C. pallidum are often papillose on margins and veins, in combination with typical branched trichomes. Corispermum pallidum seems to be related to the eastern Asian C. macrocarpum Bunge ex Maximowicz aggregate (subsect. Platyptera Mosyakin)."

Corispermum villosum Rydb. [FNA4, HC2]
Bull. Torrey Bot. Club. 24: 191. (as Coriospermum). 1897.
hairy bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

Closely related to Corispermum americanum and C. pallasii. FNA4: "Corispermum villosum may also occur in British Columbia, Manitoba, Nevada, South Dakota, and Utah. It is probably introduced rather than native in Ontario (where it is found mostly in Thunder Bay district, known for its grain elevators and mills), Quebec, and Wisconsin. Plants from Minnesota and North Dakota are transitional toward C. americanum. Corispermum villosum is also distinguished by having style bases forming a triangular "beak" distinctly protruding over the edge of the wing/fruit. Some specimens of C. villosum are very similar to the small-fruited and narrow-winged European representatives of C. pallasii. Together with some Eurasian species, C. pallasii, C. americanum, and C. villosum belong to the same group of closely related species, and occasional transitional forms between these taxa are not uncommon in North American material. The names Corispermum orientale Lamarck and C. hyssopifolium were commonly misapplied to C. villosum."

**Cycloloma* [FNA4, HC2]
Chenop. Monogr. Enum. 17. 1840.
cycloloma, pigweed

**Dysphania* [FNA4, HC2]
Prodr. 411. 1810.

**Dysphania ambrosioides* (L.) Mosyakin & Clemants [FNA4, HC2]
Ukrayins?k. Bot. Zhurn., n. s. 59: 382. 2002.
Mexican tea, wormseed

Chenopodium ambrosioides L. [HC]
Teloxys ambrosioides (L.) W.A. Weber

FNA4: "Southern populations of Dysphania ambrosioides are native while those populations in the northern part of the flora area are introduced."

**Dysphania botrys* (L.) Mosyakin & Clemants [FNA4, HC2]
Ukrayins?k. Bot. Zhurn., n. s. 59: 383. 2002.
Jerusalem oak goosefoot, Jerusalem oak

Chenopodium botrys L. [HC]
Teloxys botrys (L.) W.A. Weber

The similar Eurasian and African species Chenopodium schraderiana Schult. should be sought as an adventive, acording to FNA. It has keeled perianth parts with nearly sessile glands, and a leafy inflorescence, compared to C. botrys. FNA4: "Dysphania botrys is related to a species from Africa and southern Eurasia, D. schraderiana (Schultes) Mosyakin & Clemants, which may occur locally in North America as introduced. Dysphania schraderiana has distinctly keeled perianth segments with mostly sessile or subsessile glands. The general inflorescence in D. schraderiana is usually leafy almost to the top, distal cauline leaves are similar to proximal ones (in D. botrys distal leaves are normally much reduced, and the distal portion of the general inflorescence appears nearly leafless). H. A. Wahl (1954) reported that D. schraderiana (as Chenopodium schraderianum) had been grown in Ontario. He did not indicate that it had escaped."

**Dysphania pumilio* (R. Br.) Mosyakin & Clemants [FNA4, HC2]
Ukrayins?k. Bot. Zhurn., n. s. 59: 382. 2002.
small crumbweed, clammy goosefoot

Chenopodium pumilio R. Br. [HC]
Teloxys pumilio (R. Br.) W.A. Weber

FNA4: This species has gone under the misapplied name Chenopodium carinatum R. Brown (now Dysphania carinata).

Grayia [FNA4, HC2]
Bot. Beechey Voy. 387. 1841.
hopsage

Zuckia [FNA4]

Grayia spinosa (Hook.) Moq. [FNA4, HC2]

Prodr. 13(2): 119. 1849.
spiny hopsage

Atriplex spinosa (Hook.) Collotzi [HC]
Chenopodium spinosum Hook.

**Halogeton* [FNA4, HC, HC2]
Icon. Pl. 1: 10, plate 40. 1829.
halogeton

**Halogeton glomeratus* (M. Bieb.) C.A. Mey. [FNA4, HC, HC2]
Icon. Pl. 1: 10. 1829.
halogeton, saltlover

Anabasis glomerata M. Bieb.

FNA4: "A noxious and toxic weed in disturbed, barren, alkaline soils, Halogeton glomeratus is able to withstand high concentrations of salinity. It is often associated with Sarcobatus vermiculatus and Atriplex confertifolia and is found in the cold deserts of western United States. The first collection of Halogeton in the United States was by Ben Stahmann in Wells, Nevada, in 1934. It was not until the fall of 1942, when a herder lost 160 sheep, that the species was recognized as toxic to livestock (J. A. Young et al. 1999)."

Krascheninnikovia [FNA4, HC2]
Novi Comment. Acad. Sci. Imp. Petrop. 16: 551. 1772.
white sage, winter sage, winterfat

Eurotia [HC]

Krascheninnikovia lanata (Pursh) A. Meeuse & A. Smit [FNA4, HC2]
Taxon. 20: 644. 1971.
winterfat

Ceratoides lanata (Pursh) J.T. Howell
Diotis lanata Pursh
Eurotia lanata (Pursh) Moq. [HC]
Eurotia lanata (Pursh) Moq. var. *subspinosa* (Rydb.) Kearney & Peebles

FNA4: "Krascheninnikovia lanata often forms pure stands. It occurs throughout the intermountain region except in the northwest corner of central Oregon. It is called winterfat because of its nutritional importance for domestic livestock, especially sheep."

Micromonolepis [FNA4, HC2]
Nat. Pflanzenfam., ed. 2. 16c: 499. 1934.
povertyweed

Micromonolepis pusilla (Torr. ex S. Watson) Ulbr. [FNA4, HC2]
Nat. Pflanzenfam., ed. 2. 16c: 500. 1934.
red povertyweed

Monolepis pusilla Torr. ex S. Watson
Monolepsis pusilla Torr. [HC], orthographic variant

Micromonolepis is monotypic, and restricted to the western United States.

Oxybasis [HC2]
goosefoot

Oxybasis chenopodioides (L.) S. Fuentes, Uotila & Borsch [HC2]
Willdenowia 42(1): 15. 2012.
low goosefoot, red goosefoot

Blitum chenopodioides L.
Chenopodium botryodes Sm.
Chenopodium chenopodioides (L.) Aellen [FNA4, HC]

The Linnaean basionym was neotypified (Uotila 2001). FNA4: "The name Chenopodium botryodes Smith

was sometimes applied to C. chenopodioides because of uncertainty about the proper application and typification of the name Blitum chenopodioides Linnaeus. The recent publication by P. Uotila (2001) provides a reasonable solution by maintaining the traditional usage through neotypification of the Linnaean name."

Oxybasis glauca (L.) S. Fuentes, Uotila & Borsch [HC2]
Willdenowia 42(1): 15. 2012.
glaucous goosefoot, oakleaf goosefoot

Chenopodium glaucum L. [FNA4, HC]

*ssp. *glauca* [HC2]
oak-leaf goosefoot

Chenopodium glaucum L. var. *glaucum* [FNA4]

Recently (2015) collected in Franklin County; native to Eurasia.

ssp. *salina* (Standl.) Mosyakin [HC2]
Phytoneuron 2013-56: 5. 2013.
Rocky Mountain goosefoot

Chenopodium glaucum L. ssp. *salinum* (Standl.) Aellen
Chenopodium glaucum L. var. *salinum* (Standl.) B. Boivin [FNA4]
Chenopodium salinum Standl. [KZ99]

Taxonomy follows FNA.

**Oxybasis macrosperma* (Hook. f.) S. Fuentes, Uotila & Borsch [HC2]
Willdenowia 42(1): 15. 2012.
large seed goosefoot

Chenopodium farinosum Standl.
Chenopodium macrospermum Hook. f. [FNA4]
Chenopodium macrospermum Hook. f. var. *farinosum* (S. Watson) J.T. Howell [KZ99]
Chenopodium macrospermum Hook. f. var. *halophilum* (Phil.) Aellen [KZ99]
Chenopodium murale L. var. *farinosum* S. Watson

FNA4: "Chenopodium macrospermum is native and diverse in South America. Much, if not all, of the North American material is introduced from there and appears to represent more than one part of the variation. Until a reliable treatment of the South American material is published we are not assigning names to the variants in North America."

Oxybasis rubra (L.) S. Fuentes, Uotila & Borsch [HC2]
Willdenowia 42(1): 15. 2012.
red goosefoot

Chenopodium rubrum L. [FNA4, HC]

var. *humilis* (Hook.) Mosyakin [HC2]
Phytoneuron 2013-56: 4. 2013.
marshland goosefoot

Chenopodium humile Hook.
Chenopodium rubrum L. ssp. *humile* (Hook.) Aellen
Chenopodium rubrum L. var. *humile* (Hook.) S. Watson [FNA4, HC]

FNA4: Chenopodium rubrum var. humile has been treated as a species, variety, or form, or not recognized at all. It is native in western North America and introduced east of the plains. Sometimes it has been misidentified as C. chenopodioides. Patterns of distribution of these taxa in North America are in need of further study."

*var. *rubra* [HC2]
red goosefoot

Chenopodium rubrum L. var. *rubrum* [FNA4, HC]

FNA4: "Hybrids between Chenopodium rubrum and C. glaucum are known as C. ×schulzeanum Murr and have been seen from waste areas in Illinois and Washington. These plants in general resemble C.

rubrum with small, mealy leaves and horizontal seeds, but they also have some leaves shaped like those of C. glaucum."

Salicornia [FNA4, HC, HC2]
Sp. Pl. 1: 3. 1753; Gen. Pl. ed. 5. 4. 1754.
glasswort, saltwort, samphire

Sarcocornia [FNA4, HC2]

Salicornia depressa Standl. [FNA4, HC2]
N. Amer. Fl. 21: 85. 1916.
low saltwort

Salicornia europaea L. [HC], misapplied
Salicornia maritima S.L. Wolff & Jefferies [FNA4], misapplied
Salicornia virginica L. [HC]

H&C name S. europaea is misapplied. This is the common native annual species in coastal marshes. FNA suggests S. virginica may be the best name for this plant, if the Atlantic and Pacific populations are the same taxon. As with all our Corispermum taxa, for many decades this plant was mistakenly given the binomial and introduced status of a European species. FNA4: "Salicornia depressa is the common and widespread species in coastal areas of North America. No detailed taxonomic investigation of the tetraploid populations has ever been undertaken in North America. It is possible that a number of different taxa exist; the Pacific Coast populations in particular seem distinct from those of the Atlantic Coast. This species has generally been called Salicornia europaea by North American authors, but that name refers to a diploid European species that does not occur in North America. The earliest name that is probably referable to this species is Salicornia virginica Linnaeus, which must be typified by specimens collected by John Clayton probably from Virginia. The specimens are sterile but clearly annual, as indicated by Linnaeus in the protologue. The name was applied to an annual species by P. C. Standley (1916), but subsequently came to be misapplied to the perennial species of the east coast now treated in Sarcocornia."

Salicornia pacifica Standl.
N. Amer. Fl. 21: 83. 1916.
woody glasswort, pickelweed

Salicornia perennis Mill., Misapplied in western North America
Sarcocornia pacifica (Standl.) A.J. Scott [FNA4]
Sarcocornia perennis (Mill.) A.J. Scott, Misapplied in western North America

Taxonomy of Salicornia and Sarcocornia has presented challenges over the last few decades. Piirainen et al. (2017) firmly establish Sarcocornia as paraphyletic. Salicornia perennis is a European species and is a misapplied name in the North American flora.

Piirainen, M., O. Liebisch, and G. Kadereit. 2017. Phylogeny, biogeography, systematics and taxonomy of Salicornioideae (Amaranthaceae / Chenopodiaceae) ? A cosmopolitan, highly specialized hygrohalophyte lineage dating back to the Oligocene. Taxon 66:109?132.

Salicornia rubra A. Nelson [FNA4, HC, HC2]
Bull. Torrey Bot. Club. 26: 122. 1899.
red glasswort saltwort

Salicornia borealis S.L. Wolff & Jefferies

Salicornia rubra is known only from Okanogan Co. in Washington. FNA4: "Salicornia rubra is very similar to the Eurasian species S. prostrata Pallas, which occurs in very similar inland habitats. No direct comparison of these two species has been possible and it is not at all clear how they differ from each other."

**Salsola* [FNA4, HC, HC2]
Sp. Pl. 1: 222. 1753; Gen. Pl. ed. 5, 104. 1754.
Russian thistle

**Salsola tragus* L. [FNA4, HC2]
Cent. Pl. II. 13. 1756.
Russian thistle, tumbleweed

Salsola australis R. Br.
Salsola iberica (Sennen & Pau) Botsch. ex Czerepanov
Salsola kali L. [FNA4, HC, HC2], misapplied
Salsola kali L. var. *tenuifolia* Tausch ex Moq. [VPPNW2]
Salsola pestifer A. Nelson

Salsola kali L. subsp. pontica (Pall.) Mosyakin has been collected in Multnomah Co., Oregon, and may be found in Washington. Recent molecular work may change the nomenclature again (Ryan & Ayers 2000). FNA4: "Salsola tragus probably was introduced to South Dakota in 1870 or 1874 in flaxseed imported from Russia (J. C. Beatley 1973c; C. W. Crompton and I. J. Bassett 1985; S. L. Mosyakin 1996). Now this noxious weed occupies almost all of its potential range in North America. It seems, however, to be quite rare in the southeastern part of the United States. Salsola tragus has been known in North American and European botanical literature under numerous names (for detailed synonymy see S. L. Mosyakin 1996 and S. Rilke 1999). Judging from the photographs of the Linnaean specimen of S. tragus (LINN 315.3), which should be regarded as a lectotype, it is the correct name for the widespread, narrow-leaved, weedy representative of the S. kali aggregate (Á. Degen 1936-1938, vol. 2; N. N. Tzvelev 1993; S. L. Mosyakin 1996; S. Rilke 1999). In the present circumscription, Salsola tragus is an extremely polymorphic species consisting of several more or less distinct races (subspecies or segregate species). Several varieties may be recognized within S. tragus, many of them are just morphological variants of little or no taxonomic value. Studies using allozymes and DNA-based molecular markers in some North American and Eurasian representatives of Salsola tragus indicate that there are at least two cryptic genetically divergent populations (F. J. Ryan and D. R. Ayres 2000). More studies may clarify distribution, origin, and taxonomic status of these infraspecific taxa (or cryptic species). In spite of being a noxious weed, Salsola tragus is an additional forage source for livestock in arid rangelands. The mature plant may break off at the stem base to form a tumbleweed."

**Spinacia* [FNA4, HC, HC2]
Sp. Pl. 2: 1027. 1753; Gen. Pl. ed. 5, 452. 1754.

Suaeda [FNA4, HC, HC2]
Onomat. Bot. Compl. 8: 797. 1776.
[name conserved]
seablite

Suaeda calceoliformis (Hook.) Moq. [FNA4, HC2]
Chenop. Monogr. Enum. 128. 1840.
paiuteweed, common seablite, horned seablite, pahute weed

Chenopodium calceoliformis Hook.
Suaeda americana (Pers.) Fernald
Suaeda depressa (Pursh) S. Watson [HC], misapplied
Suaeda depressa (Pursh) S. Watson var. *erecta* S. Watson
Suaeda maritima (L.) Dumort. [FNA4, HC, HC2], misapplied
Suaeda maritima (L.) Dumort. ssp. *maritima*, misapplied

Found in coastal salt marshes and inland. Similar to Suaeda occidentalis, differing only in floral bracts and branching pattern. McNeill et al. (1977) discuss the misapplication of the name Suaeda depressa for this plant. FNA4: "The name Suaeda depressa has been misapplied to this species (J. McNeill et al. 1977). In the northeastern part of its range, S. calceoliformis was long known as S. americana, but the two were found to be conspecific (I. J. Bassett and C. W. Crompton 1978). Suaeda calceoliformis can easily be confused with S. occidentalis, with which it is sympatric in the Great Basin; see comments under S. occidentalis. Plants of the annual Mexican seepweed, S. mexicana (Standley) Standley also are similar to S. calceoliformis, but are more or less shiny, yellowish or light brown, and have opposite leaves at the base and alternate ones distally. Suaeda mexicana has been reported once (in 1895) from El Paso County, Texas, but no specimens have been located to substantiate the report."

Suaeda nigra (Raf.) J.F. Macbr. [FNA4, HC, HC2]
Contr. Gray Herb. 56: 50. 1918.
bushy seablite seepweed

Suaeda fruticosa (L.) Forssk., misapplied
Suaeda intermedia S. Watson [HC]

Suaeda moquinii (Torr.) Greene [KZ99]
Suaeda torreyana S. Watson [Abrams]

FNA4: "Suaeda nigra is the correct name for the species previously known as Suaeda moquinii. The type specimen was collected in 1820 by Edwin James along the Canadian River in the Texas panhandle. J. Torrey (1827) tentatively identified it as "Chenopodium maritimum L. ?". Rafinesque named it Chenopodium nigrum, long before Torrey\\'s publication of the name Chenopodina moquinii in 1856. C. O. Hopkins and W. H. Blackwell (1977) suggested that the name Chenopodium nigrum was both a nomen nudum and a superfluous name. But the publication of that name included a clear reference to Torrey\\'s 1832 publication, which means that the name was not a nomen nudum, and the specimen belonged to a new species, which means that the name was not superfluous. "Suaeda fruticosa" with the incorrect author combination (Linnaeus) Forsskål has been misapplied to this species (H. J. Schenk and W. R. Ferren Jr. 2001). Suaeda nigra exhibits much phenotypic plasticity, as well as genetic variability, and is wide ranging. This combination has resulted in the naming of many variants that often reflect a response to localized or regional habitat conditions such as degree of wetness, salinity, or freezing temperatures (C. O. Hopkins and W. H. Blackwell 1977). In California and adjacent states, for example, glabrous plants (S. torreyana var. torreyana) and pubescent plants (S. torreyana var. ramosissima) occur throughout the distribution of the species. In California it is coastal but not estuarine in the San Francisco Bay area and in Orange and San Diego counties. Plants of northern latitudes or higher elevations that are prone to freezing tend to have annual stems from a woody base. Plants that occur in more southern or milder conditions are usually shrubs with perennial stems. Plants in seasonally flooded wetlands tend to be facultative annuals. In the western and northern part of the range, most plants of Suaeda nigra are glabrous or sparsely pubescent and more or less long leaved."

Suaeda occidentalis (S. Watson) S. Watson [FNA4, HC, HC2]
Proc. Amer. Acad. Arts. 9: 90. 1874.
slender seablite, western seepweed

Schoberia occidentalis S. Watson

Found in saline situations east of the Cascades. FNA4: "This species is easily confused with Suaeda calceoliformis, which occurs throughout its range. There are virtually no differences in floral characters. Bracts of S. occidentalis often appear thin-margined at the base in dried specimens but not in fresh material, whereas bracts of S. calceoliformis have visible membranous margins in both. Differences in bract and branching characteristics are usually distinct in fresh specimens. Larger specimens of S. occidentalis are usually branched throughout, with the spreading branches resulting in a more-or-less spherical shape of the plant. The mostly ascending branches of the more-erect S. calceoliformis tend to be concentrated in the upper half of the main stems, with primary branches sometimes arising from the base, and therefore creating a candelabrum shape of the plant."

Anacardiaceae [HC, HC2] Sumac Family

Rhus [HC, HC2]
sumac
(see also *Toxicodendron*)

Rhus glabra L. [HC, HC2]
Sp. Pl. 1: 265. 1753.
smooth sumac

**Rhus typhina* L. [Flora of Virginia, HC2]
Cent. Pl. II 14. 1756.
staghorn sumac

Easily distinguished from Rhus glabra by the abundance of pubescence on stems and petioles.

Toxicodendron [HC2]
poison ivy, poison oak

Toxicodendron diversilobum (Torr. & A. Gray) Greene [HC2, IFBC]
Leafl. Bot. Observ. Crit. 1(9): 119. 1905.
Pacific poison-oak

Rhus diversiloba Torr. & A. Gray [HC]
Toxicodendron radicans (L.) Kuntze ssp. *diversilobum* (Torr. & A. Gray) Thorne

Toxicodendron radicans (L.) Kuntze [HC2]
Revis. Gen. Pl. 1: 153. 1891.
western poison ivy

Rhus radicans L. [HC]

var. *rydbergii* (Small ex Rydb.) Erskine [Draft FNA, HC2]
Pl. Prince Edward Island 190. 1861.
poison-ivy, western poison-ivy

Rhus radicans L. var. *rydbergii* (Small ex Rydb.) Rehder
Rhus rydbergii (Small ex Rydb.) Greene
Rhus toxicodendron L. var. *vulgaris* Michx.
Toxicodendron radicans (L.) Kuntze ssp. *radicans*, misapplied
Toxicodendron rydbergii (Small ex Rydb.) Greene [IFBC]

Apiaceae [HC2] Carrot Family

Synonyms:
Umbelliferae [HC]

**Aegopodium* [HC2]

**Aegopodium podagraria* L. [HC2, VPBC1]
Sp. Pl. 1: 265. 1753.
bishop's goutweed

Aegopodium podagraria L. var. *variegatum* L.H. Bailey

**Anethum* [HC2]

**Anethum graveolens* L. [HC2, VPBC1]
Sp. Pl. 1: 263. 1753.
dill

Angelica [HC, HC2]
angelica

Angelica arguta Nutt. [HC, HC2, IMF3, VPBC1]
Fl. N. Amer. (Torr. & A. Gray) 1(4): 620. 1840.
Lyall's angelica, sharp-tooth angelica

Angelica lyallii S. Watson
Angelica piperi

Angelica canbyi J.M. Coult. & Rose [HC, HC2]
Rev. N. Amer. Umbell. 40, f. 14. 1888.
Canby's angelica

Angelica genuflexa Nutt. [HC, HC2, VPBC1]
Fl. N. Amer. (Torr. & A. Gray) 1(4): 620. 1840.
kneeling angelica

Angelica hendersonii J.M. Coult. & Rose [HC, HC2]
Bot. Gaz. 13: 80. 1888.

Henderson's angelica, woolly angelica

Angelica tomentosa S. Watson var. *hendersonii* (J.M. Coult. & Rose) Di Tomaso

Angelica lucida L. [HC, HC2, VPBC1]
Sp. Pl. 1: 251. 1753.
seacoast angelica, sea-watch

Coelopleurum actaeifolium (Michx.) J.M. Coult. & Rose
Coelopleurum gmelinii (DC.) Ledeb.
Coelopleurum longipes
Coelopleurum lucida L.
Coelopleurum lucidum (L.) Fernald
Coelopleurum lucidum (L.) Fernald ssp. *gmelinii* (DC.) Á. Löve & D. Löve
Coelopleurum maritimum

**Anthriscus* [HC, HC2]
anthriscus, chervil

**Anthriscus caucalis* M. Bieb. [HC2, VPBC1]
Fl. Taur.-Caucas. 1: 230 1808.
burr chervil

Anthriscus neglecta Boiss. & Reut. var. *scandix* (Scop.) Hyl.
Anthriscus scandicina Mansf. [HC]
Anthriscus vulgaris
Scandix anthriscus

**Anthriscus sylvestris* (L.) Hoffm. [HC, HC2]
Gen. Pl. Umbell. 40 (t. 1, fig. 19). 1814.
wild chervil

Chaerophyllum sylvestre L.

**Apium* [HC2]
celery

**Apium graveolens* L. [HC2]
Sp. Pl. 1: 264. 1753.
celery

*var. *dulce* (Mill.) DC. [HC2]

Celeri graveolens (L.) Britton

Not included in H&C. Naturalization in WA needs to be verified

Berula [HC, HC2]
berula, water parsnip

Berula incisa (Torr.) G.N. Jones [HC2]
Vasc. Pl. Illinois [Jones & Fuller] 353. 1955.

Berula erecta (Huds.) Coville, misapplied
Berula erecta (Huds.) Coville var. *incisa* (Torr.) Cronquist [HC, IMF3, VPBC1]
Berula pusilla Fernald
Berula pusillum
Sium erectum Huds. [IMF]
Sium incisum Torr. [VPBC, VPBC]
Sium pusillum Nutt.

**Carum* [HC, HC2]

**Chaerophyllum* [HC2]
chervil

Chaerophyllum temulum L. [HC2]
Sp. Pl. 1: 258. 1753.
rough chervil

Cicuta [HC, HC2]
water-hemlock

Cicuta bulbifera L. [HC, HC2, VPBC1]
Sp. Pl. 1: 255. 1753.
bulblet-bearing water-hemlock, bulbous water-hemlock

Cicuta douglasii (DC.) J.M. Coult. & Rose [HC, HC2, VPBC1]
Contr. U.S. Natl. Herb. 7: 95. 1900.
Douglas' water-hemlock, western water-hemlock

Cicuta maculata L. var. *californica* (A. Gray) B. Boivin

Cicuta maculata L. [HC2]
Sp. Pl. 1: 256. 1753.
spotted water-hemlock

var. *angustifolia* Hook. [HC2, JPM]
Fl. Bor.-Amer. (Hooker) 1(5): 259. 1832.
spotted water-hemlock

Cicuta occidentalis Greene

Conioselinum [HC, HC2]
hemlock-parsley

Conioselinum pacificum (S. Watson) J.M. Coult. & Rose [HC, HC2, JPM, VPBC1]
Contr. U.S. Natl. Herb. 7: 152. 1900.
Pacific hemlock-parsley

Conioselinum chinense (L.) Britton, Sterns & Poggenb. var. *pacificum* (S. Watson) B. Boivin
Conioselinum gmelinii (Bray) Steud. [KZ99]
Selinum pacificum S. Wats.

Conium [HC, HC2]
poison-hemlock

Conium maculatum L. [HC, HC2, VPBC1]
Sp. Pl. 1: 243. 1753.
poison hemlock

Cymopterus [HC, HC2]
spring parsley

Rhysopterus [HC]

Cymopterus foeniculaceus Torr. & A. Gray [HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(4): 624 (625). 1840.
montane spring parsley

Cymopterus elrodi
Cymopterus terebinthinus (Hook.) Torr. & A. Gray var. *foeniculaceus* (Nutt. ex Torr. & A. Gray) Cronquist [HC, IMF3]
Cymopterus thapsoides
Pteryxia terebinthina (Hook.) J.M. Coult. & Rose var. *foeniculacea* (Torr. & A. Gray) Mathias

Cymopterus terebinthinus (Hook.) Torr. & A. Gray [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(4): 624. 1840.
turpentine spring parsley
(see also *Cymopterus foeniculaceus*)

Cymopterus terebinthinus (Hook.) Torr. & A. Gray var. *terebinthinus* [HC, IMF3]

Pteryxia terebenthina (Hook.) Coult. & Rose
Pteryxia terebinthina (Hook.) J.M. Coult. & Rose
Pteryxia terebinthina (Hook.) J.M. Coult. & Rose var. *terebinthina*

Daucus [HC, HC2]
carrot

**Daucus carota* L. [HC, HC2, VPBC1]
Sp. Pl. 1: 242. 1753.
Queen Anne's-lace, wild carrot

Daucus pusillus Michx. [HC, HC2, VPBC1]
Fl. Bor.-Amer. (Michaux) 1: 164. 1803.
American wild carrot, rattlesnake weed

Daucus carota L. var. *microphyllus*
Daucus microphyllus

Eryngium [HC, HC2]
coyote-thistle, eryngo

Eryngium articulatum Hook. [HC, HC2]
London J. Bot. 6: 232. 1847.
bee-thistle, bee-thistle eryngo

Eryngium petiolatum Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(5): 259. 1832.
Oregon eryngo, rush-leaf eryngo

Eryngium petiolatum Hook. var. *juncifolium*

**Foeniculum* [HC, HC2]
fennel

**Foeniculum vulgare* Mill. [HC, HC2, VPBC1]
Revis. Gen. Pl. 2: 511. 1891.
sweet fennel

Anethum foeniculum
Foeniculum foeniculum (L.) Karst.
Foeniculum officinale

Glehnia [HC, HC2]
glehnia

Glehnia leiocarpa Mathias [HC, HC2]
Ann. Missouri Bot. Gard. 15: 95, t. 17, 19. 1928.
American glehnia

Cymopterus littoralis A. Gray
Glehnia littoralis F. Schmidt ex Miq., misapplied
Glehnia littoralis F. Schmidt ex Miq. ssp. *leiocarpa* (Mathias) Hultén [VPBC1, JPM]
Glehnia littoralis F. Schmidt ex Miq. var. *leiocarpa* (Mathias) B. Boivin

Heracleum [HC, HC2]
cow-parsnip, hogweed

**Heracleum mantegazzianum* Sommier & Levier [HC2, VPBC1]
Nuovo Giorn. Bot. Ital. ser. 2, 2: 79. 1895.
giant hogweed

WA State class A noxious weed

Heracleum maximum Bartr. [HC2, ILBC1]
Travels Carolina 344 (1791); cf. Fernald in Rhodora, xlvi. 50 (1944); Rickett in Rhodora,xlvi. 390. 1944.
American cow-parsnip, American hogweed

Heracleum douglasii
Heracleum lanatum Michx. [HC, IMF3, JPM, VPBC1]
Heracleum sphondylium L. ssp. *montanum* (Schleich. ex Gaudin) Briq.
Heracleum sphondylium L. var. *lanatum* (Michx.) Dorn
Pastinaca lanatum

**Levisticum* [HC2]
garden lovage

Ligusticum [HC, HC2]
licorice-root, lovage

Ligusticum apiifolium (Nutt. ex Torr. & A. Gray) A. Gray [HC, HC2, JPM]
Proc. Amer. Acad. Arts vii. 1868.
celery-leaf wild lovage, parsely-leaf wild lovage

Cynapium apiifolium

Ligusticum canbyi (J.M. Coult. & Rose) J.M. Coult. & Rose [HC, HC2, VPBC1]
Rev. N. Amer. Umbell., 86. 1888.
Canby's wild lovage

Ligusticum caeruleimontanum H. St. John
Ligusticum leibergii J.M. Coult. & Rose

Ligusticum grayi J.M. Coult. & Rose [HC, HC2, IMF3, JPM]
Rev. N. Amer. Umbell. 88, f. 92. 1888.
Gray's lovage, sheep wild lovage

Ligusticum apiifolium var. *minus* Gray ex Brewer & Wats. [IMF]
Ligusticum caeruleomontanum
Ligusticum cusickii
Ligusticum purpureum
Ligusticum tenuifolium var. *dissimilis*
Pimpinella apidora var. *nudicaulis*

Lilaeopsis [HC, HC2]
lilaeopsis

Lilaeopsis occidentalis J.M. Coult. & Rose [HC, HC2, VPBC1]
Bot. Gaz. 24: 48. 1897.
western grasswort, western lilaeopsis

Crantziola occidentalis
Lilaeopsis lineata var. *occidentalis*

Lomatium [HC, HC2]
biscuit-root, lomatium

Orogenia [HC]

Lomatium ambiguum (Nutt.) J.M. Coult. & Rose [HC, HC2, IMF3, VPBC1]
Contr. U.S. Natl. Herb. 7(1): 212. 1900.
Wyeth biscuit-root, stream bank desert-parsley, swale desert-parsley, lacy lomatium

Cogswellia ambigua (Nutt.) M.E. Jones [IMF]
Peucedanum ambiguum (Nutt.) Nutt. ex Torr. & A. Gray

Lomatium anomalum M.E. Jones ex J.M. Coult. & Rose [HC2]
Contr. U.S. Natl. Herb. vii. 237. 1900.
anomalous biscuit-root, nine-leaved biscuit-root

Lomatium triternatum (Pursh) J.M. Coult. & Rose var. *anomalum* (M.E. Jones ex J.M. Coult. & Rose) Mathias [HC, IMF3]

Lomatium bradshawii (Rose ex Mathias) Mathias & Constance [HC, HC2]

Bull. Torrey Bot. Club 69(3): 246. 1942.
Bradshaw's biscuit-root, Bradshaw's desert-parsley, Bradshaw's lomatium

Leptotaenia bradshawii Rose ex Mathias

Lomatium brandegeei (J.M. Coult. & Rose) J.F. Macbr. [HC2]
Contr. Gray Herb. 56: 35. 1918.
Brandegee's desert-parsley

Cynomarathrum brandegeei J.M. Coult. & Rose

Lomatium brevifolium J.M. Coult. & Rose [HC2]
Contr. U.S. Natl. Herb. 7: 232. 1900.
narrowfruit biscuit-root, short-leaved biscuit-root, short-leaved desert-parsley

Lomatium triternatum (Pursh) J.M. Coult. & Rose var. *alatum* J.M. Coult. & Rose
Lomatium triternatum (Pursh) J.M. Coult. & Rose var. *brevifolium* (J.M. Coult. & Rose) Mathias
Lomatium triternatum (Pursh) J.M. Coult. & Rose var. *macrocarpum* (J.M. Coult. & Rose) Mathias [JPM]

Lomatium canbyi (J.M. Coult. & Rose) J.M. Coult. & Rose [HC, HC2, IMF3]
Contr. U.S. Natl. Herb. 7: 210. 1900.
Canby's biscuit-root, chucklusa, Canby's desert-parsley

Cogswellia canbyi (Coult. & Rose) M.E. Jones
Peucedanum canbyi J.M. Coult. & Rose

Lomatium columbianum Mathias & Constance [HC, HC2]
Bull. Torrey Bot. Club 69: 246. 1942.
purple biscuit-root, Columbia Gorge desert-parsley

Leptotaenia purpurea

Lomatium cous (S. Watson) J.M. Coult. & Rose [HC, HC2, IMF3]
Contr. U.S. Natl. Herb. 7(1): 214. 1900.
cous biscuit-root, cous, cous-root desert-parsley

Lomatium circumdatum (S. Watson) J.M. Coult. & Rose
Lomatium montanum J.M. Coult. & Rose

Lomatium cuspidatum Mathias & Constance [HC, HC2]
Bull. Torrey Bot. Club 69(3): 246. 1942.
Wenatchee biscuit-root, Wenatchee desert-parsley, Wenatchee Mountain lomatium

Leptotaenia watsoni

Lomatium dissectum (Nutt.) Mathias & Constance [HC, HC2]
Bull. Torrey Bot. Club 69: 246. 1942.
fern-leaved biscuit-root, sessile-fruited fern-leaved biscuit-root, fern-leaved desert parsley, fern-leaved lomatium
(see also *Lomatium multifidum*)

Leptotaenia dissecta Nutt.
Leptotaenia foliosa var. *dissecta*
Lomatium dissectum (Nutt.) Mathias & Constance var. *dissectum* [HC, VPBC1]

Lomatium farinosum (Geyer ex Hook.) J.M. Coult. & Rose [HC, HC2]
Contr. U.S. Natl. Herb. 7: 210. 1900.
northern biscuit-root, Hamblen's lomatium

Lomatium farinosum (Geyer ex Hook.) J.M. Coult. & Rose var. *farinosum*
Lomatium farinosum (Geyer ex Hook.) J.M. Coult. & Rose var. *hambleniae* (Mathias & Constance) Schlessman
Lomatium hambleniae Mathias & Constance [HC]
Peucedanum farinosum Geyer ex Hook.

Lomatium geyeri (S. Watson) J.M. Coult. & Rose [HC, HC2, VPBC1]
S.Watson) J.M.Coult. & Rose, Contr. U.S. Natl. Herb. 7(1): 209. 1900.
Geyer's desert-parsley, Geyer's lomatium

Orogenia fusiformis var. *leibergii*
Orogenia leibergii
Peucedanum evittatum Coult. & Rose

Lomatium gormanii (Howell) J.M. Coult. & Rose [HC, HC2, IMF3]
J.M.Coult. & Rose, Contr. U.S. Natl. Herb. 7: 208. 1900.
Gorman's desert-parsley, Gorman's lomatium, salt and pepper

Lomatium gormanii (T.J. Howell) Coult. & Rose f. *purpureum*
Peucedanum confusum Piper

Lomatium klickitatense J.A. Alexander & W. Whaley
J. Bot. Res. Inst. Texas 12(2): 387 ? 444. 2018.
Klickitat biscuit-root, Klickitat desert-parsley, Klickitat lomatium

Lomatium grayi (J.M. Coult. & Rose) J.M. Coult. & Rose [FNA], misapplied

Segregated from Lomatium grayi.

Lomatium knokei Darrach [HC2]
Darrach, M.E. 2014. Phytoneuron 2014-109: 1?12. 2014.
Knoke's biscuit-root, Knoke's desert-parsley, Knoke's lomatium

Lomatium laevigatum (Nutt.) J.M. Coult. & Rose [HC, HC2]
Contr. U.S. Natl. Herb. 7(1): 225. 1900.
smooth biscuit-root, slickrock desert-parsley, smooth lomatium

Lomatium leptocarpum (Torr. & A. Gray) J.M. Coult. & Rose [HC, HC2, IMF3]
Contr. U.S. Natl. Herb. 7(1): 213. 1900.
gumbo biscuit-root, gumbo lomatium

Lomatium ambiguum (Nutt.) J.M. Coult. & Rose ssp. *leptocarpum* (Torr. & Gray) E. Murray [IMF]
Lomatium bicolor (S. Watson) J.M. Coult. & Rose var. *leptocarpum* (Torr. & A. Gray) Schlessman [JPM, IMF]
Peucedanum bicolor (S. Wats.) Coult & Rose var. *gumbonis* M.E. Jones [IMF]
Peucedanum leptocarpum Nutt. ex. Torr. & Gray [IMF]
Peucedanum nuttallii var. *leptocarpum* (Torr. & Gray) Walp. [IMF]
Peucedanum triternatum var. *leptocarpum* Torr. & Gray [IMF]

Lomatium linearifolium (S.Watson) J.F. Smith & Mansfield [HC2]
Phytotaxa 316(1): 96. 2017.
linear-leaved biscuit-root, linear-leaved desert-parsley, linear-leaved lomatium, turkey peas

Orogenia linearifolia S. Watson [HC, IMF3]
Orogenia linearifolia S. Watson var. *lata* Payson

Lomatium lithosolamans J.F. Sm. & M.A. Feist [HC2]
Phytotaxa 316(1): 96. 2017.
Hoover's biscuit-root, Hoover's desert-parsley, Hoover's lomatium

Tauschia hooveri Mathias & Constance [HC]

Lomatium macrocarpum (Nutt. ex Torr. & A. Gray) J.M. Coult. & Rose [HC, HC2, IMF3, JPM, VPBC1]
Contr. U.S. Natl. Herb. 7(1): 217. 1900.
large-fruit desert-parsley, bigseed lomatium

Cogswellia macrocarpa (Nutt. ex Torr. & A. Gray) M.E. Jones
Ferula macrocarpa Hook. & Arn.
Lomatium flavum
Lomatium macrocarpum (Nutt. ex Torr. & A. Gray) J.M. Coult. & Rose var. *artemisiarum* Piper
Lomatium macrocarpum (Nutt. ex Torr. & A. Gray) J.M. Coult. & Rose var. *ellipticum* (Torr. & A. Gray) Jeps.
Peucedanum macrocarpum Nutt. ex Torr. & A. Gray

Lomatium martindalei (J.M. Coult. & Rose) J.M. Coult. & Rose [HC, HC2]
Contr. U.S. Natl. Herb. 7(1): 225. 1900.
Cascade biscuit-root, Cascade desert-parsley

Lomatium angustatum (J.M. Coult. & Rose) H. St. John
Lomatium angustatum (J.M. Coult. & Rose) H. St. John var. *flavum* G.N. Jones
Lomatium martindalei (J.M. Coult. & Rose) J.M. Coult. & Rose var. *angustatum* (J.M. Coult. & Rose) J.M. Coult. & Rose [HC]
Lomatium martindalei (J.M. Coult. & Rose) J.M. Coult. & Rose var. *flavum* (G.N. Jones) Cronquist [HC]
Lomatium martindalei (J.M. Coult. & Rose) J.M. Coult. & Rose var. *martindalei* [HC, JPM, VPBC1]

Lomatium multifidum (Nutt.) R.P. McNeill & Darrach [HC2]
Phytotaxa 316(1): 97. 2017.
fern-leaved biscuit-root, fern-leaved desert-parsley, fern-leaved lomatium

Leptotaenia multifida Nutt.
Lomatium dissectum (Nutt.) Mathias & Constance var. *eatonii* (J.M. Coult. & Rose) Cronquist [HC]
Lomatium dissectum (Nutt.) Mathias & Constance var. *multifidum* (Nutt.) Mathias & Constance [HC, VPBC1]

Lomatium nudicaule (Pursh) J.M. Coult. & Rose [HC, HC2, IMF3, JPM, VPBC1]
Contr. U.S. Natl. Herb. 7(1): 238. 1900.
bare-stemmed biscuit-root

Cogswellia nudicaulis (Pursh) M.E. Jones
Lomatium platyphyllum

Lomatium papilioniferum J.A. Alexander & W. Whaley
J. Bot. Res. Inst. Texas 12(2): 387 ? 444. 2018.
butterfly bearing biscuit-root, butterfly bearing desert-parsley

Lomatium grayi (J.M. Coult. & Rose) J.M. Coult. & Rose [FNA], misapplied

Segregated from Lomatium grayi, which now represents plants south and east of Washington. Most plants previously named L. grayi are now treated as L. papilioniferum, except for some populations in Klickitat County that are now treated as L. klickitatense.

Lomatium piperi J.M. Coult. & Rose [HC2, JPM2]
Contributions from the United States National Herbarium 7(1): 211. . 1900.
Piper's biscuit-root, Piper's desert-parsley

Cogswellia piperi (Coult. & Rose) M.E. Jones

Lomatium quintuplex Schlessman & Constance [HC2]
Madroño 26: 37 (-38), fig. 1979.
Umptanum biscuit-root, Umptanum desert-parsley

Lomatium rollinsii Mathias & Constance [HC, HC2]
Bull. Torrey Bot. Club 70: 59. 1943.
Rollins's biscuit-root, Rollins's desert-parsley

Lomatium roneorum M.E. Darrach
Phytoneuron 2018-78: 1?12. 2018.
Rone's biscuit-root, Rone's desert-parsley

Lomatium salmoniflorum (J.M. Coult. & Rose) Mathias & Constance [HC, HC2]
Bull. Torrey Bot. Club 69(3): 246. 1942.
Salmon River biscuit-root, Salmon River desert-parsley

Lomatium sandbergii (J.M. Coult. & Rose) J.M. Coult. & Rose [HC, HC2]
Contr. U.S. Natl. Herb. 7(1): 230. 1900.
Sandberg's biscuit-root, Sandberg's desert-parsley

Lomatium serpentinum (M.E. Jones) Mathias [HC, HC2]
Ann. Missouri Bot. Gard. 25(1): 271. 1937.
Snake Canyon biscuit-root, Snake Canyon desert-parsley

Cogswellia fragrans

Lomatium simplex (Nutt.) J.F. Macbr. [HC2]
Contr. Gray Herb. 56: 34. 1918.
nine-leaf biscuit-root, nine-leaf desert-parsley

Lomatium platycarpum (Torr.) J.M. Coult. & Rose
Lomatium simplex (Nutt.) J.F. Macbr. var. *leptophyllum* (Hook.) Mathias
Lomatium simplex (Nutt.) J.F. Macbr. var. *simplex*
Lomatium triternatum (Pursh) J.M. Coult. & Rose ssp. *platycarpum* (Torr.) Cronquist [HC]

Lomatium suksdorfii (S. Watson) J.M. Coult. & Rose [HC, HC2]
Contr. U.S. Natl. Herb. 7(1): 239. 1900.
Suksdorf's biscuit-root, Suksdorf's desert-parsley

Cogswellia suksdorfii

Lomatium tamanitchii Darrach & Thie [HC2]
Madroño 57(3): 203-208. 2010.
ribseed biscuit-root, ribseed desert-parsley

Lomatium tenuissimum (Geyer ex Hook.) Feist & G.M. Plunkett [HC2]
Phytotaxa 316(1): 96. 2017.
Leiberg's biscuit-root, Leiberg's umbrella-wort

Leibergia orogenioides J.M. Coult. & Rose
Lomatium orogenioides (J.M. Coult. & Rose) Mathias [HC]
Tauschia tenuissima (Geyer ex Hook.) Mathias & Constance [WNHP]

Historically known from Spokane County- possibly extirpated in WA.

Lomatium thompsonii (Mathias) Cronquist [HC, HC2]
Vasc. Pl. Pacif. N. W. [C.L. Hitchcock & al.] 3: 563. 1961.
Thompson's biscuit-root, Thompson's desert-parsley

Lomatium suksdorfii (S. Watson) J.M. Coult. & Rose var. *thompsonii* Mathias

Lomatium triternatum (Pursh) J.M. Coult. & Rose [HC, HC2]
Contr. U.S. Natl. Herb. 7(1): 227. 1900.
triternate biscuit-root
(see also *Lomatium anomalum*, *Lomatium brevifolium*, *Lomatium simplex*)

Lomatium triternatum (Pursh) Coult. & Rose ssp. *triternatum* [HC, VPBC1]
Lomatium triternatum (Pursh) J.M. Coult. & Rose var. *triternatum* [HC, IMF3]

Lomatium tuberosum Hoover [HC, HC2]
Leafl. W. Bot. 4: 39. 1944.
Hoover's biscuit-root, Hoover's lomatium, potato desert-parsley

Lomatium utriculatum (Nutt. ex Torr. & A. Gray) J.M. Coult. & Rose [HC, HC2, JPM, VPBC1]
Contr. U.S. Natl. Herb. 7: 215. 1900.
common biscuit-root, bladder desert-parsley, spring-gold

Lomatium vaseyi (J.M. Coult. & Rose) J.M. Coult. & Rose

Lomatium watsonii (J.M. Coult. & Rose) J.M. Coult. & Rose [HC, HC2]
Contr. U.S. Natl. Herb. 7(1): 211. 1900.
Watson's biscuit-root, Watson's desert-parsley

Lomatium frenchii Mathias & Constance

**Myrrhis* [HC2]
anise

Oenanthe [HC, HC2]
oenanthe, water-parsley

Oenanthe sarmentosa C. Presl ex DC. [HC, HC2, JPM, VPBC1]
Prodr. [A. P. de Candolle] 4: 138. 1830.
oenanthe, Pacific water-dropwort, American water-parsley, Pacific water-parsley

Osmorhiza [HC, HC2]
sweet-cicely, sweet-root

Osmorhiza berteroi DC. [HC2, JPM2]
Prodr. [A. P. de Candolle] 4: 232. 1830.
mountain sweet-cicely

Osmorhiza brevipes (J.M. Coult. & Rose) Suksd.
Osmorhiza chilensis Hook. & Arn. [HC, IMF3, JPM, VPBC1]
Osmorhiza divaricata (Britton) Suksd.
Osmorhiza intermedia
Osmorhiza nuda Torr.
Osmorhiza nuda Torr. var. *brevipes* (Coult. & Rose) Jeps [IMF]
Osmorhiza nuda Torr. var. *divaricata* (Britton) Jeps
Scandix divaricata (Britton) Koso-Pol. [IMF]
Washingtonia brevipes Coult. & Rose [IMF]
Washingtonia divaricata Britton
Washingtonia intermedia

Osmorhiza depauperata Phil. [HC, HC2, IMF3, JPM, VPBC1]
Anales Univ. Chile 85: 726. 1894.
blunt-fruit sweet-cicely

Osmorhiza chilensis Hook. & Arn. var. *cupressimontana* (B. Boivin) B. Boivin
Osmorhiza obtusa (J.M. Coult. & Rose) Fernald
Washingtonia obtusa J.M. Coult. & Rose

Osmorhiza occidentalis (Nutt. ex Torr. & A. Gray) Torr. [HC, HC2, JPM, VPBC1]
Rep. U.S. Mex. Bound., Bot. [Emory] 71. 1859.
Sierran sweet-cicely, western sweet-cicely

Glycosma ambiguum
Glycosma occidentalis Nutt. ex Torr. & A. Gray
Osmorhiza ambigua (A. Gray) J.M. Coult. & Rose
Osmorhiza ambiguum

Osmorhiza purpurea (J.M. Coult. & Rose) Suksd. [HC, HC2, JPM, VPBC1]
Allg. Bot. Z. Syst. 12: 5. 1906.
purple sweet-cicely

Osmorhiza chilensis Hook. & Arn. var. *purpurea* (J.M. Coult. & Rose) B. Boivin
Osmorhiza leibergii (J.M. Coult. & Rose) Blank.
Washingtonia leibergii
Washingtonia purpurea J.M. Coult. & Rose

**Pastinaca* [HC, HC2]
parsnip

**Pastinaca sativa* L. [HC, HC2, VPBC1]
Sp. Pl. 1: 262. 1753.
common parsnip, wild parsnip

Pastinaca sativa L. var. *pratensis* Pers.

Perideridia [HC, HC2]
false-caraway, yampah

Perideridia montana (Blank.) Dorn [HC2, IMF3]
Vasc. Pl. Wyoming 295. 1988.
mountain yampah

Atenia montana (Blank.) Rydb.
Carum garrettii A. Nelson ex Coult. & Rose [IMF]
Carum montanum Blank.
Perideridia gairdneri (Hook. & Arn.) Mathias [HC], misapplied
Perideridia gairdneri (Hook. & Arn.) Mathias ssp. *borealis* T.I. Chuang & Constance [HC, JPM2]
Perideridia gairdneri (Hook. & Arn.) Mathias var. *montana* (Blank.) B. Boivin [IMF]

See IMF3 for a discussion of this taxon.

Perideridia oregana (S. Watson) Mathias [HC, HC2, JPM]
Brittonia 2: 243. 1936.
Oregon yampah

Atenia oregana
Carum oregana

**Petroselinum*
parsley

**Petroselinum crispum* (Mill.) Fuss
Fl. Transsilv. 254. 1866.
parsely

**Pimpinella* [HC, HC2]
pimpinella

Sanicula [HC, HC2]
sanicle

Sanicula arctopoides Hook. & Arn. [HC, HC2, VPBC1]
Bot. Beechey Voy. 141. 1832.
footsteps-of-spring, bear's-foot sanicle

Sanicula crassicaulis Poepp. ex DC. var. *howellii* (J.M. Coult. & Rose) Mathias
Sanicula ×*howellii* (J.M. Coult. & Rose) Shan & Constance

Sanicula bipinnatifida Douglas ex Hook. [HC, HC2, VPBC1]
Fl. Bor.-Amer. (Hooker) 1(5): 258. 1832.
purple black-snakeroot, purple sanicle

Sanicula bipinnatifida Douglas ex Hook. var. *flava* Jeps.

Sanicula crassicaulis Poepp. ex DC. [HC, HC2]
Prodr. [A. P. de Candolle] 4: 84. 1830.
Pacific sanicle

var. *crassicaulis* [HC, HC2, VPBC1]
Pacific sanicle

Sanicula menziesii

var. *tripartita* (Suksd.) H. Wolff [HC, HC2]
Pacific sanicle

Sanicula tripartita Suksd.

Sanicula graveolens Poepp. ex DC. [HC, HC2, VPBC1]
Prodr. [A. P. de Candolle] 4: 85. 1830.
Sierran black-snakeroot

Sanicula apiifolia
Sanicula graveolens Poepp. ex DC. var. *septentrionalis* (Greene) H. St. John
Sanicula nevadensis S. Watson
Sanicula nevadensis S. Watson var. *septentrionalis* (Greene) Mathias
Sanicula septentrionalis Greene

Sanicula marilandica L. [HC, HC2, VPBC1]
Sp. Pl. 1: 235 1753.
Maryland black-snakeroot

Caucalis mirilandica
Sanicula canadensis var. *marilandica*
Sanicula marilandica L. var. *petiolulata* Fernald

Sium [HC, HC2]
water-parsnip

Sium suave Walter [HC, HC2, VPBC1]
Fl. Carol. [Walter] 115. 1788.
water parsnip, hemlock water-parsnip

Sium cicutifolium Schrank
Sium floridanum Small
Sium suave Walter var. *floridanum* (Small) C.F. Reed

Tauschia [HC, HC2]
tauschia
(see also *Lomatium*)

Tauschia stricklandii (J.M. Coult. & Rose) Mathias & Constance [HC, HC2]
Bull. Torrey Bot. Club 68(2): 121. 1941.
Strickland's tauschia, Strickland's umbrella-wort

Hesperogenia stricklandii J.M. Coult. & Rose

**Torilis* [HC, HC2]
hedge parsley

**Torilis arvensis* (Huds.) Link [HC, HC2, IFBC]
Enum. Hort. Berol. Alt. 1: 265. 1821.
field hedge-parsley

*ssp. *arvensis* [HC2]

**Torilis japonica* (Houtt.) DC. [HC, HC2, IFBC]
Prodr. 4: 219. 1830.
upright hedge-parsley, Japanese hedge-parsley

**Turgenia* [HC2]

Yabea [HC2]
California hedge-parsley

Yabea microcarpa (Hook. & Arn.) Koso-Pol. [HC2, IMF3, JPM]
Bull. Soc. Imp. Naturalistes Moscou n.s, 28: 202. 1915.
California hedge-parsley, false hedge-parsley

Caucalis microcarpa Hook. & Arn. [HC]

Zizia [HC, HC2]
zizia

Zizia aptera (A. Gray) Fernald [HC, HC2, KZ99]
Rhodora 41(no. 489): 441. 1939.
heart-leaved Alexanders

var. *occidentalis* Fernald [HC, HC2, IMF3, VPBC1]
heart-leaved Alexanders

Zizia cordata W.D.J. Koch ex DC.

Apocynaceae [HC, HC2] Dogbane Family

Synonyms:
Asclepiadaceae [HC] (Milkweed Family)

Apocynum [HC, HC2]
dogbane

Apocynum androsaemifolium L. [HC, HC2]
Sp. Pl. 1: 213. 1753.
flytrap dogbane, spreading dogbane

Apocynum ambigens Greene
Apocynum androsaemifolium L. ssp. *pumilum* (A. Gray) B. Boivin
Apocynum androsaemifolium L. var. *androsaemifolium* [HC]
Apocynum androsaemifolium L. var. *pumilum* A. Gray [HC]

Apocynum cannabinum L. [HC, HC2]
Sp. Pl. 1: 213. 1753.
clasping-leaved dogbane, common dogbane, hemp dogbane

Apocynum cannabinum L. var. *glaberrimum* A. DC. [HC]
Apocynum cannabinum L. var. *suksdorfii* (Greene) Bég. & Beloserky [HC]
Apocynum sibiricum Jacq. [HC]
Apocynum sibiricum Jacq. var. *salignum* (Greene) Fernald [HC]

Apocynum ×floribundum Greene [HC2, IMF]
Erythea 1(7): 151. 1893.
western dogbane

Apocynum medium Greene [HC, KZ99]

Asclepias [HC, HC2]
milkweed

Asclepias cryptoceras S. Watson [HC, HC2]
Botany Fortieth Parallel 283, pl. 28, f. 1-4. 1871.
Humboldt milkweed, pallid milkweed

Asclepias cryptoceras S. Watson ssp. *davisii* (Woodson) Woodson [KZ99]
Asclepias cryptoceras S. Watson var. *davisii* (Woodson) W.H. Baker
Asclepias davisii Woodson

Asclepias fascicularis Decne. [HC, HC2]
Prodr. 8: 569. 1844.
Mexican whorled milkweed, narrow-leaf milkweed

Asclepias incarnata L. [Draft FNA]
Sp. Pl. 1: 215. 1753.
swamp milkweed

Recently (2017) documented from Okanogan County.

Asclepias speciosa Torr. [HC, HC2]
Ann. Lyceum Nat. Hist. New York 2: 218-219. 1827.
showy milkweed

Asclepias giffordii Eastw.

**Vinca* [HC, HC2]
periwinkle

**Vinca major* L. [HC, HC2]
Sp. Pl. 1: 209. 1753.
greater periwinkle

**Vinca minor* L. [HC2]
Sp. Pl. 1: 209. 1753.
lesser periwinkle

Aquifoliaceae [HC2] Holly Family

**Ilex* [HC2]
holly

**Ilex aquifolium* L. [HC2, IFBC]
Sp. Pl. 1: 125. 1753.
English holly

Araliaceae [HC, HC2] Ginseng Family

Aralia [HC, HC2]
spikenard

Aralia nudicaulis L. [HC, HC2]
Sp. Pl. 1: 274. 1753.
wild sarsaparilla

Aralia nudicaulis L. var. *elongata* Nash
Aralia nudicaulis L. var. *prolifera* Apgar

**Hedera* [HC, HC2]
ivy

**Hedera colchica* (K. Koch) K. Koch [HC2]

**Hedera helix* L. [HC, HC2]
Sp. Pl. 1: 202. 1753.
common ivy, English ivy
(see also *Hedera hibernica*)

Hedera helix L. ssp. *helix* [Stace 1997]

The classification of Hedera is disputed, here we follow the taxonomy of Stace (1997). A weed in western Washington, but not as abundant as subsp. hibernica (Murai 1999; Jacobson 2001).

**Hedera hibernica* (G. Kirchn.) Bean [HC2]
Bon Jard. 1835: 731. 1835.
Atlantic ivy

Hedera helix L. ssp. *hibernica* (G. Kirchn.) D.C. McClint. [Stace 1997]

The taxonomy of Hedera is disputed, here we follow the taxonomy of Stace (1997). The subspecies are distinguished by the aspect and color of their stellate hairs, and to a lesser degree by the leaf lobing of sterile shoots. An abundant weed in western Washington (Murai 1999; Jacobson 2001). In the horticultural trade generally called CV \'Hiber

Hydrocotyle [HC, HC2]
marsh-pennywort, water-pennywort

Hydrocotyle ranunculoides L. f. [HC, HC2, VPBC1]
Suppl. Pl. 177. [1782]. 1781.
floating marsh-pennywort

Hydrocotyle cymbalarifolia Muhl.

Formerly placed in Apiaceae.

Oplopanax [HC, HC2]

Oplopanax horridus (Sm.) Miq. [HC2]

Ann. Mus. Bot. Lugduno-Batavum 1: 16. 1863.
devil's-club

Echinopanax horridum (Sm.) Dcne. & Planch
Echinopanax horridus (Sm.) Decne. & Planch. ex Harms [KZ99]
Fatsia horridum (Sm.) Benth & Hook. f. ex Brewer & S. Watson
Oplopanax horridum (Sm.) Miq. [HC]
Panax horridum (Sm.)
Ricinophyllum horridum Nelson & Macbr.

Aristolochiaceae [FNA3, HC, HC2] Birthwort Family

Asarum [FNA3, HC, HC2]
Sp. Pl. 1: 442. 1753; Gen. Pl. ed. 5, 201, 1754.
wild ginger

Asarum caudatum Lindl. [FNA3, HC, HC2]
Edwards\'s Bot. Reg. 17: footnote after plate 1399. 1831.
wild ginger

Asarum caudatum Lindl. var. *caudatum* [KZ99]

FNA3: "In most populations of Asarum caudatum , the distal portion of the sepal is spreading or weakly reflexed and 30-75 mm. A single population south of Mt. Shasta, California, has the distal sepals strongly reflexed and unusually short, often as little as 1.1 cm. Flowers of these plants superficially resemble those of A . lemmonii ; they differ in being horizontal, not descending as in A . lemmonii , and in the filiform-attenuate sepals. Native Americans used Asarum caudatum medicinally to treat headaches, intestinal pain, knee pain, indigestion, boils, tuberculosis, and colic, and as a general tonic (D. E. Moerman 1986)."

Asclepiadaceae: see Apocynaceae

Asteraceae [FNA19, HC2] Aster Family

Synonyms:
Compositae [HC]

Many taxonomic and nomenclatural changes have occurred within Asteraceae since the publication of Hitchcock and Cronquist (1973). The Flora of North America project(FNA) published the Asteraceae volumes in 2007, and that has served as the primary literature resource for the taxonomy and nomenclature provided here. Some of the introduced taxa in Washington belonging to this family are not included in the FNA volumes. Many of these can be found in Stace's New Flora of the British Isles (1997). Ken Chambers and Scott Sundberg provided a treatment of the Asteraceae for the Oregon Flora Project (OFP), and some of their taxonomic decisions are followed here rather than what is provided in FNA.

Achillea [FNA19, HC, HC2]
Sp. Pl. 2: 896. 1753; Gen. Pl. ed. 5, 382. 1754.
yarrow

Achillea millefolium L. [FNA19, HC, HC2]
Sp. Pl. 2: 899. 1753.

milfoil, yarrow

Achillea borealis Bong.
Achillea lanulosa Nutt. var. *eradiata* (Piper) M. Peck
Achillea lanulosa Nutt. var. *lanulosa*
Achillea millefolium L. ssp. *lanulosa* (Nutt.) Piper [HC]
Achillea millefolium L. var. *alpicola* (Rydb.) Garrett [HC]
Achillea millefolium L. var. *borealis* (Bong.) Farw.
Achillea millefolium L. var. *californica* (Pollard) Jeps. [HC]
Achillea millefolium L. var. *lanulosa* (Nutt.) Piper [HC]
Achillea millefolium L. var. *litoralis* Ehrendorfer ex Nobs
Achillea millefolium L. var. *millefolium*
Achillea millefolium L. var. *occidentalis* DC.
Achillea millefolium L. var. *pacifica* (Rydb.) G.N. Jones

**Achillea ptarmica* L. [FNA19, HC2]
Sp. Pl. 2: 898. 1753.
pearl yarrow

FNA19 lists this species as occurring in WA. No voucher, reported by R. Old in Kz99. FNA19: "Achillea ptarmica is naturalized from Eurasia. "Double-flowered" plants originated as cultivars; apparently, they persist outside of cultivation."

Adenocaulon [FNA19, HC, HC2]
Bot. Misc. 1: 19, plate 15. 1829.
pathfinder, trail plant

Adenocaulon bicolor Hook. [FNA19, HC, HC2]
Bot. Misc. 1: 19, plate 15. 1829.
pathfinder, trailplant

Ageratina [FNA21, HC2]
Hist. Nat. Vég. 10: 286. 1841.
snakeroot

Ageratina occidentalis (Hook.) R.M. King & H. Rob. [FNA21, HC2]
Phytologia. 19: 224. 1970.
western boneset, western snakeroot

Eupatorium occidentale Hook. [HC]

Agoseris [FNA19, HC, HC2]
Fl. Ludov. 58. 1817.
false-dandelion, mountain-dandelion

Agoseris ×agrestis Osterh. [HC2]
field agoseris

Agoseris glauca (Pursh) Raf. var. *agrestis* (Osterh.) Q. Jones ex Cronquist [HC]

Agoseris apargioides (Less.) Greene [FNA19, HC, HC2]
Pittonia. 2: 177. 1891.
seaside agoseris

var. *maritima* (E. Sheldon) G.I. Baird [FNA19, HC, HC2]
Sida. 21: 716. 2004.
seaside agoseris

Agoseris apargioides (Less.) Greene ssp. *maritima* (E. Sheldon) Q. Jones
Agoseris maritima E. Sheldon

Agoseris aurantiaca (Hook.) Greene [FNA19, HC, HC2]
Pittonia. 2: 177. 1891.
orange agoseris

var. *aurantiaca* [FNA19, HC, HC2]

orange agoseris, slender agoseris

Agoseris angustissima Greene
Agoseris arachnoidea Rydb.
Agoseris aurantiaca (Hook.) Greene ssp. *aurantiaca*
Agoseris gracilens (A. Gray) Greene
Agoseris greenei (A. Gray) Rydb.
Agoseris howellii Greene
Agoseris nana Rydb.
Agoseris prionophylla Greene
Agoseris subalpina G.N. Jones
Agoseris vulcanica Greene

FNA19:"Variety aurantiaca is widespread in the western cordillera and is disjunct in Quebec. Two morphologic trends occur within this variety. Plants of wetter habitats represent the typical var. aurantiaca; those of drier habitats resemble what past authors have called Agoseris gracilens (including A. gracilens var. greenei). There is a weak geographic trend to this variation, with the aurantiaca phase occurring mostly along the Rocky Mountains axis and the gracilens phase mostly along the Cascade Mountains-Sierra Nevada axis. In their extremes they appear distinct, but their intergradation is so complete that separation becomes arbitrary. Putative hybrids between var. aurantiaca and A. glauca, A. grandiflora, A. monticola, and A. parviflora have been collected. Corolla color in var. aurantiaca is variable but most commonly orange. Pink-flowered forms occur sporadically. They have been recognized as Agoseris lackschewitzii. Recognition of pink forms is unmerited; if it were, the older name A. carnea would have priority."

var. *carnea* P. Lesica [HC2]
Journal of Botanical Research Institute of Texas 6(1): 25-27. 2012.
pink agoseris

Agoseris lackschewitzii Douglas M. Hend. & R.K. Moseley

Agoseris ×elata (Nutt.) Greene [FNA19, HC, HC2]
Pittonia. 2: 177. 1891.
tall agoseris, tall goat-chicory

Agoseris laciniata (Nutt.) Greene

Agoseris glauca (Pursh) Raf. [FNA19, HC, HC2]
Herb. Raf. 39. 1833.
pale agoseris, short-beaked agoseris
(see also *Agoseris agrestis*, *Agoseris monticola*)

var. *dasycephala* (Torr. & A. Gray) Jeps. [FNA19, HC, HC2]
Man. Fl. Pl. Calif. 1005. 1925.
pale goat-chicory

Agoseris glauca (Pursh) Raf. var. *aspera* (Rydb.) Cronquist

FNA19: "Variety dasycephala occurs primarily at high elevations in the western cordillera, extending eastward onto the northern prairies, and disjunctively in the Canadian arctic (Caribou Hills). It is more readily distinguished from var. glauca southward, where the two varieties are Â± elevationally separated. Difficulty in separating them occurs northward, where they are nearer each other and pockets of complete introgression occur, e.g., southeastern British Columbia and southwestern Alberta. Hybrids with Agoseris aurantiaca and A. parviflora also occur. Variety dasycephala contains regional phases that exhibit a step-clinal distribution. The large number of synonyms reflects the variation. As circumscribed here, var. dasycephala encompasses most of what has been called Agoseris glauca var. agrestis (see discussion under var. glauca)."

var. *glauca* [FNA19, HC, HC2]
Herb. Raf. 39. 1833.
pale agoseris, short beaked agoseris

Agoseris lacera Greene
Agoseris lapathifolia Greene
Agoseris longissima Greene

Agoseris microdonta Greene
Agoseris procera Greene
Agoseris vicinalis Greene

FNA19: "Variety glauca is usually found at lower elevations from the northern prairies westward to valleys and basins of the North American cordillera. Misidentification is often due to falsely assuming this variety is strictly glabrous. Some regional phases have a high percentage of individuals with weakly puberulent peduncles and/or phyllaries. In addition, var. glauca intergrades with var. dasycephala in some locations."

Agoseris grandiflora (Nutt.) Greene [FNA19, HC, HC2]
Pittonia. 2: 178. 1891.
large-flowered agoseris

Stylopappus grandiflorus Nutt.

var. *grandiflora* [FNA19, HC2]
Pittonia. 2: 178. 1891.
large flowered agoseris, large flower goat-chicory

Agoseris cinerea Greene
Agoseris grandiflora (Nutt.) Greene var. *intermedia* (Greene) Jeps.
Agoseris grandiflora (Nutt.) Greene var. *plebeia* (Greene) G.L. Wittrock
Agoseris intermedia Greene
Agoseris marshallii (Greene) Greene
Agoseris obtusifolia (Suksd.) Rydb.
Agoseris plebeia (Greene) Greene

FNA19: "Variety grandiflora is most commonly found east of the Cascade Mountains and southward into California and occurs primarily in grassland, steppe, or chaparral. It has regional phases, especially southward in its range. These appear more or less distinct but they so completely intergrade that their separation becomes arbitrary. Variety grandiflora rarely forms intermediates with other species; putative hybrids with A. apargioides have been collected. It is one of the suspected parental taxa of A. ×elata, especially the Sierra Nevada populations."

var. *leptophylla* G.I. Baird [FNA19, HC2]
Sida. 21: 267. 2004.
Puget Sound agoseris

FNA19: "Variety leptophylla is most commonly found west of the Cascade Mountains from Vancouver Island through the Puget Sound and Willamette Valley to the Siskiyou-Klamath Mountains region of southwestern Oregon and northwestern California. It also occurs sporadically in mesic forest areas on the eastern slopes of the Cascade Mountains, and disjunctively in the Selkirk-Clearwater Mountains region of British Columbia and northern Idaho. In the Selkirk-Clearwater Mountains region, Columbia River Gorge, southern Willamette Valley, and Siskiyou-Klamath Mountains region var. grandiflora and var. leptophylla are sympatric and appear to be introgressive. In those regions, intermediate specimens are not uncommon. It may be one of the parental taxa of A. ×elata (which see), especially the Puget Sound-Willamette Valley populations."

Agoseris heterophylla (Nutt.) Greene [FNA19, HC, HC2]
Pittonia. 2: 178. 1891.
annual agoseris

Agoseris heterophylla (Nutt.) Greene ssp. *heterophylla*

var. *heterophylla* [FNA19, HC, HC2]

Agoseris heterophylla (Nutt.) Greene ssp. *normalis* Piper

Agoseris monticola Greene [FNA19, HC2]
Pittonia. 4: 37. 1899.
mountain agoseris, Sierra Nevada agoseris

Agoseris glauca (Pursh) Raf. var. *monticola* (Greene) Q. Jones [HC]

FNA19: "Agoseris monticola occurs mainly in the Sierra Nevada and sporadically eastward in the Great Basin (Jarbridge and Ruby Mountains) and northward to the Cascade Range and Blue Mountains of

Oregon. It appears to be allied with A. glauca and has been treated as a variety of the latter. Ecologically, it approaches A. glauca var. dasycephala; the two are morphologically and geographically separate from each other. Intermediates between A. monticola and A. aurantiaca, A. glauca, and A. parviflora are known."

Agoseris retrorsa (Benth.) Greene [FNA19, HC, HC2]
Pittonia. 2: 178. 1891.
spear leaved agoseris, spear leaf goat-chicory

Macrorhynchus angustifolius Kellogg
Macrorhynchus retrorsus Benth.

Ambrosia [FNA21, HC, HC2]
Sp. Pl. 2: 987. 1753; Gen. Pl. ed. 5, 425. 1754.
bursage, burweed, ragweed

Ambrosia acanthicarpa Hook. [FNA21, HC, HC2]
Fl. Bor.-Amer. 1: 309. 1833.
flat spine bur-ragweed, annual bursage, bur ragweed

Franseria acanthicarpa (Hook.) Coville

**Ambrosia artemisiifolia* L. [FNA21, HC, HC2]
Sp. Pl. 2: 988. 1753.
annual ragweed, common ragweed

Ambrosia artemisiifolia L. var. *elatior* (L.) Descourtilz
Ambrosia artemisiifolia L. var. *paniculata* (Michx.) Blank.
Ambrosia elatior L.
Ambrosia glandulosa Scheele
Ambrosia monophylla (Walter) Rydb.

FNA21: "Hybrids between Ambrosia psilostachya and A. artemisiifolia have been called A. ×intergradiens W. H. Wagner." FNA21: "The name Ambrosia ×helenae Rouleau applies to hybrids between A. artemisiifolia and A. trifida."

Ambrosia chamissonis (Less.) Greene [FNA21, HC, HC2]
Man. Bot. San Francisco. 188. 1894.
silver beachweed, beach bur, cutleaf beach bur, silver bur-ragweed

Ambrosia chamissonis (Less.) Greene var. *bipinnatisecta* (Less.) J.T. Howell [HC]
Ambrosia chamissonis (Less.) Greene var. *chamissonis* [HC]
Franseria chamissonis Less. ssp. *bipinnatisecta* (Less.) Wiggins & Stockw.
Franseria chamissonis Less. ssp. *chamissonis*
Franseria chamissonis Less. var. *bipinnatisecta* Less.
Franseria chamissonis Less. var. *chamissonis*

Ambrosia psilostachya DC. [FNA21, HC, HC2]
Prodr. 5: 526. 1836.
perennial ragweed, western ragweed

Ambrosia psilostachya DC. var. *californica* (Rydb.) S.F. Blake
Ambrosia psilostachya DC. var. *coronopifolia* (Torr. & A. Gray) Farw.
Ambrosia psilostachya DC. var. *lindheimeriana* (Scheele) Blank.
Ambrosia rugelii Rydb.

FNA21: "Hybrids between Ambrosia psilostachya and A. artemisiifolia have been called A. ×intergradiens W. H. Wagner."

Ambrosia trifida L. [FNA21, HC, HC2]
Sp. Pl. 2: 987. 1753.
giant ragweed

Ambrosia aptera DC.
Ambrosia trifida L. var. *integrifolia* (Muhl. ex Willd.) Torr. & A. Gray
Ambrosia trifida L. var. *texana* Scheele

Ambrosia trifida L. var. *trifida* [HC]

Anaphalis [FNA19, HC, HC2]
Prodr. 6: 271. 1838.
pearly-everlasting

Anaphalis margaritacea (L.) Benth. & Hook. f. [FNA19, HC, HC2]
Gen. Pl. 2: 303. 1873.
pearly everlasting

Anaphalis margaritacea (L.) Benth. & Hook. f. var. *occidentalis* Greene
Anaphalis margaritacea (L.) Benth. & Hook. f. var. *subalpina* (A. Gray) A. Gray
Gnaphalium margaritaceum L.

Anisocarpus [FNA21, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 388. 1841.
anisocarpus

Anisocarpus madioides Nutt. [FNA21, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 388. 1841.
woodland tarplant, woodland tarweed

Madia madioides (Nutt.) Greene [HC]

Antennaria [FNA19, HC, HC2]
Fruct. Sem. Pl. 2: 410, plate 167, fig. 3. 1791.
everlasting, pussy-toes

Antennaria alpina (L.) Gaertn. [FNA19, HC, HC2]
Fruct. Sem. Pl. 2: 410. 1791.
alpine pussytoes

Antennaria alpina (L.) Gaertn. var. *canescens* Lange
Gnaphalium alpinum L.

The application of this species concept to plants in Washington warrants further consideration. . FNA19: "Excluded names: Some Antennaria names are based on early-generation interspecific hybrids, including: A. ×rousseaui A. E. Porsild = ? A. alpina × A. rosea Antennaria alpina is one of the more morphologically variable agamic complexes in the genus. Some taxonomists have argued that true Antennaria alpina does not occur in North America, because none of the North American material exactly matches the type of A. alpina, which is from Lapland (M. O. Malte 1934; A. E. Porsild 1965). If one uses a strict typological species concept, then this is true; I recognize that this species complex is composed of innumerable apomictic clones and am circumscribing a broad species concept for A. alpina. The potential morphologic overlap between the A. media and A. alpina complexes is a major taxonomic problem. The chief difference between members of the two complexes is the presence of prominent flags on cauline leaves in A. alpina and their absence in A. media. Antennaria alpina of North America is gynoecious and characterized by its dark green to black phyllaries and conspicuous flags on the distal cauline leaves. The basal leaves vary from glabrous, as in the type material, to pubescent. The primary progenitors of the A. alpina complex include A. aromatica, A. densifolia, A. friesiana subsp. alaskana, A. friesiana subsp. neoalaskana, A. monocephala subsp. monocephala, and A. pulchella."

Antennaria anaphaloides Rydb. [FNA19, HC, HC2]
Mem. New York Bot. Gard. 1: 409. 1900.
tall pussytoes

Antennaria anaphaloides Rydb. var. *straminea* B. Boivin
Antennaria pulcherrima (Hook.) Greene ssp. *anaphaloides* (Rydb.) W.A. Weber
Antennaria pulcherrima (Hook.) Greene var. *anaphaloides* (Rydb.) G.W. Douglas

Antennaria corymbosa E.E. Nelson [FNA19, HC, HC2]
Bot. Gaz. 27: 212. 1899.
flat topped pussytoes, meadow pussytoes

Antennaria acuta Rydb.

Antennaria dioica (L.) Gaertn. var. *corymbosa* (E.E. Nelson) Jeps.
Antennaria hygrophila Greene
Antennaria nardina Greene

Scarcely different from A. rosea. FNA19: "Antennaria corymbosa is characterized by linear-oblanceolate basal leaves and white-tipped phyllaries, each with a distinct black spot near the base of the scarious portion. A form with black phyllaries (A. acuta) occurs sporadically throughout the range of the species (R. J. Bayer 1988). Antennaria corymbosa is a sexual progenitor of the A. rosea complex."

Antennaria dimorpha (Nutt.) Torr. & A. Gray [FNA19, HC, HC2]
Fl. N. Amer. 2: 431. 1843.
cushion pussytoes, low pussytoes

Antennaria dimorpha (Nutt.) Torr. & A. Gray var. *integra* L.F. Hend.
Antennaria dimorpha (Nutt.) Torr. & A. Gray var. *latisquama* (Piper) M. Peck
Antennaria dimorpha (Nutt.) Torr. & A. Gray var. *macrocephala* D.C. Eaton
Antennaria dimorpha (Nutt.) Torr. & A. Gray var. *nuttallii* D.C. Eaton
Antennaria latisquama Piper
Antennaria macrocephala (D.C. Eaton) Rydb.
Gnaphalium dimorphum Nutt.

Antennaria flagellaris (A. Gray) A. Gray [FNA19, HC, HC2]
Proc. Amer. Acad. Arts. 17: 212. 1882.
stoloniferous pussytoes, whip pussytoes

Antennaria dimorpha (Nutt.) Torr. & A. Gray var. *flagellaris* A. Gray

Antennaria geyeri A. Gray [FNA19, HC, HC2]
Mem. Amer. Acad. Arts, n. s. 4: 107. 1849.
Geyer's pussytoes, pinewoods pussytoes

FNA19: "Antennaria geyeri is distinctive because it has woody upright branches and is not stoloniferous. It lacks basal leaves at flowering and has heads that are often described as subdioecious (central flowers are often bisexual). As the only member of the Geyerae group, A. geyeri is not closely related to any other species of Antennaria; it bears strong similarities to some species of Anaphalis (R. J. Bayer 1990; Bayer et al. 1996)."

Antennaria howellii Greene [FNA19, HC2]
Pittonia. 3: 174. 1897.
Howell's pussytoes

ssp. *howellii* [FNA19, HC2]
Pittonia. 3: 174. 1897.
Howell's pussytoes

Antennaria neglecta Greene ssp. *howellii* (Greene) Hultén
Antennaria neglecta Greene var. *howellii* (Greene) Cronquist [HC]
Antennaria neodioica Greene ssp. *howellii* (Greene) Bayer

ssp. *neodioica* (Greene) R.J. Bayer [FNA19, HC2]
Brittonia. 41: 397. 1989.
northern pussytoes

Antennaria howellii Greene ssp. *petaloidea* (Fernald) R.J. Bayer [FNA19]
Antennaria neglecta Greene var. *attenuata* (Fernald) Cronquist [HC]
Antennaria neglecta Greene var. *neodioica* (Greene) Cronquist
Antennaria pedicellata Greene

Antennaria lanata (Hook.) Greene [FNA19, HC, HC2]
Pittonia. 3: 288. 1898.
woolly pussytoes

Antennaria carpathica (Wahlenb.) Hook. var. *lanata* Hook., orthographic variant

Antennaria luzuloides Torr. & A. Gray [FNA19, HC, HC2]
Fl. N. Amer. 2: 430. 1843.
silvery-brown pussytoes, woodrush pussytoes

ssp. *luzuloides* [FNA19, HC2]
silvery brown pussytoes, woodrush pussytoes

Antennaria argentea Benth. ssp. *argentea*
Antennaria luzuloides Torr. & A. Gray var. *luzuloides*

Antennaria media Greene [FNA19, HC2]
Pittonia. 3: 286. 1898.
alpine pussytoes, Rocky Mountain pussytoes

Antennaria alpina (L.) Gaertn. var. *media* (Greene) Jeps. [HC]

FNA19: "The main distinction between A. media and A. alpina is flags on distal cauline leaves present in A. alpina and mostly absent in A. media (Bayer 1990d). Phyllaries of the pistillate plants in A. alpina tend to be acute; they are blunter in A. media. At some point, it may be preferable to follow W. L. Jepson ([1923?1925]) and some later authors and treat A. media as a subspecies of A. alpina. Antennaria media appears to be an autopolyploid derivative of A. pulchella; genes from A. pulchella may have introgressed into the A. alpina and A. parvifolia complexes indirectly through A. media."

Antennaria microphylla Rydb. [FNA19, HC, HC2]
Bull. Torrey Bot. Club. 24: 303. 1897.
little-leaf pussytoes, rosy pussytoes, white pussytoes

Antennaria bracteosa Rydb.
Antennaria concinna E.E. Nelson
Antennaria microphylla Lunell var. *solstitialis* Lunell
Antennaria nitida Greene
Antennaria rosea Greene [FNA19]
Antennaria rosea Greene ssp. *arida* (E.E. Nelson) R.J. Bayer [FNA19]
Antennaria rosea Greene ssp. *confinis* (Greene) R.J. Bayer [FNA19]
Antennaria rosea Greene ssp. *pulvinata* (Greene) R.J. Bayer [FNA19]
Antennaria rosea Greene ssp. *rosea* [FNA19]
Antennaria rosea Greene var. *nitida* (Greene) Breitung
Antennaria solstitialis Lunell

FNA19: "Antennaria microphylla is a primary sexual progenitor of the A. rosea polyploid agamic complex (R. J. Bayer 1990b). A. Cronquist (1955) included A. rosea within his circumscription of A. microphylla. It is preferable to recognize sexual diploids as distinct from their morphologically discrete hybrid apomictic derivatives. Antennaria microphylla is always dioecious and has stems distally stipitate-glandular and white phyllaries; A. rosea is always gynoecious and has stems without glandular hairs and phyllaries only occasionally white. Some authors (A. E. Porsild 1950; E. H. Moss 1959; Porsild and W. J. Cody 1980) have recognized A. nitida as distinct; comparisons of the nomenclatural types of the two show that they are conspecific. Antennaria microphylla has allelopathic properties (G. D. Manners and D. S. Galitz 1985)."

Antennaria monocephala DC. [FNA19, HC2]
Prodr. 6: 269. 1838.
pygmy pussytoes, single-headed pussytoes

Recently (2017) photographed in Glacier Peak Wilderness. Identification confirmed by Jamie Fenneman at UBC.

Antennaria parvifolia Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 406. 1841.
little-leaf pussytoes, Nuttall's pussytoes

Antennaria pulcherrima (Hook.) Greene [FNA19, HC, HC2]
Pittonia. 3: 176. 1897.
showy pussytoes

Antennaria pulcherrima (Hook.) Greene ssp. *eucosma* (Fernald & Wiegand) R.J. Bayer [FNA19]
Antennaria pulcherrima (Hook.) Greene ssp. *pulcherrima* [FNA19]
Antennaria pulcherrima (Hook.) Greene var. *pulcherrima*

Antennaria pulvinata Greene
Pittonia 3: 287. 1898.
white pussytoes

Antennaria racemosa Hook. [FNA19, HC, HC2]
Fl. Bor.-Amer. 1: 330. 1834.
Hooker's pussytoes, raceme pussytoes

Antennaria stenophylla (A. Gray) A. Gray [FNA19, HC, HC2]
Proc. Amer. Acad. Arts. 17: 213. 1882.
narrowleaved pussytoes

Antennaria alpina (L.) Gaertn. var. *stenophylla* A. Gray
Antennaria leucophaea Piper

Antennaria umbrinella Rydb. [FNA19, HC, HC2]
Bull. Torrey Bot. Club. 24: 302. 1897.
brown-bract pussytoes, umber pussytoes

**Anthemis* [FNA19, HC, HC2]
Sp. Pl. 2: 893. 1753; Gen. Pl. ed. 5, 381. 1754.
chamomile, dogfennel, mayweed
(see also *Cota*)

**Anthemis arvensis* L. [FNA19, HC, HC2]
Sp. Pl. 2: 894. 1753.
corn chamomile, field chamomile

Anthemis arvensis L. var. *arvensis*

**Anthemis cotula* L. [FNA19, HC, HC2]
Sp. Pl. 2: 894. 1753.
mayweed chamomile, stinking chamomile, dogfennel

**Arctium* [FNA19, HC, HC2]
Sp. Pl. 2: 816. 1753; Gen. Pl. ed. 5, 357. 1754.
burdock, clotbur

**Arctium lappa* L. [FNA19, HC, HC2]
Sp. Pl. 2: 816. 1753.
great burdock, greater burdock

**Arctium minus* (Hill) Bernh. [FNA19, HC, HC2]
Syst. Verz. 154. 1800.
common burdock, lesser burdock

Arnica [FNA21, HC, HC2]
Sp. Pl. 2: 884. 1753; Gen. Pl. ed. 5, 376. 1754.
arnica

Arnica chamissonis Less. [FNA21, HC, HC2]
Linnaea. 6: 238. 1831.
leafy arnica, meadow arnica, narrowleaf arnica, silvery arnica, leafy leapordbane

Arnica chamissonis Less. ssp. *chamissonis* [HC]
Arnica chamissonis Less. ssp. *foliosa* (Nutt.) Maguire [HC]
Arnica chamissonis Less. ssp. *incana* (A. Gray) Maguire
Arnica chamissonis Less. var. *andina* (Nutt.) Ediger & T.M. Barkl.
Arnica chamissonis Less. var. *chamissonis*
Arnica chamissonis Less. var. *foliosa* (Nutt.) Maguire [HC]
Arnica chamissonis Less. var. *incana* (A. Gray) Hultén [HC]
Arnica chamissonis Less. var. *interior* Maguire [HC]
Arnica chamissonis Less. var. *maguirei* (A. Nels.) Maguire [HC]

Arnica cordifolia Hook. [FNA21, HC, HC2]
Fl. Bor.-Amer. 1: 331. 1834.
heart-leaf arnica, heart-leaf leopardbane

Arnica cordifolia Hook. var. *cordifolia* [HC]

Arnica cordifolia Hook. var. *pumila* (Rydb.) Maguire [HC]

Arnica discoidea Benth. [FNA21, HC]
Pl. Hartw. 319. 1849.
rayless arnica, rayless leopardbane

Arnica discoidea Benth. var. *eradiata* (A. Gray) Cronquist [HC]
Arnica grayi A. Heller
Arnica parviflora A. Gray ssp. *alata* (Rydb.) Maguire
Arnica parviflora A. Gray ssp. *parviflora*

Arnica fulgens Pursh [FNA21, HC, HC2]
Fl. Amer. Sept. 2: 527. 1813.
hillside arnica, orange arnica, shining leopardbane

Arnica gracilis Rydb. [FNA21, HC2]
Bull. Torrey Bot. Club. 24: 297. 1897.
slender arnica, slender leopardbane

Arnica latifolia Bong. var. *gracilis* (Rydb.) Cronquist [HC]

Arnica lanceolata Nutt. [FNA21, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 407. 1841.
clasping arnica, stream bank arnica

ssp. *prima* (Maguire) Strother & S.J. Wolf [FNA21, HC2]
Fl. N. Amer. (1993+). 21: 373. 2006.
clasping arnica, streambank arnica, streambank leopardbane

Arnica amplexicaulis Nutt. [HC]
Arnica amplexicaulis Nutt. ssp. *amplexicaulis*
Arnica amplexicaulis Nutt. var. *amplexicaulis* [HC]
Arnica amplexicaulis Nutt. var. *piperi* H. St. John & F.A. Warren [HC]
Arnica amplexifolia Rydb. ssp. *prima* Maguire

Arnica latifolia Bong. [FNA21, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2: 147. 1832.
broad-leaved arnica, mountain arnica, daffodil leopardbane
(see also *Arnica gracilis*)

Arnica latifolia Bong. var. *latifolia* [HC]

Arnica longifolia D.C. Eaton [FNA21, HC, HC2]
Botany (Fortieth Parallel). 186. 1871.
longleaf arnica, seep spring arnica, spear-leaf leopardbane

Arnica longifolia D.C. Eaton ssp. *myriadenia* (Piper) Maguire

Arnica mollis Hook. [FNA21, HC, HC2]
Fl. Bor.-Amer. 1: 331. 1834.
cordilleran arnica, hairy arnica, cordilleran leopardbane

Arnica nevadensis A. Gray [FNA21, HC, HC2]
Proc. Amer. Acad. Arts. 19: 55. 1883.
Nevada arnica, Sierra arnica, Sierran leopardbane

Arnica tomentella Greene

Arnica ovata Greene [FNA21, HC2]
Pittonia. 4: 161. 1900.
sticky arnica, sticky-leaf arnica

Arnica ×diversifolia Greene [HC]

Arnica parryi A. Gray [FNA21, HC, HC2]
Amer. Naturalist. 8: 213. 1874.
Parry's arnica

Arnica angustifolia Vahl ssp. *eradiata* A. Gray

Arnica parryi A. Gray ssp. *parryi*
Arnica parryi A. Gray ssp. *sonnei* (Greene) Maguire
Arnica parryi A. Gray var. *parryi* [HC]
Arnica parryi A. Gray var. *sonnei* (Greene) Cronquist

Arnica rydbergii Greene [FNA21, HC, HC2]
Pittonia. 4: 36. 1899.
Rydberg's arnica, subalpine arnica, subalpine leopardbane

Arnica sororia Greene [FNA21, HC, HC2]
Ottawa Naturalist. 23: 213. 1910.
bunch arnica, twin arnica, twin leopardbane

Arnica fulgens Pursh var. *sororia* (Greene) G.W. Douglas & Ruyle-Douglas

Artemisia [FNA19, HC, HC2]
Sp. Pl. 2: 845. 1753; Gen. Pl. ed. 5, 367. 1754.
artemisia, mugwort, sagebrush, wormwood

Picrothamnus [FNA19]
Sphaeromeria [FNA19]

**Artemisia absinthium* L. [FNA19, HC, HC2]
Sp. Pl. 2: 848. 1753.
absinthe, oldman, wormwood

Artemisia absinthium L. var. *absinthium*

**Artemisia annua* L. [FNA19, HC, HC2]
Sp. Pl. 2: 847. 1753.
sweet Annie, sweet sagewort, annual wormwood

Artemisia arbuscula Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 398. 1841.
dwarf sagebrush, low sagebrush

ssp. *arbuscula* [FNA19, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 398. 1841.
little sagebrush, low sagebrush

Artemisia arbuscula Nutt. var. *arbuscula* [HC]

FNA19:"The relatively large heads of Artemisia arbuscula subsp. arbuscula suggest a relationship with A. cana; the extreme morphologic variability of this subspecies from east to west may be the result of hybridization with various subspecies within the A. cana complex."

Artemisia biennis Willd. [FNA19, HC, HC2]
Phytographia. 11. 1794.
biennial wormwood

Artemisia biennis Willd. var. *biennis*

FNA19: "Artemisia biennis is naturalized and weedy in the eastern portion of its range. It is morphologically similar to A. annua, differing primarily in the coarser leaf lobes and larger heads that are sessile in axils of leaflike bracts. Artemisia biennis is considered native to the northwest United States; it may be introduced in other parts of its range. The type specimen is a horticultural specimen from New Zealand."

Artemisia campestris L. [FNA19, HC, HC2]
Sp. Pl. 2: 846. 1753.
Pacific sagewort, northern wormwood

var. *borealis* (Pall.) M. Peck [HC2]
Man. Pl. Oregon 768. 1941.
northern wormwood

Artemisia borealis Pall. [FNA19]
Artemisia borealis Pall. ssp. *borealis* [FNA19]
Artemisia borealis Pall. ssp. *richardsoniana* (Besser) Korobkov [FNA19]

Artemisia campestris L. ssp. *borealis* (Pall.) H.M. Hall & Clem. [HC]
Artemisia campestris L. var. *purshii* (Besser) Cronquist [HC]

var. *scouleriana* (Besser) Cronquist [HC, HC2]
Leaflets of Western Botany 7(2): 20. 1953.
Pacific sagewort, Scouler's wormwood

Artemisia campestris L. ssp. *pacifica* (Nutt.) H.M. Hall & Clem. [FNA19]

var. *wormskioldii* (Besser ex Hook.) Cronquist [HC, HC2]
Leafl. W. Bot. 6: 43. 1950.
Columbia Islands sagewort, Wormskiold's wormwood sagewort

Artemisia cana Pursh [FNA19, HC, HC2]
Fl. Amer. Sept. 2: 521. 1813.
hoary sagebrush, silver sagebrush

ssp. *bolanderi* (A. Gray) G.H. Ward [FNA19, HC2]
Contr. Dudley Herb. 4: 192. 1953.
Bolander's hairy sagebrush

Artemisia douglasiana Besser [FNA19, HC, HC2]
Fl. Bor.-Amer. 1: 323. 1833.
Douglas's mugwort, Douglas's sagewort, Douglas's wormwood

Artemisia vulgaris L. var. *douglasiana* (Besser) H. St. John

Artemisia dracunculus L. [FNA19, HC, HC2]
Sp. Pl. 2: 849. 1753.
dragon sagewort, tarragon, dragon wormwood

Artemisia dracunculus L. ssp. *dracunculus*
Artemisia dracunculus L. var. *dracunculus* [HC]

Artemisia frigida Willd. [FNA19, HC, HC2]
Sp. Pl. 3: 1838.
prairie sagebrush, prairie sagewort

Artemisia furcata M. Bieb. [FNA19, HC2]
Fl. Taur.-Caucas. 3: 567. 1819.
three-forked mugwort, forked wormwood

Artemisia furcata M. Bieb. var. *furcata*
Artemisia furcata M. Bieb. var. *heterophylla* (Besser) Hultén
Artemisia trifurcata Stephani ex Spreng. [HC]

FNA19: "Artemisia furcata extends from the islands of the Bering Sea into southern and interior Alaska, parts of Canada (disjunct in British Columbia and the northernmost Rocky Mountains of Alberta), and on Mt. Rainier in Washington. The array of names applied to A. furcata shows the taxonomic confusion arising from a myriad of morphologic variants that may indicate introgression with other species."

Artemisia ludoviciana Nutt. [FNA19, HC, HC2]
Gen. N. Amer. Pl. 2: 143. 1818.
western mugwort, prairie sage

ssp. *candicans* (Rydb.) D.D. Keck [FNA19, HC2]
Proc. Calif. Acad. Sci., ser. 4. 25: 447. 1946.
gray sagewort

Artemisia ludoviciana Nutt. var. *latiloba* Nutt. [HC]

ssp. *incompta* (Nutt.) D.D. Keck [FNA19, HC2]
Publ. Carnegie Inst. Wash. 520: 327. 1940.
intermediate sagewort, mountain wormwood

Artemisia ludoviciana Nutt. var. *incompta* (Nutt.) Cronquist [HC]

ssp. *lindleyana* (Besser) Lesica [HC2]
J. Bot. Res. Inst. Texas 6(1): 26 2012.

Lindley's western mugwort, Lindley's prairie sage

Artemisia lindleyana Besser. [HC]

ssp. *ludoviciana* [FNA19, HC2]
Nouv. Mém. Soc. Imp. Naturalistes Moscou 3: 38. 1834.
western mugwort, Louisiana sagewort, silver wormwood

Artemisia diversifolia Rydb.
Artemisia gnaphaloides Nutt.
Artemisia ludoviciana Nutt. var. *ludoviciana* [HC]

Artemisia michauxiana Besser [FNA19, HC, HC2]
Fl. Bor.-Amer. 1: 324. 1833.
Michaux's mugwort, lemon sagewort, Michaux's wormwood

Artemisia vulgaris L. var. *michauxiana* (Besser) H. St. John

FNA19: "Members of the Artemisia ludoviciana complex with deeply lobed leaves are sometimes confused with A. michauxiana, and there is evidence that plants hybridize in some locations. Artemisia michauxiana is distinguished by its glabrous, bright green to yellow-green foliage and lemony-sweet fragrance."

Artemisia norvegica Fr. [FNA19, HC, HC2]
Novit. Fl. Svec. 56. 1817.
mountain sagewort, boreal wormwood

ssp. *saxatilis* (Besser) H.M. Hall & Clem. [FNA19, HC2]
Publ. Carnegie Inst. Wash. 326: 58. 1923.
mountain sagewort

Artemisia arctica Less. ssp. *arctica*
Artemisia norvegica Fr. var. *saxatilis* (Besser) Jeps. [HC]
Artemisia saxatalis Less.

Artemisia rigida (Nutt.) A. Gray [FNA19, HC, HC2]
Proc. Amer. Acad. Arts. 19: 49. 1883.
scabland sagebrush, stiff sagebrush

Artemisia spiciformis Osterh. [FNA19, HC2]
Bull. Torrey Bot. Club. 27: 507. 1900.
snowfield sagebrush, spiked sagebrush

Artemisia tridentata Nutt. ssp. *spiciformis* (Osterh.) Kartesz & Gandhi

FNA19: "Often confused with Artemisia rothrockii, A. spiciformis has been recognized only recently as a widespread, high-elevation sagebrush of late-lying snowfields. Molecular analysis has not yet determined the degree to which this species intergrades with A. cana subsp. viscidula and A. tridentata subsp. vaseyana, the presumed parents of this putative hybrid. Because snow-field sagebrush produces fertile seeds and forms a stable community type, it is treated here as a distinct species."

**Artemisia stelleriana* Besser [FNA19, HC2]
Nouv. Mém. Soc. Imp. Naturalistes Moscou. 3: 79, plate 5. 1834.
dusty miller, oldwoman, beach wormwood, Steller's wormwood

Artemisia suksdorfii Piper [FNA19, HC, HC2]
Bull. Torrey Bot. Club. 28: 42. 1901.
coastal mugwort, Suksdorf's sagewort, coastal wormwood

Artemisia vulgaris L. var. *littoralis* Suksd.

Artemisia tilesii Ledeb. [FNA19, HC, HC2]
Mém. Acad. Imp. Sci. St. Pétersbourg Hist. Acad. 5: 568. 1814.
Aleutian mugwort, Cascade wormwood

Artemisia elatior (Torr. & A. Gray) Rydb.
Artemisia hookeriana Besser
Artemisia tilesii Ledeb. ssp. *elatior* (Torr. & A. Gray) Hultén
Artemisia tilesii Ledeb. ssp. *unalaschcensis* (Besser) Hultén

Artemisia tilesii Ledeb. var. *elatior* Torr. & A. Gray
Artemisia tilesii Ledeb. var. *unalaschcensis* Besser [HC]

FNA19: "Artemisia tilesii has a bewildering array of variation in leaf and inflorescence morphology that has been separated into four infraspecific taxa recognized in some floras. I am unable to separate these taxa consistently and am including them within a broad circumscription of the species."

Artemisia tridentata Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 398. 1841.
big sagebrush

ssp. *tridentata* [FNA19, HC2]
big sagebrush

Artemisia tridentata Nutt. var. *tridentata*

ssp. *vaseyana* (Rydb.) Beetle [FNA19, HC2]
Rhodora. 61: 83. 1959.
mountain big sagebrush, Vasey sagebrush

Artemisia tridentata Nutt. var. *vaseyana* (Rydb.) B. Boivin

ssp. *wyomingensis* Beetle & A.M. Young [FNA19, HC2]
Rhodora. 67: 405. 1965.
Wyoming sagebrush

Artemisia tridentata Nutt. var. *wyomingensis* (Beetle & A.M. Young) S.L. Welsh
Seriphidium tridentatum (Nutt.) W.A. Weber ssp. *wyomingense* (Beetle & A.M. Young) W.A. Weber

FNA19: "Subspecies wyomingensis is the common sagebrush of rocky or fine-grained soils from valleys to high plateaus in the Great Basin. It is an allopolyploid that may be derived from the populations of subsp. tridentata with which it occurs. Identification is based primarily on the shorter leaves of subsp. wyomingensis, its usually shorter stature, and its shorter flowering branches that are retained from year to year. Wyoming sagebrush may be increasing in abundance in response to increased grazing pressure and drought in the high valleys of the Great Basin."

Artemisia tripartita Rydb. [FNA19, HC, HC2]
Mem. New York Bot. Gard. 1: 432. 1900.
cut-leaf sagebrush, threetip sagebrush

ssp. *tripartita* [FNA19, HC2]
cutleaf sagebrush, threetip sagebrush

**Artemisia vulgaris* L. [FNA19, HC, HC2]
Sp. Pl. 2: 848. 1753.
mugwort, lobed wormwood

Artemisia vulgaris L. var. *selengensis* (Turcz. ex Besser) Maxim.
Artemisia vulgaris L. var. *vulgaris*

Askellia [HC2]
elegant hawksbeard

Askellia pygmaea (Ledeb.) Sennikov [HC2]
Komarovia 5(2): 86. 2008.
low hawksbeard

Crepis nana Richardson [FNA19, HC]
Crepis nana Richardson ssp. *nana* [HC]
Crepis nana Richardson ssp. *ramosa* Babc. [HC]
Crepis nana Richardson var. *lyratifolia* (Turcz.) Hultén
Crepis nana Richardson var. *ramosa* (Babc.) Cronquist

FNA19: "Crepis nana occurs in North America and northern Asia. It is recognized by the tufted, cespitose habit, elongate roots and rhizomes, and occurrence in alpine habitats. In the typical form, the plants are tufted, the stems are not leafy, and the heads are borne among the leaves. Taller specimens with elongated, leafy branches and heads borne well beyond the basal leaves are sometimes recognized as

subsp. ramosa; these characteristics appear to be part of the normal range of variation for the species. Crepis nana is closely related to C. elegans, differing mainly in the shape of the cypselae. The cypselae of C. nana are almost always more columnar, wider at bases, and with broader ribs, than those of C. elegans."

Baccharis [FNA20, HC, HC2]
Sp. Pl. 2: 860. 1753; Gen. Pl. ed. 5, 370. 1754.
baccharis

Baccharis pilularis DC. [FNA20, HC, HC2]
Prodr. 5: 407. 1836.
chaparral broom, coyote brush

ssp. *consanguinea* (DC.) C.B. Wolf [FNA20, HC2]
Occas. Pap. Rancho Santa Ana Bot. Gard. 1: 21. 1935.
chaparral broom

Baccharis pilularis DC. var. *consanguinea* (DC.) Kuntze [HC]

Balsamorhiza [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 349. 1840.
balsamroot

Balsamorhiza ×bonseri H. St. John [HC2]
hybrid balsamroot
(= *Balsamorhiza rosea* × *Balsamorhiza sagittata*)

Balsamorhiza careyana A. Gray [FNA21, HC, HC2]
Mem. Amer. Acad. Arts, n. s. 4: 81. 1849.
Carey's balsamroot

Balsamorhiza careyana A. Gray var. *careyana* [HC]
Balsamorhiza careyana A. Gray var. *intermedia* Cronquist [HC]

Balsamorhiza careyana A. Gray × ***Balsamorhiza hookeri*** Nutt.
hybrid balsamroot

Balsamorhiza deltoidea Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 351. 1840.
deltoid balsamroot, Puget balsamroot

Balsamorhiza hookeri Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 349. 1840.
hairy balsamroot, hare's head balsamroot, Hooker's balsamroot

Balsamorhiza hirsuta Nutt. [HC]
Balsamorhiza hirsuta Nutt. var. *lagocephala* W.M. Sharp
Balsamorhiza hookeri Nutt. var. *hirsuta* (Nutt.) A. Nelson
Balsamorhiza hookeri Nutt. var. *hookeri* [HC]
Balsamorhiza hookeri Nutt. var. *lagocephala* (W.M. Sharp) Cronquist [HC]

FNA19: "At one time or another, most species of subg. Balsamorhiza have been synonymized under B. hookeri. Nevertheless, a number of taxa are justifiably segregated as species by their morphologic differences and geographic restrictions. One might logically choose either of two taxonomies: recognizing only two species in the entire genus, one representing subg. Artorhiza and the other subg. Balsamorhiza, or recognizing each slightly differing population as a species. Either course results in an unsatisfactory classification. The present classification is a compromise. A knotty problem persists. A central cluster of populations from eastern Washington to southeastern California display a number of minor and locally discrete morphologies. They tend to be less isolated from each other than are the peripheral populations, although some tend to mimic the latter ones in one or more characteristics. Their evolutionary history may be involved with past hybridizations with each other or with species of subg. Artorhiza, gene drift, and polyploidy. At present, it appears impossible to reach a satisfactory classification."

Balsamorhiza hookeri Nutt. × ***Balsamorhiza sagittata*** (Pursh) Nutt.
hybrid balsamroot

Balsamorhiza incana Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 350. 1840.
hoary balsamroot, woolly balsamroot

Balsamorhiza rosea A. Nelson & J.F. Macbr. [FNA21, HC, HC2]
Bot. Gaz. 56: 478. 1913.
rosy balsamroot

Balsamorhiza sagittata (Pursh) Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 350. 1840.
arrowleaf balsamroot

Balsamorhiza serrata A. Nelson & J.F. Macbr. [FNA21, HC, HC2]
Bot. Gaz. 56: 479. 1913.
serrrate balsamroot, toothed balsamroot

Balsamorhiza ×terebinthacea (Hook.) Nutt. [HC2]
wormwood balsamroot

Chambers & Sundberg use this epithet for any cross between B. deltoidea, B. careyana, and B. sagittata, the three deltoid-leaved taxa; see Weber (1953)

Balsamorhiza ×tomentosa Rydb. [HC2]
wooly hybrid balsamroot

**Bellis* [FNA20, HC, HC2]
Sp. Pl. 2: 886. 1753; Gen. Pl. ed. 5, 378. 1754.
bellis, daisy

**Bellis perennis* L. [FNA20, HC, HC2]
Sp. Pl. 2: 886. 1753.
English daisy, lawn daisy

Bidens [FNA21, HC, HC2]
Sp. Pl. 2: 831. 1753; Gen. Pl. ed. 5, 362. 1754.
beggar-ticks, bur-marigold, sticktight

Bidens amplissima Greene [FNA21, HC, HC2]
Pittonia. 4: 268. 1901.
Vancouver Island beggar-ticks

Biden cernua L. var. *elata* Torr. & A. Gray
Bidens elata (Torr. & A. Gray) Sherff

Bidens beckii Torr. ex Spreng. [FNA21, HC, HC2]
Neue Entd. 2: 135. 1821.
Beck's water marigold

Megalodonta beckii (Torr. ex Spreng.) Greene
Megalodonta beckii (Torr. ex Spreng.) Greene var. *beckii*
Megalodonta beckii (Torr. ex Spreng.) Greene var. *hendersonii* Sherff
Megalodonta beckii (Torr. ex Spreng.) Greene var. *oregonensis* Sherff

Bidens cernua L. [FNA21, HC, HC2]
Sp. Pl. 2: 832. 1753.
nodding beggar-ticks, bur-marigold

Bidens cernua L. var. *cernua*
Bidens cernua L. var. *elliptica* Wiegand
Bidens cernua L. var. *minima* (Huds.) Pursh

**Bidens connata* Muhl. ex Willd. [FNA21, HC2]
Sp. Pl. 3: 1718.
purplestem beggars-ticks, swamp beggar-ticks

FNA21:"Bidens connata may be better treated as part of B. tripartita."

Bidens frondosa L. [FNA21, HC, HC2]
Sp. Pl. 2: 832. 1753.
leafy beggar-ticks, devil's pitchfork, sticktight

**Bidens tripartita* L. [FNA21, HC, HC2]
Sp. Pl. 2: 831. 1753.
three-lobed beggar-ticks

FNA21:"Plants with cypsela mid-nerves strongly developed (cypselae more or less strongly 4-angled and, often, tuberculate) that are treated below as Bidens connata have been included in B. tripartita, perhaps rightly so. And some botanists have included (or advocated inclusion of) B. eatonii, B. heterodoxa, and/or B. infirma in B. tripartita, as well, perhaps rightly so."

**Bidens vulgata* Greene [FNA21, HC, HC2]
Pittonia. 4: 72. 1899.
tall beggar-ticks, western sticktight

Considered Introduced in OR & Native in BC.

Blepharipappus [FNA21, HC, HC2]
Fl. Bor.-Amer. 1: 316. 1833.
eyelash tarweed

Blepharipappus scaber Hook. [FNA21, HC, HC2]
Fl. Bor.-Amer. 1: 316. 1833.
blepharipappus, rough eyelashweed

Blepharipappus scaber Hook. ssp. *laevis* (A. Gray) D.D. Keck
Blepharipappus scaber Hook. ssp. *scaber*
Blepharipappus scaber Hook. var. *scaber* [HC]

FNA21: "Blepharipappus scaber is unusual among self-incompatible, continental tarweeds for occurring widely in western North America and having a relatively limited distribution in the California Floristic Province."

**Boltonia* [FNA20, HC, HC2]
Sert. Angl. 27. 1789.
Doll's-daisy

**Boltonia asteroides* (L.) L\\'Hér. [FNA20, HC, HC2]
Sert. Angl. 27. 1789.
white doll's daisy

**var. recognita* (Fernald & Griscom) Cronquist [FNA20, HC, HC2]
Bull. Torrey Bot. Club. 74: 149. 1947.
white doll's daisy

Boltonia latisquama A. Gray var. *microcephala* Fernald & Griscom
Boltonia latisquama A. Gray var. *occidentalis* A. Gray
Boltonia latisquama A. Gray var. *recognita* Fernald & Griscom
Boltonia recognita (Fernald & Griscom) G.N. Jones

Brickellia [FNA21, HC, HC2]
Sketch Bot. S. Carolina. 2: 290. 1823.
brickellbush, brickellia, thoroughwort

Brickellia grandiflora (Hook.) Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 287. 1840.
tasselflower brickellbush, large flowered tasselflower, large flowered thoroughwort

Brickellia grandiflorum Hook.

Brickellia microphylla (Nutt.) A. Gray [FNA21, HC, HC2]
Smithsonian Contr. Knowl. 3(5): 85. 1852.
small-leaved brickellbush

var. *microphylla* [FNA21, HC, HC2]
Smithsonian Contr. Knowl. 3(5): 85. 1852.
small-leaved brickellbush, small-leaved brickellia

Brickellia microphylla (Nutt.) A. Gray var. *watsonii* (B.L. Rob.) S.L. Welsh
Brickellia watsonii B.L. Rob.

Brickellia oblongifolia Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 288. 1840.
narrow-leaved brickellbush, narrow-leaved thoroughwort

var. *oblongifolia* [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 288. 1840.
narrowleaf brickellia

Cacaliopsis [FNA20, HC2]
Proc. Amer. Acad. Arts. 19: 50. 1883.
cacaliopsis, silvercrown

Cacaliopsis nardosmia (A. Gray) A. Gray [FNA20, HC2]
Proc. Amer. Acad. Arts. 19: 50. 1883.
silvercrown luina, tall silvercrown

Cacalia nardosmia A. Gray
Cacaliopsis nardosmia (A. Gray) A. Gray ssp. *glabrata* (Piper) Piper
Luina nardosmia (A. Gray) Cronquist [HC]
Luina nardosmia (A. Gray) Cronquist var. *glabrata* (Piper) Cronquist [HC]

**Calendula* [FNA19, HC2]
Sp. Pl. 2: 921. 1753; Gen. Pl. ed. 5, 393. 1754.

**Calendula officinalis* L. [FNA19, HC2]
Sp. Pl. 2: 921. 1753.
pot marigold

garden origin? (Stace 1997) generally a waif, or spreading from gardens

Canadanthus [FNA20, HC2]
Phytologia. 77: 250. 1995.
mountain aster

Canadanthus modestus (Lindl.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 251. 1995.
few-flowered aster, great northern aster

Aster major (Hook.) Porter
Aster modestus Lindl. [HC]
Aster modestus Lindl. var. *major* (Hook.) Muenscher
Aster sayianus Nutt.
Aster unalaschensis Less. ex Bong. var. *major* Hook.
Weberaster modestus (Lindl.) Á. Löve & D. Löve

**Carduus* [FNA19, HC, HC2]
Sp. Pl. 2: 820. 1753; Gen. Pl. ed. 5, 358. 1754.
plumeless thistle

**Carduus acanthoides* L. [FNA19, HC, HC2]
Sp. Pl. 2: 821. 1753.
plumeless thistle, spiny plumeless thistle

*ssp. *acanthoides* [FNA19, HC2]

**Carduus nutans* L. [FNA19, HC, HC2]
Sp. Pl. 2: 821. 1753.
musk thistle, nodding thistle

*_Carduus pycnocephalus_ L. [FNA19, HC, HC2]
Sp. Pl. Ed. 2,. 2: 1151. 1763.
Italian plumeless thistle

*ssp. _pycnocephalus_ [FNA19, HC2]
Sp. Pl. Ed. 2,. 2: 1151. 1753.
Italian plumeless thistle

*_Carduus tenuiflorus_ Curtis [FNA19, HC, HC2]
Fl. Londin. 2(6,61): plate 55. 1789.
slender flowered thistle, winged plumeless thistle

Carduus pycnocephalus L. var. _tenuiflorus_ (Curtis) Fiori

FNA 19: "Carduus tenuiflorus has been reported from New Jersey, Texas, and Washington; I have not seen specimens from those states. Carduus pycnocephalus and C. tenuiflorus are similar annuals with small, usually tightly clustered heads. The number of heads per capitulescence is usually ultimately greater in C. tenuiflorus, but early season plants of this species often have only a few heads. At the end of the growing season the fruiting heads of C. tenuiflorus are aggregated in dense, subspheric clusters. Stem wings tend to be more pronounced in C. tenuiflorus. Fresh corollas of C. pycnocephalus are rose-purple whereas those of C. tenuiflorus have a more pinkish tinge, but this difference is subtle and not reliable on herbarium material. The phyllaries of C. tenuiflorus are membranous-margined, more or less glabrate, and lack the short, stiff, upwardly appressed trichomes of C. pycnocephalus. All published chromosome counts for Carduus tenuiflorus from both Old and New World material are the same. The two species sometimes grow in mixed populations and at times appear to intergrade. Hybridization has been reported in Europe (S. W. T. Batra et al. 1981) and is suspected to occur in California. Hybrids between C. pycnocephalus and C. tenuiflorus have been designated Carduus ×theriotii Rouy."

*_Carthamus_ [FNA19, HC, HC2]
Sp. Pl. 2: 830. 1753; Gen. Pl. ed. 5, 361. 1754.
distaff thistle

*_Centaurea_ [FNA19, HC, HC2]
Sp. Pl. 2: 909. 1753; Gen. Pl. ed. 5, 389. 1754.
centaurea, knapweed, star-thistle
(see also _Rhaponticum_)

Cnicus [HC]

*_Centaurea benedicta_ (L.) L. [FNA19, HC2]
Sp. Pl. Ed. 2,. 2: 1296. 1763.
blessed thistle

Cnicus benedictus L. [HC]

FNA19:"Recent molecular phylogenetic studies (A. Susanna et al. 1995; N. Garcia-Jacas et al. 2000, 2001) have begun to clarify relationships within Centaurea and between Centaurea and other genera. Some taxa traditionally included within Centaurea (e.g., the two native North American species, Centaurea americana and C. rothrockii) fall outside the redefined generic boundaries and are here treated in Plectocephalus. Others usually placed into segregate genera (e.g., Cnicus benedictus) are firmly nested within Centaurea..... Although Cnicus has usually been recognized as a distinctive monotypic genus, it has been merged into Centaurea by various authors (e.g., K. Bremer 1994; G. Wagenitz and F. H. Hellwig 1996). Recent molecular systematic studies (N. Garcia-Jacas et al. 2000) provide additional evidence that it is nested within Centaurea."

*_Centaurea calcitrapa_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 917. 1753.
purple starthistle, red starthistle

FNA19 includes WA within the range of this species.

*_Centaurea cyanus_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 911. 1753.
bachelor's button, garden cornflower

*_Centaurea diffusa_ Lam. [FNA19, HC, HC2]
Encycl. 1: 675. 1785.
diffuse knapweed, tumble knapweed, white knapweed

*_Centaurea ×gerstlaueri_ Erdner [FNA, HC2]
Mitt. Bayer. Bot. Ges. xxxiv. 425, ex Bot. Centralbl.xcviii. 604. 1905.
hybrid knapweed, meadow knapweed, protean knapweed
(= _Centaurea jacea_ × _Centaurea nigra or Centaurea jacea_ × _nigrescens_)

Centaurea debeauxii Godr. & Grenier ssp. _thuillieri_ Dostál
Centaurea ×moncktonii C.E. Britton [FNA19]
Centaurea nigra L. × _Centaurea jacea_ L.
Centaurea pratensis Thuill. [HC], superfluous renaming (illegitimate)

FNA19: "Centaurea ×moncktonii is native to Europe or originated in North America from European ancestry. Meadow knapweeds represent an array of mutually interfertile intermediates derived by hybridization and backcrossing among the various cytotypes of the Centaurea jacea complex. The plants variously combine features of C. jacea and C. nigra, and perhaps C. nigrescens as well. The hybrid complex includes both diploids and tetraploids. Extremes approach the parental types. Meadow knapweeds are often present without either parent in the immediate vicinity. They are considered to be noxious weeds in British Columbia, Idaho, Oregon, and Washington. Centaurea pratensis J. L. Thuillier, sometimes applied to plants that belong here, is not a legitimate name." Chambers and Sundberg (2000) treat as C. pratensis Thuill., which is C. jacea × nigra.

*_Centaurea iberica_ Trevir. ex Spreng. [FNA19, HC2]
Syst. Veg. 3: 406. 1826.
Iberian knapweed, Iberian starthistle

FNA19:"Iberian star thistle is considered to be a noxious weed in several states of the western United States. Weed control measures in Oregon and Washington have apparently eradicated the species in those states. Centaurea iberica is very similar to C. calcitrapa, from which it differs by its pappose cypselae and often more robust habit." Chambers and Sundberg (2000) give author as Spreng. WA report is MT database Kz99, are there specimens?

*_Centaurea jacea_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 914. 1753.
brown knapweed, brownray knapweed

*_Centaurea macrocephala_ Puschkarew ex Willd. [FNA19, HC2]
Sp. Pl. 3: 2298. 1803.
globe knapweed

*_Centaurea melitensis_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 917. 1753.
Maltese starthistle, tocalote

*_Centaurea montana_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 911. 1753.
mountain bluet, mountain cornflower, montane starthistle

*_Centaurea nigra_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 911. 1753.
black knapweed, lesser knapweed

*_Centaurea nigrescens_ Willd. [FNA19, HC2]
Sp. Pl. 3: 2288. 1803.
short fringed knapweed, Tyrol knapweed

Centaurea dubia Suter [HC]
Centaurea dubia Suter ssp. _nigrescens_ (Willd.) Hayek
Centaurea dubia Suter ssp. _vochinensis_ (Bernh. ex Rchb.) Hayek
Centaurea jacea L. ssp. _nigrescens_ (Willd.) Celakovsky
Centaurea transalpina Schleich. ex DC.
Centaurea vochinensis Bernh. ex Rchb.

FNA19: Tyrol knapweed is considered to be a noxious weed in Washington and Oregon. In recent years

there has been much controversy regarding the name(s) to be applied to the North American Tyrol knapweeds. The names Centaurea vochinensis, C. nigrescens, and C. dubia have all been used in twentieth-century North American floras, and J. T. Kartesz and C. A. Meacham (1999) have accepted C. transalpina as well. R. J. Moore (1972) tentatively accepted two species, C. nigrescens and C. dubia, placing C. transalpina and C. vochinensis as synonyms through application beneath both species. Moore discussed the considerable similarities and practical difficulties of differentiating the taxa. H. A. Gleason and A. Cronquist (1991) recognized C. dubia as including C. nigrescens and C. vochinensis. E. G. Voss (1972?1996, vol. 3) recognized C. nigrescens as including C. dubia and C. vochinensis. Kartesz and Meacham accept C. nigrescens as a species, including C. vochinensis; they also accept C. transalpina with C. dubia as a synonym. In our investigation of the North American Tyrol knapweeds we have not been able to distinguish more than one (admittedly variable) entity. At the species level the correct name for this taxon is Centaurea nigrescens. Centaurea dubia Suter, sometimes applied to plants that belong here, is not a valid name."

*_Centaurea solstitialis_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 917. 1753.
yellow star-thistle

*_Centaurea stoebe_ L. [FNA19, HC2]
Sp. Pl. 2: 914. 1753.
spotted knapweed

*ssp. _australis_ (A. Kern) Greuter [FNA, HC2]
Willdenowia 33(1): 56. 2003.
spotted knapweed

Centaurea biebersteinii DC., misapplied
Centaurea maculosa Lam. [HC], misapplied
Centaurea paniculata L., misapplied
Centaurea stoebe L. ssp. _micranthos_ (S.G. Gmel. ex Gugler) Hayek [FNA19]

FNA19 includes a brief reference to this taxon in the text for C. stoebe. BC flora uses this interpretation, noting it is closely related to C. paniculata, but Chambers and Sundberg (2000) think the use of C. bieb. for our plants may be misapplied, and "needs further study".

*_Centaurea trichocephala_ M. Bieb. ex Willd. [FNA19, HC2]
Sp. Pl., ed. 4 [Willdenow] 3(3): 2286. 1803.
featherhead knapweed

FNA19: "A population of Centaurea trichocephala M. Bieberstein ex Willdenow (featherhead or hairy-head knapweed) was found in the late 1970s in a degraded pasture in eastern Washington (B. F. Roché and C. T. Roché 1991). A weed-control program was instituted, and the plants were successfully eradicated. Although it is apparently not established anywhere in North America, C. trichocephala is listed as a noxious weed in Oregon. These plants resemble C. phrygia in having elongate, pectinate-fringed phyllary appendages. In C. trichocephala the linear-filiform, featherlike appendages are much narrower than the phyllary bodies. Plants of the species spread by horizontal roots. According to Roché and Roché, C. trichocephala is apparently self-sterile; the Oregon plants spread clonally and formed no seeds."

*_Centaurea ×varnensis_ Velen. [HC2]
Fl. Bulg. 313. 1891.
hybrid diffuse knapweed, sand knapweed
(= _Centaurea diffusa_ × _Centaurea stoebe ssp. micranthos_)

Centaurea ×psammogena G. Gáyer

This name appears at the bottom of the description for C. diffusa. Both the International Plant Names Index (IPNI) and TROPICOS show this name published as "Centaurea psammogena Gayer". IPNI indicates that the name represents a taxon of hybrid origin.

*_Centromadia_ [FNA21, HC2]
Fl. Francisc. 4: 424. 1897.
spikeweed

*_Centromadia pungens_ (Hook. & Arn.) Greene [FNA21, HC2]

Man. Bot. San Francisco. 196. 1894.
common spikeweed

Hemizonia pungens (Hook. & Arn.) Torr. & A. Gray [HC]

*ssp. *pungens* [FNA21, HC2]
Man. Bot. San Francisco. 196. 1894.
common spikeweed, western spikeweed

Hemizonia pungens (Hook. & Arn.) Torr. & A. Gray ssp. *septentrionalis* D.D. Keck
Hemizonia pungens (Hook. & Arn.) Torr. & A. Gray var. *pungens* [HC]
Hemizonia pungens (Hook. & Arn.) Torr. & A. Gray var. *septentrionalis* (D.D. Keck) Cronquist [HC]

Noxious in WA. FNA21: "Subspecies pungens is circumscribed broadly to include subsp. maritima and subsp. septentrionalis based on morphologic and molecular data (B. G. Baldwin, unpubl.). As treated here, Centromadia pungens subsp. pungens occurs widely in central and northern California, and it is putatively introduced in southwestern California and outside the state."

Chaenactis [FNA21, HC, HC2]
Prodr. 5: 659. 1836.
chaenactis, false-yarrow

Chaenactis douglasii (Hook.) Hook. & Arn. [FNA21, HC, HC2]
Bot. Beechey Voy. 354. 1839.
hoary chaenactis, hoary false-yarrow

var. *douglasii* [FNA21, HC, HC2]
Bot. Beechey Voy. 354. 1839.
dustymaidens, hoary false yarrow

Chaenactis douglasii (Hook.) H. & A var. *achilleaefolia* (H. & A.) A. Nels. [HC]
Chaenactis douglasii (Hook.) Hook. & Arn. var. *achilleifolia* (Hook. & Arn.) A. Gray
Chaenactis douglasii (Hook.) Hook. & Arn. var. *glandulosa* Cronquist [HC]
Chaenactis douglasii (Hook.) Hook. & Arn. var. *montana* M.E. Jones [HC]
Chaenactis douglasii (Hook.) Hook. & Arn. var. *rubricaulis* (Rydb.) Ferris
Chaenactis pedicularia Greene
Chaenactis ramosa Stockw. [HC]

FNA21: "Most of the diploid elements of var. douglasii are distinctive and are connected by a morphologically continuous series of polyploids (usually assigned to var. achilleifolia). Some diploid forms (including var. rubricaulis and Chaenactis ramosa) appear repeatedly and discontinuously in suitable habitats. In particular, forms named var. montana seem to arise wherever the species reaches sufficient elevation. Such populations have no historic or genetic cohesion to justify their recognition as a collective taxon, even though their reduced stature may become genetically fixed in each instance. (Variety alpina, recognized below with hesitation, may be just an extreme such case.) " Possibly not a syn, Kz99, BC & Chambers and Sundberg (2000) differ

Chaenactis thompsonii Cronquist [FNA21, HC, HC2]
Vasc. Pl. Pacif. N.W. 5: 123, fig. [p. 125]. 1955.
Thompson's pincushion

FNA21: "Chaenactis thompsonii appears to be sister to C. evermannii; it is known from the mountains of central and northwestern Washington. The similar habits of C. thompsonii and C. ramosa (= C. douglasii var. douglasii) appear to result from convergent evolution in the distinctive habitat of their type localities (Wenatchee Mountains), not from a close genetic relationship as suggested by Cronquist."

**Chondrilla* [FNA19, HC, HC2]
Sp. Pl. 2: 796. 1753; Gen. Pl. ed. 5, 348. 1754.
gum-succory, skeletonweed

**Chondrilla juncea* L. [FNA19, HC, HC2]
Sp. Pl. 2: 796. 1753.
hogbite, rush skeletonweed, gum succory

FNA19: "Chondrilla juncea is native to the Mediterranean region of Europe, North Africa, and Asia Minor. It

is a weed in North America (not listed as noxious at the federal level). Its deep and extensive root system competes strongly for soil moisture and nutrients and makes control difficult because it helps the plants survive drought, cultivation, grazing, and most selective herbicides. The large, stiff branches and stems interfere with harvesting. The species is said to be "the most serious weed of Australian wheat-growing regions" (F. D. Panetta and J. Dodd 1987). It also infests millions of acres in California, Idaho, Oregon, and Washington. Chondrilla juncea is an obligate apomict; its seeds are formed by a parthenogenetic process (E. Battaglia 1949). Nevertheless, the species is highly variable in morphology and biochemical traits."

Chrysothamnus [FNA20, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 323. 1840.
rabbit-brush
(see also *Ericameria*)

Chrysothamnus viscidiflorus (Hook.) Nutt. [FNA20, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 324. 1840.
green rabbit-brush

ssp. *lanceolatus* (Nutt.) H.M. Hall & Clem. [FNA20, HC2]
Publ. Carnegie Inst. Wash. 326: 181. 1923.
sticky-leaf rabbitbrush, yellow rabbitbrush

Chrysothamnus viscidiflorus (Hook.) Nutt. var. *lanceolatus* (Nutt.) Greene [HC]
Ericameria viscidiflora (Hook.) L.C. Anderson ssp. *lanceolata* (Nutt.) L.C. Anderson

ssp. *viscidiflorus* [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 324. 1840.
sticky flowered rabbitbrush, sticky-leaf rabbitbrush, yellow rabbitbrush

Chrysothamnus viscidiflorus (Hook.) Nutt. ssp. *pumilus* (Nutt.) H.M. Hall & Clem.
Chrysothamnus viscidiflorus (Hook.) Nutt. ssp. *stenophyllus* (A. Gray) H.M. Hall & Clem.
Chrysothamnus viscidiflorus (Hook.) Nutt. var. *pumilus* (Nutt.) Jeps.
Chrysothamnus viscidiflorus (Hook.) Nutt. var. *stenophyllus* (A. Gray) H.M. Hall [HC]
Chrysothamnus viscidiflorus (Hook.) Nutt. var. *viscidiflorus* [HC]
Ericameria viscidiflora (Hook.) L.C. Anders. ssp. *viscidiflora*
Ericameria viscidiflora (Hook.) L.C. Anderson var. *stenophylla* (A. Gray) L.C. Anderson

**Cichorium* [FNA19, HC, HC2]
Sp. Pl. 2: 813. 1753; Gen. Pl. ed. 5, 354. 1754.
chicory

**Cichorium intybus* L. [FNA19, HC, HC2]
Sp. Pl. 2: 813. 1753.
chicory, wild succory

Cirsium [FNA19, HC, HC2]
Gard. Dict. Abr. ed. 4. vol. 1. 1754.
thistle

**Cirsium arvense* (L.) Scop. [FNA19, HC, HC2]
Fl. Carniol. ed. 2. 2: 126. 1772.
Canadian thistle, creepiing thistle

Cirsium arvense (L.) Scop. var. *arvense* [HC]
Cirsium arvense (L.) Scop. var. *horridum* Wimm. & Grab. [HC]
Cirsium arvense (L.) Scop. var. *mite* Wimm. & Grab.

Cirsium brevifolium Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 421. 1841.
Palouse thistle

Cirsium palousense (Piper) Piper

Cirsium brevistylum Cronquist [FNA19, HC, HC2]
Leafl. W. Bot. 7: 26. 1953.

clustered thistle, short-styled thistle

FNA19: "Cirsium brevistylum occurs in the coast ranges and adjacent coastal slope from southwestern British Columbia to southern California. In the Pacific Northwest its range extends inland to the northern Rocky Mountains of southern British Columbia, Idaho, and northwestern Montana, and the Blue and Wallowa ranges of eastern Oregon. It is absent from the central and southern Cascade Range. In older literature the name Cirsium edule was widely misapplied to this species. A. Cronquist (1953) pointed out that the type of C. edule has corolla and style features quite different from those of the plants that had been called by that name and established the name C. brevistylum, based upon the notably short styles of this species. Hybrids of C. brevistylum with C. edule have been named C. ×vancouveriense R. J. Moore & C. Frankton."

Cirsium edule Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 420. 1841.
edible thistle

var. *edule* [FNA19, HC2]
edible thistle, Indian thistle, Macoun's thistle

Carduus macounii Greene
Cirsium edule Nutt. var. *macounii* (Greene) D.J. Keil [FNA19]
Cirsium hallii (A. Gray) M.E. Jones [HC]
Cirsium macounii (Greene) Petr.

var. *wenatchense* D.J. Keil [FNA19, HC2]
Sida. 21: 213. 2004.
Wenatchee thistle

FNA19: "Variety wenatchense is known only from the Wenatchee Mountains of central Washington. Little is known of its ecology." FNA key separates out this variety on the basis of th heads being mostly borne singly and peduncles 10?30 cm.

Cirsium flodmanii (Rydb.) Arthur [FNA19, HC, HC2]
Torreya. 12: 34. 1912.
Flodman's thistle

Cirsium hookerianum Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 418. 1841.
Hooker's thistle, white thistle

Cirsium inamoenum (Greene) D.J. Keil [FNA19, HC2]
Sida. 21: 214. 2004.
Greene's thistle

Cirsium wallowense M. Peck

var. *inamoenum* [FNA19, HC2]
Sida. 21: 214. 2004.
Greene's thistle

Cirsium neomexicanum A. Gray [FNA19, HC2], misapplied
Cirsium subniveum Rydb. [HC]

Known from a single collection in Garfield County. FNA19: "Plants of northeastern Oregon, southeastern Washington, and adjacent western Idaho often have large heads and densely tomentose foliage. These were named Cirsium wallowense by Peck. Similar plants occur sporadically in other portions of the range of Cirsium inamoenum var. inamoenum and I chose not to recognize these northwestern populations as a third variety. Additional study might clarify the relationships of these plants."

Cirsium remotifolium (Hook.) DC. [FNA19, HC, HC2]
Prodr. 6: 655. 1838.
few-leaf thistle, Pacific fringed thistle, remote-leaved thistle, weak thistle

Carduus remotifolius Hook.
Cirsium callilepis (Greene) Jeps. [HC]
Cirsium callilepis (Greene) Jeps. var. *oregonense* (Petr.) J.T. Howell [HC]

Cirsium remotifolium (Hook.) DC. ssp. *remotifolium*
Cirsium remotifolium (Hook.) DC. var. *odontolepis* Petr. [FNA19]
Cirsium remotifolium (Hook.) DC. var. *remotifolium* [FNA19]
Cirsium remotifolium (Hook.) DC. var. *rivulare* Jeps. [FNA19]

FNA19: "Variety remotifolium occurs primarily west of the Cascade Range in Washington and Oregon and on coastal-facing slopes in northwestern California. Intermediates with var. odontolepis are known through much of that range." "Cirsium remotifolium occurs from the Coast Ranges and valleys of the Pacific Northwest to the western slopes of the Cascade and Klamath ranges, south in the California North Coast Ranges to the San Francisco Bay region. It is closely related to the C. clavatum complex of the Rocky Mountains region. Both have a similar growth habit and some forms variably express the character of broadly scarious, lacerate-toothed phyllary margins. Gray, in naming Cnicus carlinoides var. americanus, included as syntypes both California and Colorado specimens. F. Petrak (1917) treated both the West Coast plants and those of the Rocky Mountains as Cirsium subsect. Americana, recognizing C. remotifolium with several infraspecific taxa plus two other species, C. callilepis and C. amblylepis from the West Coast, and four additional species from the Rocky Mountains. A. Cronquist (1955) rejected Petrak\\\'s subspecies, treating C. remotifolium in a restricted sense, limited to plants of Washington and Oregon without dilated phyllary tips, and circumscribed C. centaureae broadly to include the Rocky Mountains and West Coast plants with dilated phyllary tips. Because of the frequent presence of dilated phyllary tips in C. remotifolium in the restricted sense, Cronquist acknowledged the likelihood of past introgression with C. centaureae in the broad sense. J. T. Howell (1960b) recognized three species: Cirsium remotifolium, C. acanthodontum, and C. callilepis, the latter with four varieties collectively corresponding to the West Coast representatives of C. centaureae (in the sense of Cronquist). Because of the great similarity of the various West Coast plants and their intergradation, I see no value in recognizing two or more species. The West Coast and Rocky Mountains plants are clearly related, but are separated by the Great Basin region and there is little chance of current genetic interchange. As is often the case with American Cirsium, genetic enrichment from past hybridization with other nearby species within their respective areas has likely been fertile ground for evolutionary diversification. Different species have contributed genes in the Pacific states and in the Rockies. I have chosen to recognize two geographically-based species complexes, each with intergrading races here treated as varieties. I treat the West Coast plants as C. remotifolium and the Rocky Mountains plants as C. clavatum."

Cirsium scariosum Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 420. 1841.
elk thistle, meadow thistle

Cirsium hookerianum Nutt. var. *scariosum* (Nutt.) B. Boivin
Cirsium magnificum (A. Nelson) Petr. [HC]
Cirsium scariosum Nutt. var. *americanum* (A. Gray) D.J. Keil [FNA19]
Cirsium scariosum Nutt. var. *citrinum* (Petr.) D.J. Keil [FNA19]
Cirsium scariosum Nutt. var. *coloradense* (Rydb.) D.J. Keil [FNA19]
Cirsium scariosum Nutt. var. *congdonii* (R.J. Moore & Frankton) D.J. Keil [FNA19]
Cirsium scariosum Nutt. var. *robustum* D.J. Keil [FNA19]
Cirsium scariosum Nutt. var. *scariosum* [FNA19]
Cirsium scariosum Nutt. var. *thorneae* S.L. Welsh [FNA19]
Cirsium scariosum Nutt. var. *toiyabense* D.J. Keil [FNA19]
Cirsium tioganum (Congdon) Petr. var. *tioganum*

Cirsium undulatum (Nutt.) Spreng. [FNA19, HC, HC2]
Syst. Veg. 3: 374. 1826.
wavy leaf thistle

Cirsium undulatum (Nutt.) Spreng. var. *undulatum*

FNA19: "Cirsium undulatum is widely distributed in the wstern half of North America from the dry plains and plateaus of the Pacific Northwest eastward across the Great Plains to Manitoba and the Dakotas and south to Texas, New Mexico, and northwestern Mexico. It occurs in scattered localities in the Rocky Mountains and northeastern Great Basin region. At least some of the few widely scattered records from the eastern United States are probably introductions. Cirsium undulatum is both widespread and variable. Plants of the Great Plains region tend to be low-growing with a few large heads and elongate corollas. Plants of the Pacific Northwest are usually taller and produce smaller, more numerous heads with shorter corollas. A detailed study of this species might reveal races worthy of recognition as infraspecific taxa.

Wavyleaf thistle is listed by California as a noxious weed. However, most reports of Cirsium undulatum in California are based upon misidentifications of C. canescens. Cirsium undulatum is known to hybridize with C. flodmanii, C. hookerianum, and C. scariosum var. coloradense. J. T. Howell (1960b) reported that C. undulatum was suspected to hybridize with C. brevifolium in the Pacific Northwest."

*_Cirsium vulgare_ (Savi) Ten. [FNA19, HC, HC2]
Fl. Napol. 5: 209. 1835.
bull thistle, common thistle

Carduus vulgare Savi

Columbiadoria [FNA20, HC2]
Phytologia. 71: 249. 1991.
goldenweed

Columbiadoria hallii (A. Gray) G.L. Nesom [FNA20, HC2]
Phytologia. 71: 249. 1991.
Columbia River daisy, Hall's goldenweed

Haplopappus hallii A. Gray [HC]

FNA20:"Columbiadoria hallii is known from the vicinity of the eastern Columbia River Gorge. It occurs also "at scattered stations [south] in the Cascades to the Calapooia Mountains," where the plants "are not precisely like the others, and may prove to be varietally distinct" (A. Cronquist 1955, p. 216)."

Conyza [FNA20, HC, HC2]
Syn. Gen. Compos. 203. 1832.
conyza, horseweed

*_Conyza bonariensis_ (L.) Cronquist [FNA20, HC, HC2]
Bull. Torrey Bot. Club. 70: 632. 1943.
South American conyza
(see also _Conyza sumatrensis_ var. _sumatrensis_)

Conyza canadensis (L.) Cronquist [FNA20, HC, HC2]
Bull. Torrey Bot. Club. 70: 632. 1943.
Canadian fleabane, horseweed

Conyza canadensis (L.) Cronquist var. _canadensis_
Conyza canadensis (L.) Cronquist var. _glabrata_ (A. Gray) Cronquist

FNA20:"Conyza canadensis is thought to be native to North America and is now widely adventive, e.g., in South America, Europe, Asia, and Africa. Plants with stems glabrous and phyllaries red-tipped are sometimes treated as var. pusilla; similar plants with stems glabrous and phyllaries stramineous (not red-tipped) are sometimes treated as var. glabrata."

*var. _sumatrensis_ [HC2]

Coreopsis [FNA21, HC, HC2]
Sp. Pl. 2: 907. 1753; Gen. Pl. ed. 5, 388. 1754.
coreopsis, tickseed

*_Coreopsis grandiflora_ Hogg ex Sweet [FNA21, HC2]
Brit. Fl. Gard. 2: plate 175. 1826.
bigleaf tickseed

*_Coreopsis grandiflora_ Hogg ex Sweet × _Coreopsis lanceolata_ L. [HC2]

*_Coreopsis lanceolata_ L. [FNA21, HC2]
Sp. Pl. 2: 908. 1753.
lance-leaved tickseed

Not in H&C. Recently (2008) collected in San Juan County.

Coreopsis tinctoria Nutt. [FNA21, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 2: 114. 1821.
calliopsis, Columbia coreopsis

Coreopsis atkinsoniana Douglas ex Lindl. [HC]
Coreopsis tinctoria Nutt. var. *atkinsoniana* (Douglas ex Lindl.) H.M. Parker ex E.B. Sm.
Coreopsis tinctoria Nutt. var. *tinctoria*

FNA21:"Coreopsis tinctoria is widely grown in public and residential gardens, and commercially (for cut flowers), and has become widely established in the flora area. As here circumscribed, Coreopsis tinctoria includes plants that others (without agreement among themselves) have treated as distinct species or infraspecific taxa: C. atkinsoniana (plants mostly 50?150+ cm, seldom branched from bases; cypselae 2.5?3 mm, "narrowly" winged; pappi 0.1?0.2 mm; mostly Idaho, Montana, Oregon, Washington), C. cardaminefolia (plants mostly 20?50 cm, seldom branched at bases; cypselae 2 mm, "narrowly to widely" winged; pappi 0 or 0.1?0.2 mm; mostly Arkansas, Kansas, Louisiana, Nebraska, Oklahoma, Texas), and C. tinctoria var. similis (plants mostly 10?30 cm, usually branched from bases; cypselae 2?3 mm, "widely" winged; pappi 0.2?1 mm; Texas and Mexico)."

**Cota* [FNA19, HC2]
Fl. Sicul. Syn. 2: 866. 1845.
chamomile

**Cota austriaca* (Jacq.) Sch. Bip. [HC2]
Oesterr. Bot. Wochenbl. 4: 155. 1854.
Austrian chamomile

Anthemis austriaca Jacq. [Stace 1997]

**Cota tinctoria* (L.) J. Gay ex Guss. [FNA19, HC2]
Fl. Sicul. Syn. 2: 867. 1845.
golden chamomile, yellow chamomile

Anthemis tinctoria L. [HC, Stace 1997]

This species is not included in FNA19.

**Cotula* [FNA19, HC, HC2]
Sp. Pl. 2: 891. 1753; Gen. Pl. ed. 5, 380. 1754.
cotula

**Cotula coronopifolia* L. [FNA19, HC, HC2]
Sp. Pl. 2: 892. 1753.
brass buttons, common brass buttons

Crepis [FNA19, HC, HC2]
Sp. Pl. 2: 805. 1753; Gen. Pl. ed. 5, 350. 1754.
hawksbeard
(see also *Askellia*)

Crepis acuminata Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 437. 1841.
long-leaved hawksbeard, tapertip hawksbeard

Crepis acuminata Nutt. ssp. *acuminata* [HC]

Crepis atribarba A. Heller [FNA19, HC2]
Bull. Torrey Bot. Club. 26: 314. 1899.
slender hawksbeard

Crepis atrabarba Heller [HC], orthographic variant
Crepis atrabarba A. Heller ssp. *atrabarba* [HC], orthographic variant
Crepis atrabarba A. Heller ssp. *originalis* Babc. & Stebbins [HC], orthographic variant
Crepis atribarba A. Heller ssp. *atribarba*
Crepis atribarba A. Heller ssp. *originalis* (Babc. & Stebbins) Babc. & Stebbins

FNA19: "Crepis atribarba is generally recognized by the deeply pinnately lobed leaves with linear lobes, fine tomentulose indument on stems and leaves, setose phyllaries, and dark green, strongly ribbed cypselae. It is a variable mixture that includes polyploid, apomictic forms and hybrids with C. acuminata and other species. The typical form is recognized by its short stature, narrow pinnately lobed, tomentulose

leaves, stems with 3?10 heads, and phyllaries with scattered, black, eglandular setae. Larger, more robust forms with stems 30?70 cm, 10?30+ heads, narrower involucres, and few or no black setae have been recognized as subsp. originalis. The latter was considered by E. B. Babcock (1947) to represent the original diploid form of the species; it is difficult to distinguish in practice."

Crepis bakeri Greene [FNA19, HC, HC2]
Erythea. 3: 73. 1895.
Baker's hawksbeard

Crepis bakeri Greene ssp. *bakeri* [FNA19, HC]
Crepis bakeri Greene ssp. *cusickii* (Eastw.) Babc. & Stebbins [FNA19]
Crepis bakeri Greene ssp. *idahoensis* Babc. & Stebbins [FNA19, HC]

FNA19: "Crepis bakeri is generally recognized by the low stature, dense rosettes of pinnately lobed leaves with coarsely dentate lobes, tomentose stems and leaves, stipitate-glandular hairs distally on stems, relatively large involucres, and densely flowered heads. It is considered closely related to C. occidentalis. Three somewhat weakly defined subspecies were recognized by E. B. Babcock (1947)."

Crepis barbigera Leiberg ex Coville [FNA19, HC, HC2]
Contr. U.S. Natl. Herb. 3: 565, plate 26. 1896.
bearded hawksbeard

FNA19: "Crepis barbigera is recognized by its relatively tall stature, deeply pinnately lobed leaves, tomentulose stems, and phyllaries with coarse, green, eglandular setae. It is a complex of polyploid, apomictic forms, combining characteristics of C. atribarba, C. acuminata, and C. modocensis, from which the species is presumed to have been derived by intercrossing (E. B. Babcock 1947)."

**Crepis capillaris* (L.) Wallr. [FNA19, HC, HC2]
Linnaea. 14: 657. 1840.
smooth hawksbeard

Crepis capillaris (L.) Wallr. var. *capillaris*

FNA19:"Crepis capillaris is recognized by its shallow root system, dense rosettes of coarsely dentate or pinnately lobed leaves, erect slender stems, auriculate-based cauline leaves, relatively small heads, phyllaries with double rows of black setae, and fluffy white pappi. It is weedy and can become a serious lawn pest. It is one of only three species of Crepis with 2n = 6; E. B. Babcock (1947) considered it to be advanced in the genus." Reports of var. agrestis Atkinson & Sharpe (1993) are not supported by a specimen.

Crepis intermedia A. Gray [FNA19, HC, HC2]
Syn. Fl. N. Amer. 1(2): 432. 1884.
gray hawksbeard, intermediate hawksbeard, limestone hawksbeard

Crepis modocensis Greene [FNA19, HC, HC2]
Erythea. 3: 48. 1895.
low hawksbeard, Modoc hawksbeard

Crepis modocensis Greene ssp. *glareosa* (Piper) Babc. & Stebbins [FNA19]
Crepis modocensis Greene ssp. *modocensis* [FNA19, HC]
Crepis modocensis Greene ssp. *rostrata* (Coville) Babc. & Stebbins [FNA19, HC]
Crepis modocensis Greene ssp. *subacaulis* (Kellogg) Babc. & Stebbins [FNA19]
Crepis rostrata Coville

**Crepis nicaeensis* Balbis ex Pers. [FNA19, HC, HC2]
Syn. Pl. 2: 376. 1807.
French hawksbeard, Turkish hawksbeard

FNA19:"Crepis nicaeensis is distinguished by the annual or biennial habit, shallow root system, hispid stems, and glabrate phyllaries enclosing outer cypselae. It is similar in habit to C. biennis, which differs in its larger heads and 13?20-ribbed cypselae; it is considered closely related to C. capillaris (E. B. Babcock 1947)."

Crepis occidentalis Nutt. [FNA19, HC, HC2, JPM]
J. Acad. Nat. Sci. Philadelphia. 7: 29. 1834.
western hawksbeard

Crepis occidentalis Nutt. ssp. *conjuncta* Babc. & Stebbins [FNA19, HC]
Crepis occidentalis Nutt. ssp. *costata* (A. Gray) Babc. & Stebbins [FNA19, HC]
Crepis occidentalis Nutt. ssp. *occidentalis* [FNA19, HC]
Crepis occidentalis Nutt. ssp. *pumila* (Rydb.) Babc. & Stebbins [FNA19, HC]
Crepis occidentalis Nutt. var. *costata* A. Gray

Taxonomy follows Stebbins in Jepson Manual in not recognizing subspecies in species of Crepis that are largely apomictic. FNA19 does recognize four subspecies. FNA19:"Crepis occidentalis is recognized by the old, brown leaf bases persisting on caudices, by stems, leaves, and phyllaries gray-tomentose, and by loose, corymbiform arrays with relatively few, relatively large heads. It is widespread and polymorphic. Some specimens have coarse setae or black, stipitate glands on the phyllaries in addition to the tomentose indument, the stipitate glands sometimes extending proximally on stems. Four intergrading subspecies were recognized by E. B. Babcock (1947). The sexual diploid forms are found in subsp. occidentalis and occur in northern California and adjacent Nevada. The other subspecies are polyploid and apomictic (Babcock)."

Crepis runcinata (E. James) Torr. & A. Gray [FNA19, HC, HC2]
Fl. N. Amer. 2: 487. 1843.
dandelion hawksbeard, meadow hawksbeard

ssp. *runcinata* [FNA19, HC, HC2]
Fl. N. Amer. 2: 487. 1843.
dandelion hawksbeard, meadow hawksbeard

Crepis runcinata (E. James) Torr. & A. Gray ssp. *glauca* (Nutt.) Babc. & Stebbins [FNA19, HC]
Crepis runcinata (E. James) Torr. & A. Gray ssp. *hispidulosa* (Howell ex Rydb.) Babc. & Stebbins [FNA19, HC]
Crepis runcinata (E. James) Torr. & A. Gray ssp. *imbricata* Babc. & Stebbins [FNA19]
Crepis runcinata (E. James) Torr. & A. Gray var. *hispidulosa* Howell ex Rydb.

**Crepis setosa* Haller f. [FNA19, HC, HC2]
Arch. Bot. (Leipzig). 1(2): 1. 1797.
bristly hawksbeard, rough hawksbeard

FNA19:"Crepis setosa is recognized by its annual habit, shallow roots, coarsely setose stems, leaves, and involucres, the relatively large runcinate leaves, sagittate-laciniate cauline leaves, finely beaked cypselae, and white, fine pappus bristles."

**Crepis tectorum* L. [FNA19, HC, HC2]
Sp. Pl. 2: 807. 1753.
annual hawksbeard, narrow leaf hawksbeard, rooftop hawksbeard

Crocidium [FNA20, HC, HC2]
Fl. Bor.-Amer. 1: 335, plate 118. 1834.
crocidium, spring-gold

Crocidium multicaule Hook. [FNA20, HC, HC2]
Fl. Bor.-Amer. 1: 335, plate 118. 1834.
gold-star, spring-gold

**Crupina* [FNA19, HC, HC2]
Ann. Mus. Natl. Hist. Nat. 16: 157. 1810.
crupina

**Crupina vulgaris* Pers. ex Cass. [FNA19, HC, HC2]
Dict. Sci. Nat. ed 2. 12: 68. 1818.
bearded creeper, crupina

Cyclachaena [FNA21, HC2]
Index Seminum (Frankfurt). 1836: 4. 1838.
marsh-elder

**Cyclachaena xanthiifolia* (Nutt.) Fresenius [FNA21, HC2]
Index Seminum (Frankfurt). 1836: 4. 1836.

carelessweed, burweed marsh-elder, tall marsh-elder

Iva xanthifolia Nutt. [HC]
Iva xanthiifolia Nutt.

FNA21: "Cyclachaena xanthiifolia is thought to be native to North American prairies and is evidently adventive east of the Mississippi River and in western states. It was recorded once from California as a weed in commercially grown carrots (specimen in CAS)."

Dieteria [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 300. 1840.
tansyaster

Dieteria canescens (Pursh) Nutt. [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 300. 1840.
hoary-aster

Machaeranthera canescens (Pursh) A. Gray [HC]

var. *incana* (Lindl.) D.R. Morgan & R.L. Hartm. [FNA20, HC2]
Sida. 20: 1396. 2003.
hoary-aster, tall hoary-aster

Aster attenuatus (Howell) Frye & Rigg ex M. Peck, illegitimate name
Dieteria incana (Lindl.) Torr. & A. Gray
Diplopappus incanus Lindl.
Machaeranthera canescens (Pursh) A. Gray var. *incana* (Lindl.) A. Gray
Machaeranthera incana (Lindl.) Greene

**Doronicum* [FNA20, HC2]
Sp. Pl. 2: 885. 1753; Gen. Pl. ed. 5, 377. 1754.
leopard's bane

**Doronicum willdenowii* (Rouy) A.W.Hill [New Flora of the British Isles, 2nd Edition]
Index Kew. Suppl. 6: 71. 1926.
Willdenow's leopard-bane
(= *Doronicum pardalianches x Doronicum plantagineum*)

Collected in 2022 in King County.

Eatonella [FNA21, HC, HC2]
Proc. Amer. Acad. Arts. 19: 19. 1883.
Eatonella

Eatonella nivea (D.C. Eaton) A. Gray [FNA21, HC, HC2]
Proc. Amer. Acad. Arts. 19: 19. 1883.
white Eatonella, white false tickhead

Burielia nivea D.C. Eaton

FNA21 does not show this species occurring in WA, however there are specimens from WA at WTU.

**Echinops* [FNA19, HC, HC2]
Sp. Pl. 2: 814. 1753; Gen. Pl. ed. 5, 356. 1754.
globe-thistle

*ssp. *ruthenicus* (M. Bieb.) Nyman [FNA19, HC2]
Consp. Fl. Eur. 2: 399. 1879.
southern globe thistle

Echinops ruthenicus M. Bieb. [HC]

No specimens of this taxon are known from Washington, despite being reported in WA by Abrams and Kartesz. Until a specimen is produced from WA, this taxon will not be considered part of the flora.

**Erechtites* [FNA20, HC, HC2]

Fl. Ludov. 65. 1817.
burnweed, fireweed

**Erechtites minimus* (Poir.) DC. [FNA20, HC2]
Prodr. 6: 437. 1838.
Australian burnweed, toothed coast burnweed

Erechtites minima (Poir.) DC. [HC], orthographic variant
Erechtites prenanthoides (A. Richardson) DC.
Senecio minimus Poir. [JPM2]

Ericameria [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 318. 1840.
goldenbrush, rabbit-brush

Ericameria bloomeri (A. Gray) J.F. Macbr. [FNA20, HC2]
Contr. Gray Herb. 56: 36. 1918.
Bloomer's goldenweed, rabbitbrush goldenweed

Haplopappus bloomeri A. Gray [HC]
Haplopappus bloomeri A. Gray var. *angustatus* A. Gray
Haplopappus bloomeri A. Gray var. *bloomeri*
Haplopappus bloomeri A. Gray var. *sonnei* Greene

Intergrades with E. greenei.

Ericameria greenei (A. Gray) G.L. Nesom [FNA20, HC2]
Phytologia. 68: 153. 1990.
Greene's goldenweed, Greene's heath goldenweed

Haplopappus bloomeri A. Gray var. *greenei* (A. Gray) Cronquist
Haplopappus greenei A. Gray [HC]
Haplopappus greenei A. Gray var. *greenei*
Haplopappus greenei A. Gray var. *mollis* A. Gray

Ericameria nauseosa (Pall. ex Pursh) G.L. Nesom & G.I. Baird [FNA20, HC2]
Phytologia. 75: 84. 1993.
common rabbit-brush

Chrysothamnus nauseosus (Pall. ex Pursh) Britton [HC]

var. *nana* (Cronquist) G.L. Nesom & G.I. Baird [FNA20, HC2]
Phytologia. 75: 87. 1993.
little rabbitbrush

Chrysothamnus nauseosus (Pall. ex Pursh) Britton ssp. *nanus* (Cronquist) D.D. Keck
Chrysothamnus nauseosus (Pall. ex Pursh) Britton var. *nanus* Cronquist [HC]

var. *speciosa* (Nutt.) G.L. Nesom & G.I. Baird [FNA20, HC2]
Phytologia. 75: 87. 1993.
rubber rabbitbrush

Chrysothamnus nauseosus (Pall. ex Pursh) Britton ssp. *albicaulis* (Nutt.) H.M. Hall & Clem.
Chrysothamnus nauseosus (Pall. ex Pursh) Britton ssp. *speciosus* (Nutt.) H.M. Hall & Clem.
Chrysothamnus nauseosus (Pall. ex Pursh) Britton var. *albicaulis* (Nutt.) Rydb. [HC]
Chrysothamnus nauseosus (Pall. ex Pursh) Britton var. *speciosus* (Nutt.) H.M. Hall

Ericameria resinosa Nutt. [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 319. 1840.
Columbia goldenweed, Columbian heath goldenweed

Haplopappus resinosus (Nutt.) A. Gray [HC]

Erigeron [FNA20, HC, HC2]
Sp. Pl. 2: 863. 1753; Gen. Pl. ed. 5, 371. 1754.
daisy, erigeron, fleabane

Erigeron acris L. [FNA20, HC, HC2]
Sp. Pl. 2: 863. 1753.
bitter fleabane
(see also *Erigeron elatus*, *Erigeron nivalis*)

var. *kamtschaticus* (DC.) Herder [FNA20, HC2]
Bull. Soc. Imp. Naturalistes Moscou. 38: 392. 1865.
Kamchatka bitter fleabane

Erigeron acris L. ssp. *politus* (Fr.) Schinz & R. Keller
Erigeron acris L. var. *asteroides* (Andrz. ex Besser) DC. [HC]
Trimorpha acris (L.) Gray var. *asteroides* (Andrz. ex Besser) G.L. Nesom

Erigeron aliceae Howell [FNA20, HC, HC2]
Fl. N.W. Amer. 317. 1900.
Alice's fleabane, Eastwood's fleabane

Erigeron annuus (L.) Pers. [FNA20, HC, HC2]
Syn. Pl. 2: 431. 1807.
annual fleabane, eastern daisy fleabane, sweet scabrous fleabane

Aster annuus L.
Erigeron annuus (L.) Pers. var. *discoideus* (Vict. & J. Rouss.) Cronquist

Erigeron aureus Greene [FNA20, HC, HC2]
Pittonia. 2: 16. 1891.
golden fleabane

Erigeron aureus Greene var. *acutifolius* Raup

FNA20: "Erigeron aureus var. acutifolius has leaves apically acute (versus rounded to broadly obtuse, sometimes emarginate, in the typical form) and is known only from the type locality, a peat bog in British Columbia (Peace River District). It was not listed or otherwise recognized in a recent flora of that province (G. W. Douglas et al. 1998?2002, vol. 1). Erigeron ×arthurii B. Boivin was described as "sp. nov." and was noted to have originated as a hybrid between E. acris and E. aureus. It was treated by E. H. Moss and J. G. Packer (1983) as a hybrid. Specimens cited by Boivin are from widely separated localities in southwestern British Columbia and adjacent Alberta. It was included at specific rank in the treatment by A. C. Budd et al. (1987) but not by H. J. Scoggan (1978?1979, part 4) or G. W. Douglas et al. (1998?2002, vol. 1)."

Erigeron basalticus Hoover [FNA20, HC, HC2]
Leafl. W. Bot. 4: 40. 1944.
basalt fleabane

Erigeron bloomeri A. Gray [FNA20, HC, HC2]
Proc. Amer. Acad. Arts. 6: 540. 1865.
Bloomer's fleabane, scabland fleabane

var. *bloomeri* [FNA20, HC, HC2]
Proc. Amer. Acad. Arts. 6: 540. 1865.
Bloomer's fleabane, scabland fleabane

Erigeron caespitosus Nutt. [FNA20, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 307. 1840.
tufted fleabane

FNA20: "Erigeron caespitosus as recognized here is highly variable and perhaps justifiably could be divided into more than one taxon. Plants at lower elevations tend to produce tall stems branching above the middle and long, white rays. At higher elevations, especially in Idaho, western Montana, Utah, and Wyoming, stems tend to be shorter and simple and the rays commonly are blue to violet. In the Bitterroot Mountains (Ravalli and Deerlodge counties, Montana), short-stemmed, blue-rayed plants also have strigose cauline vestiture (in contrast to typically deflexed-hirtellous stems); these vestiture variants occur in the same area with plants apparently similar in all other features. Strigose populational variants also occur in Saskatchewan and Yukon, and E. abajoensis, largely distinguished by strigose cauline vestiture, might be considered a regional variant of E. caespitosus. In eastern Idaho and southwestern Montana, plants of E. caespitosus are commonly encountered with cauline leaves obovate and distinctly subclasping.

Plants with strongly 3-nerved basal leaves occur in Carbon and Gallatin counties, Montana.

Erigeron chrysopsidis A. Gray [FNA20, HC, HC2]
Syn. Fl. N. Amer. 1(2): 210. 1884.
dwarf yellow fleabane

var. *chrysopsidis* [FNA20, HC, HC2]
In A. Gray et al., Syn. Fl. N. Amer. 1(2): 210. 1884.
dwarf yellow fleabane, golden fleabane

Erigeron chrysopsidis A. Gray ssp. *chrysopsidis* [HC]

Erigeron compositus Pursh [FNA20, HC, HC2]
Fl. Amer. Sept. 2: 535. 1813.
cutleaf daisy, dwarf mountain fleabane, fernleaf fleabane, trifid mountain fleabane

Erigeron compositus Pursh var. *compositus* [HC]
Erigeron compositus Pursh var. *discoideus* A. Gray [HC]
Erigeron compositus Pursh var. *glabratus* Macoun [HC]
Erigeron trifidus Hook. [HC2], misapplied

FNA20: "Correlations among ploidal level, breeding systems, and morphologic variation have been studied in detail in Erigeron compositus. Five informally designated population systems of diploids are geographically restricted (all of the northwestern United States and adjacent Canada) and primarily sexual, compared to the polyploids, which are agamospermous and apparently of hybrid origin, at least in some cases (R. D. Noyes et al. 1995; Noyes and D. E. Soltis 1996). Reduction in ray floret laminae usually is correlated with polyploidy. Plants with 1-ternately lobed leaves have been identified as var. glabratus, an element of variation that does not have a geographic pattern. Among closely related species, Erigeron compositus is the only one that produces strongly thickened caudex branches; occasional collections show a tendency toward the slender, loose branches characteristic of the other species."

Erigeron corymbosus Nutt. [FNA20, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 308. 1840.
foothill fleabane, longleaf fleabane

Erigeron davisii (Cronquist) G.L. Nesom [FNA20, HC2]
Sida. 21: 22. 2004.
Davis's daisy, Davis's fleabane

Erigeron engelmannii A. Nelson var. *davisii* (Cronquist) Cronquist [HC]

Specimens from southeastern WA.

Erigeron disparipilus Cronquist [FNA20, HC, HC2]
Brittonia. 6: 194. 1947.
Snake River fleabane, white cushion fleabane

Erigeron divergens Torr. & A. Gray [FNA20, HC, HC2]
Fl. N. Amer. 2: 175. 1841.

Erigeron divergens Torr. & A. Gray var. *divergens* [HC2]

FNA20: "Polyploidy and agamospermy apparently are common in Erigeron divergens and contribute to the variability and, probably to some extent, the polymorphism characteristic of this species. Diploids appear to be scattered through the range of the species, at least in its southern part."

Erigeron eatonii A. Gray [FNA20, HC, HC2]
Notes Compositae. 91. 1880.
Eaton's fleabane

var. *villosus* (Cronquist) Cronquist [FNA20, HC, HC2]
Vasc. Pl. Pacif. N.W. 5: 175. 1955.
Eaton's shaggy fleabane

Erigeron eatonii A. Gray ssp. *villosus* Cronquist

Erigeron elatus (Hook.) Greene [FNA20, HC2]
Pittonia. 3: 164. 1897.

swamp fleabane

Erigeron acris L. var. *elatus* (Hook.) Cronquist [HC]
Trimorpha acris (L.) A. Gray var. *elatus* (Hook.) G.L. Nesom
Trimorpha elata (Hook.) G.L. Nesom

Reported from WA in FNA. Currently no specimens exist in Pacific Northwest herbaria.

Erigeron filifolius (Hook.) Nutt. [FNA20, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 308. 1840.
Peck's threadleaf fleabane

Erigeron filifolius (Hook.) Nutt. var. *filifolius* [HC]
Erigeron filifolius (Hook.) Nutt. var. *robustior* M. Peck [HC]

FNA20: "The densely white-strigose stem bases, linear-filiform leaves relatively unreduced distally, and relatively few heads with coiling, usually blue rays are distinctive for Erigeron filifolius. Proximal leaves are not clustered as a basal rosette; they are inserted on closely spaced nodes that are slightly more separated distally. Plants identified as var. robustior (with more ray florets, fewer heads, and thicker stems, centered in Oregon and Washington) intergrade with the typical form and apparently are separated arbitrarily."

Erigeron flettii G.N. Jones [FNA20, HC, HC2]
Bot. Surv. Olympic Penins. 244. 1936.
Flett's fleabane, Olympic Mt. fleabane

FNA20: "Erigeron flettii differs from E. grandiflorus in having fewer, wider, consistently white rays, broadly spatulate basal leaves with bases constricted into narrow petioles longer than the blades and apices rounded or obtuse, less dense involucral vestiture, and strongly barbellate pappus bristles. It is known only from the Olympic Mountains."

Erigeron glacialis (Nutt.) A. Nelson [FNA20, HC2]
Bot. Gaz. 37: 270. 1904.
glacier fleabane

var. *glacialis* [FNA20, HC2]
Bot. Gaz. 37: 270. 1904.
subalpine fleabane

Erigeron peregrinus (Banks ex Pursh) Greene ssp. *callianthemus* (Greene) Cronquist [HC]
Erigeron peregrinus (Banks ex Pursh) Greene ssp. *callianthemus* (Torr. & A. Gray) Cronquist
Erigeron peregrinus (Banks ex Pursh) Greene var. *angustifolius* (A. Gray) Cronquist [HC]
Erigeron peregrinus (Banks ex Pursh) Greene var. *callianthemus* (Greene) Cronquist
Erigeron peregrinus (Banks ex Pursh) Greene var. *eucallianthemus* Cronquist [HC]
Erigeron peregrinus (Banks ex Pursh) Greene var. *scaposus* (Torr. & A. Gray) Cronquist [HC]

Plants previously included within E. peregrinus (except E. peregrinus var. thompsonii) are now included within E. glacialis var. glacialis.

Erigeron howellii (A. Gray) A. Gray [FNA20, HC, HC2]
Syn. Fl. N. Amer. 1(2): 209. 1884.
Howell's fleabane

Erigeron salsuginosus (Richardson ex R. Br.) A. Gray var. *howellii* A. Gray

Erigeron inornatus (A. Gray) A. Gray [FNA20, HC, HC2]
Notes Compositae. 88. 1880.
California rayless fleabane

var. *inornatus* [FNA20, HC, HC2]
Notes Compositae. 88. 1880.
California rayless fleabane

**Erigeron karvinskianus* DC. [FNA20, HC2]
Prodr. 5: 285. 1836.

Erigeron leibergii Piper [FNA20, HC, HC2]
Bull. Torrey Bot. Club. 28: 41. 1901.

Leiberg's fleabane

Erigeron linearis (Hook.) Piper [FNA20, HC, HC2]
Contr. U.S. Natl. Herb. 11: 567. 1906.
desert yellow daisy, lineleaf fleabane

Diplopappus linearis Hook.
Erigeron peucephyllus A. Gray

Erigeron lonchophyllus Hook. [FNA20, HC, HC2]
Fl. Bor.-Amer. 2: 18. 1834.
short-rayed fleabane, spear-leaved fleabane

Erigeron acris L. ssp. *racemosus* (Nutt.) Clem. & E.G. Clem.
Trimorpha lonchophylla (Hook.) G.L. Nesom

Erigeron nivalis Nutt. [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 311. 1841.
northern daisy

Erigeron acris L. ssp. *debilis* (A. Gray) Piper
Erigeron acris L. var. *debilis* A. Gray [HC]
Trimorpha acris (L.) Gray var. *debilis* (A. Gray) G.L. Nesom

FNA20: "Erigeron nivalis usually has been treated as an infra-specific taxon within E. acris; the two are broadly sympatric in the northwestern United States and Canada without obvious intergrades. Both occur over a wide range of elevations and in similar habitats. Erigeron nivalis probably occurs in Nevada; it has not been taxonomically distinguished there. Erigeron scotteri was regarded by E. H. Moss and J. G. Packer (1983) as a synonym of E. acris (presumably var. debilis = E. nivalis; the heads are relatively small and borne singly)."

Erigeron oreganus A. Gray [FNA20, HC, HC2]
Proc. Amer. Acad. Arts. 19: 2. 1883.
Gorge fleabane, Oregon fleabane

Erigeron peregrinus (Banks ex Pursh) Greene [FNA20, HC, HC2]
Pittonia. 3: 166. 1897.
wandering fleabane
(see also *Erigeron glacialis*)

var. *peregrinus* [FNA20, HC2]
Pittonia. 3: 166. 1897.
wandering daisy

Erigeron peregrinus (Banks ex Pursh) Greene ssp. *peregrinus* [HC]
Erigeron peregrinus (Banks ex Pursh) Greene var. *dawsonii* Greene [HC]
Erigeron peregrinus (Banks ex Pursh) Greene var. *peregrinus* [FNA20, HC2], misapplied

Recently (2019) collected in northern Washington.

var. *thompsonii* (S.F. Blake ex J.W. Thomp.) Cronquist [FNA20, HC, HC2]
Brittonia. 6: 144. 1947.
Thompson's wandering fleabane

Erigeron thompsonii S.F. Blake ex J.W. Thomp.

Erigeron philadelphicus L. [FNA20, HC, HC2]
Sp. Pl. 2: 863. 1753.
Philadelphia fleabane

var. *philadelphicus* [FNA20, HC2]
Sp. Pl. 2: 863. 1753.
Philadelphia fleabane

Erigeron piperianus Cronquist [FNA20, HC, HC2]
Brittonia. 6: 197. 1947.
Piper's fleabane

Erigeron poliospermus A. Gray [FNA20, HC, HC2]
Syn. Fl. N. Amer. 1(2): 210. 1884.
hairy-seeded daisy, cushion fleabane

var. *cereus* Cronquist [FNA20, HC, HC2]
Brittonia. 6: 194. 1947.
Kittitas fleabane

FNA20:"Variety cereus grows in Chelan, Douglas, Grant, and Kittitas counties, apparently occurring as an enclave within the range of the typical variety. The vestiture and elongate proximal internodes of var. cereus are distinctive even within the group of species most closely related to Erigeron poliospermus; intergrades with typical E. poliospermus in vestiture and habit appear to be relatively common. Analogous variants occur within E. concinnus and are recognized at varietal rank."

var. *poliospermus* [FNA20, HC, HC2]
Brittonia. 6: 194. 1947.
hairy seeded daisy, cushion fleabane

Erigeron pumilus Nutt. [FNA20, HC, HC2]
Gen. N. Amer. Pl. 2: 147. 1818.
shaggy fleabane

var. *intermedius* (Cronquist) S.L. Welsh [FNA20, HC2]
Brittonia. 6: 180. 1947.
shaggy fleabane

Erigeron pumilus Nutt. ssp. *intermedius* Cronquist [HC]
Erigeron pumilus Nutt. var. *euintermedius* Cronquist [HC]
Erigeron pumilus Nutt. var. *gracilior* Cronquist [HC]

FNA20: "Variety gracilior was described by A. Cronquist (1947) as "plants slender, the larger stems either not more than 1.5 mm thick near the base or bearing fewer than 5 heads." Such plants occur mostly in the southern part of the variety\'s range (mostly Idaho and Oregon, some in Washington); while the gracile tendency seems real, many arbitrary identifications must be made if two taxa are recognized."

var. *pumilus* [FNA20, HC2]
Gen. N. Amer. Pl. 2: 147. 1818.
shaggy fleabane

Erigeron pumilus Nutt. ssp. *pumilus* [HC]

Erigeron salishii G.W. Douglas & Packer [FNA20, HC2]
Canad. J. Bot. 66: 414, fig. 1. 1988.
Salish fleabane, star peak fleabane

Often confused with E. trifidus, or E. compositus.

Erigeron speciosus (Lindl.) DC. [FNA20, HC, HC2]
in A. P. de Candolle and A. L. P. P. de Candolle, Prodr. 5: 284 1836.
showy daisy, showy fleabane, splendid fleabane

Erigeron speciosus (Lindl.) DC. var. *macranthus* (Nutt.) Cronquist [HC]
Erigeron speciosus (Lindl.) DC. var. *speciosus* [HC]
Erigeron subtrinervis Rydb. ex Porter & Britton ssp. *conspicuus* (Rydb.) Cronquist
Erigeron subtrinervis Rydb. ex Porter & Britton var. *conspicuus* (Rydb.) Cronquist [HC]
Stenactis speciosa Lindl.

Taxonomy follows Flora of North America not recognizing varieties; FNA 20 (Nesom): "Plants glabrous and glandular on the phyllaries, stems, and leaves have been recognized as var. macranthus; they intergrade with hairier forms and do not show a coherent geographic pattern."

Erigeron strigosus Muhl. ex Willd. [HC, HC2]
Sp. Pl., ed. 4 [Willdenow] 3(3): 1956.
branched fleabane, daisy fleabane

var. *septentrionalis* (Fernald & Wiegand) Fernald [FNA20, HC, HC2]

Rhodora. 44: 340. 1942.
prairie fleabane

Erigeron strigosus Muhl. ex Willd. ssp. *septentrionalis* (Fernald & Wiegand) Wagenitz

FNA considers this taxon to be native. FNA20: "The distributional data given here are highly provisional; the author has not attempted to sort this taxon accurately, if it can be. According to A. Cronquist (1947), var. septentrionalis is scattered mostly in the northern half of the continent and (1994) is "found chiefly in New England and adjacent Canada." It is "morphologically transitional" to Erigeron annuus (A. Cronquist 1994) and, as implied by the synonymy, may be more appropriately treated as part of E. annuus (D. Frey et al. 2003). As noted by Fernald in the original description, the stems may be nearly glabrous or lightly hispid, in contrast to the more densely strigose to strigillose ones of typical E. strigosus." Cronquist (1955, Vol 5) believes western plants called this are hybrids (E. annuus × strigosus), and var. septentrionalis is native in e US.

var. *strigosus* [FNA20, HC, HC2]
Sp. Pl. 3: 1956.
branching fleabane, daisy fleabane

Erigeron annuus (L.) Pers. ssp. *strigosus* (Muhl. ex Willd.) Wagenitz

FNA considers this taxon native. Introduced (in OR, Chambers and Sundberg (2000), uncertain if native in BC (Douglas et al. 1998 Reported in WA by Creso (1984)

Erigeron subtrinervis Rydb. ex Porter & Britton [FNA20, HC, HC2]
Mem. Torrey Bot. Club. 5: 328. 1894.
three-veined fleabane

FNA20: "Erigeron subtrinervis is variable in vestiture, perhaps reflecting gene exchange with E. speciosus. Erigeron speciosus var. mollis (A. Gray) S. L. Welsh may be a recurrent hybrid; it is identified here within E. subtrinervis."

Eriophyllum [FNA21, HC, HC2]
Gen. Sp. Pl. 28. 1816.
woolly sunflower

Eriophyllum lanatum (Pursh) J. Forbes [FNA21, HC, HC2]
Hort. Woburn. 183. 1833.
Oregon sunshine, common woolly sunflower

var. *integrifolium* (Hook.) Smiley [FNA21, HC, HC2]
Univ. Calif. Publ. Bot. 9: 378. 1921.
Oregon sunshine

FNA21: "Variety integrifolium intergrades with var. lanatum in Oregon and Washington near the Columbia River. The intermediate populations that have been analyzed are polyploid (J. S. Mooring 2001)."

var. *lanatum* [FNA21, HC, HC2]
Gen. Sp. Pl. 28. 1816.
common woolly sunflower

var. *leucophyllum* (DC.) W.R. Carter [FNA21, HC2]
Prelim. Cat. Fl. Vancouver. 82. 1921.
common woolly sunflower

Eucephalus [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 298. 1840.
aster

Eucephalus engelmannii (D.C. Eaton) Greene [FNA20, HC2]
Pittonia. 3: 54. 1896.
Engelmann's aster

Aster engelmannii (D.C. Eaton) A. Gray [HC]

Eucephalus glaucescens (A. Gray) Greene [FNA20, HC2]

Pittonia. 3: 56. 1896.
Klickitat aster

Aster engelmannii (D.C. Eaton) A. Gray var. *glaucescens* A. Gray
Aster glaucescens (A. Gray) S.F. Blake [HC]

FNA20: "Eucephalus glaucescens is known from the vicinity of Mt. Adams in Klickitat, Skamania, and Yakima counties. Intermediates with E. ledophyllus have been reported."

Eucephalus ledophyllus (A. Gray) Greene [FNA20, HC2]
Pittonia. 3: 55. 1896.
Cascade aster

Aster ledophyllus (A. Gray) A. Gray [HC]

var. *ledophyllus* [FNA20, HC2]
Pittonia. 3: 55. 1896.
Cascade aster

Aster ledophyllus (A. Gray) A. Gray var. *ledophyllus* [HC]

Eucephalus paucicapitatus (B.L. Rob.) Greene [FNA20, HC2]
Pittonia. 3: 56. 1896.
Olympic Mountain aster

Aster paucicapitatus (B.L. Rob.) B.L. Rob. [HC]

Eurybia [FNA20, HC2]
Dict. Sci. Nat. ed. 2. 16: 46. 1820.
aster

Eurybia conspicua (Lindl.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 259. 1995.
western showy aster

Aster conspicuus Lindl. [HC]

Eurybia integrifolia (Nutt.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 260. 1995.
thickstem aster

Aster amplexifolius Rydb.
Aster integrifolius Nutt. [HC]

FNA20:"Eurybia integrifolia is found in mountain ranges bordering the Basin and Range Province, from the Sierra Nevada and Cascade ranges in the west to the Rocky Mountains and Colorado Plateau in the east."

Eurybia merita (A. Nelson) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 260. 1995.
subalpine aster

Aster meritus A. Nelson
Aster sibiricus L. ssp. *meritus* (A. Nelson) G.W. Douglas [ILBC1]
Aster sibiricus L. var. *meritus* (A. Nelson) Raup [HC]

FNA20: "Eurybia sibirica has often been confused at its southern range limit with E. merita, from which it differs by its often more low-cespitose habit (versus more erect habit, but smaller individuals may be similar in this respect), usually more serrate leaves (versus subserrate to nearly entire), and subequal, foliaceous, purplish phyllaries (versus unequal, non-foliaceous, purple-margined). At the southern end of its range, near the Canada?United States border, E. sibirica is usually found at higher elevations than its congener, there at its northern limit. Aster sibiricus forma albinus Lepage is merely a color variant of the species and is not recognized here."

Eurybia radulina (A. Gray) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 261. 1995.
rough-leaved aster

Aster radulinus A. Gray [HC]

Eurybia sibirica (L.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 261. 1995.
arctic aster

Aster sibiricus L. [HC]
Aster sibiricus L. ssp. *sibiricus*

FNA20: "Eurybia sibirica has often been confused at its southern range limit with E. merita, from which it differs by its often more low-cespitose habit (versus more erect habit, but smaller individuals may be similar in this respect), usually more serrate leaves (versus subserrate to nearly entire), and subequal, foliaceous, purplish phyllaries (versus unequal, non-foliaceous, purple-margined). At the southern end of its range, near the Canada?United States border, E. sibirica is usually found at higher elevations than its congener, there at its northern limit. Aster sibiricus forma albinus Lepage is merely a color variant of the species and is not recognized here."

Euthamia [FNA20, HC2]
Dict. Sci. Nat. ed. 2. 37: 471. 1825.
grass-leaved goldenrod

**Euthamia graminifolia* (L.) Nutt. [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 325. 1840.
fragrant goldenrod, grass-leaved goldenrod

Euthamia graminifolia (L.) Nutt. var. *major* (Michx.) Moldenke
Solidago graminifolia (L.) Salisb. [HC]
Solidago graminifolia (L.) Salisb. var. *major* (Michx.) Fernald [HC]

WA report in Abrams and FNA20, however no voucher at WTU.

Euthamia occidentalis Nutt. [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 326. 1840.
western goldenrod, western goldentop

Euthamia californica Gand.
Euthamia linearifolia Gand.
Solidago occidentalis (Nutt.) Torr. & A. Gray [HC]

Eutrochium [FNA21, HC2]
New Fl. 4: 78. 1838.
Joe-pye weed

Eutrochium maculatum (L.) E.E. Lamont [FNA21, HC2]
Sida. 21: 902. 2004.
spotted Joe-pye weed, spotted Joepyeweed

Eupatoriadelphus maculatus (L.) R.M. King & H. Rob.
Eupatorium maculatum L. [HC]

var. *bruneri* (A. Gray) E.E. Lamont [FNA21, HC2]
Sida. 21: 902. 2004.
Joepyeweed, Joe-pye weed

Eupatorium maculatum L. ssp. *bruneri* (A. Gray) G.W. Douglas
Eupatorium maculatum L. var. *bruneri* (A. Gray) Breitung [HC]

(Douglas et al. 1998) state probably introduced in BC.

**Filago* [FNA19, HC, HC2]
Sp. Pl. 2: 927, 1199. 1753; Gen. Pl. ed. 5, 397. 1754.
filago

**Filago arvensis* L. [HC, HC2]
Sp. Pl. 2: add. 1753.
field cottonrose, field filago

Logfia arvensis (L.) Holub [FNA19]

Oglifa arvensis (L.) Cass.

FNA: "Logfia arvensis appears to be basal or nearly so in Logfia and Filagininae (J. D. Morefield 1992); only 2?4 epappose florets are present in most heads.....The earliest specimen confirmed from the flora area was from Bonner County, Idaho, in 1934."

**Filago vulgaris* Lam. [FNA19, HC2]
Fl. Franç. 2: 61. 1779.
German filago

Filago germanica L., homonym (illegitimate)

voucher? only WA report in Atkinson & Sharpe (1993) some BC records of this from the Gulf Islands have been annot. to F. pyramidata

Gaillardia [FNA21, HC, HC2]
Observ. Phys. 29: 55. 1786 (as Gaillarda); Hist. Acad. Roy. Sci. Mém. Math. Phys. (Paris, 4to) 1786: 5. 1788.
blanket-flower, gaillardia

Gaillardia aristata Pursh [FNA21, HC, HC2]
Fl. Amer. Sept. 2: 573. 1813.
blanket flower, great-flowered gaillardia

**Galinsoga* [FNA21, HC, HC2]
Fl. Peruv. Prodr. 110, plate 24. 1794.
garden pest, quickweed

*var. *parviflora* [FNA21, HC2]
Icon. 3: 41, plate 281. 1795.
small flowered galinsoga, gallant soldier

**Galinsoga quadriradiata* Ruiz & Pav. [FNA21, HC2]
Syst. Veg. Fl. Peruv. Chil. 1: 198. 1798.
ciliate galinsoga, shaggy galinsoga, quickweed

Galinsoga ciliata (Raf.) S.F. Blake [HC]

Gamochaeta [FNA19, HC2]
Chlor. Andina. 1: 151. 1856.
cudweed

Gamochaeta ustulata (Nutt.) Holub [FNA19, HC2]
Folia Geobot. Phytotax. 11: 83. 1976.
purple cudweed, spoon-leaf cudweed

Gamochaeta purpurea (L.) Cabrera [FNA19], misapplied
Gnaphalium purpureum L. var. *ustulatum* (Nutt.) B. Boivin

FNA Volume 19:"Gamochaeta ustulata usually has been included in G. purpurea; it differs mostly in its longer duration, thicker and shorter stems, larger, more compact arrays of larger, brown heads, and aspects of phyllary morphology."

Gnaphalium [FNA19, HC, HC2]
Sp. Pl. 2: 850. 1753; Gen. Pl. ed. 5, 368. 1754.
cudweed, everlasting
(see also *Gamochaeta*, *Pseudognaphalium*)

Gnaphalium palustre Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 403. 1841.
lowland cudweed, western marsh cudweed

Filaginella palustris (Nutt.) Holub
Gnaphalium heteroides Klatt
Gnaphalium palustre Nutt. var. *nanum* Jeps.

Gnaphalium uliginosum L. [FNA19, HC, HC2]

Sp. Pl. 2: 856. 1753.
marsh cudweed

FNA19: "Gnaphalium uliginosum is native to Europe; it is not clear whether some or all of the North American plants may have been introduced into the flora."

Grindelia [FNA20, HC, HC2]
Ges. Naturf. Freunde Berlin Mag. Neuesten Entdeck. Gesammten Naturk. 1: 259. 1807.
grindelia, gumplant, gumweed, resinweed

Grindelia integrifolia DC. [FNA20, HC, HC2]
Prodr. 5: 315. 1836.
Puget Sound gumweed, Willamette Valley gumweed
(see also *Grindelia hirsutula*)

Grindelia integrifolia DC. var. *integrifolia* [HC]

FNA20: "But for the stipitate-glandular apices of the phyllaries, plants of Grindelia integrifolia are very much like some plants treated here in G. hirsutula. Taxonomic status for plants that have been called G. integrifolia should be reconsidered."

Grindelia nana Nutt. [JPM2, OFP]
Trans. Amer. Philos. Soc. ser. 2, 7: 314. 1840.
Idaho gumweed, low gumweed

Grindelia nana Nutt. ssp. *nana*

var. *discoidea* (Nutt.) A. Gray [OFP]
Syn. Fl. N. Amer. 1(2): 119. 1884.
Columbia gumweed, rayless gumweed

Grindelia columbiana (Piper) Rydb. [HC]
Grindelia nana Nutt. ssp. *columbiana* Piper

Endemic to the Columbia River Gorge in Washington and Oregon.

var. *nana* [Revised HC2, Flora of Oregon]
coastal gumweed

Grindelia hirsutula Hook. & Arn. [FNA, HC2, OFP, JPM2], misapplied

Grindelia squarrosa (Pursh) Dunal [FNA20, HC, HC2]
Mém. Mus. Hist. Nat. 5: 50. 1819.
curlycup gumweed, serrate resinweed
(see also *Grindelia hirsutula*)

Grindelia squarrosa (Pursh) Dunal var. *squarrosa* [HC]

Oregon Flora Project: "Although G. squarrosa is similar to G. nana in the form of its inflorescence and can sometimes be difficult to distinguish, the two species are rather distantly related and are unlikely to hy-bridize. Grindelia squarrosa appears to be increasing throughout its range and taking over areas that were occupied until recently by G. nana (and other species in other states)."

var. *serrulata* (Rydb.) Steyerm. [OFP]
curlycup gumweed, serrate resinweed
(see also *Grindelia hirsutula*)

Oregon Flora Project: "Although G. squarrosa is similar to G. nana in the form of its inflorescence and can sometimes be difficult to distinguish, the two species are rather distantly related and are unlikely to hy-bridize. Grindelia squarrosa appears to be increasing throughout its range and taking over areas that were occupied until recently by G. nana (and other species in other states)."

Grindelia stricta DC. [JPM2, OFP]
Prodr. [A. P. de Candolle] 7(1): 278. 1838.
Oegon gumweed

Grindelia hirsutula is misapplied in Washington. Coastal specimens of this species are referential to G. stricta and G. integrifolia, and interior specimens are referential to G. nana.

var. *stricta* [JPM2, OFP]

Grindelia stricta DC. ssp. *stricta*

Grindelia hirsutula is misapplied in Washington. Coastal specimens of this species are referential to G. integrifolia, and interior specimens are referential to G. nana.

**Guizotia* [FNA21, HC2]
Dict. Sci. Nat. ed. 2. 59: 237, 247, 248. 1829.

**Guizotia abyssinica* (L. f.) Cass. [FNA21, HC2]
Dict. Sci. Nat. ed. 2. 59: 248. 1829.

Polymnia abyssinica L. f.

FNA21: "In the flora area, Guizotia abyssinica has been recorded sporadically at widely scattered stations (evidently often from birdseed wastes); it may be persistently established at relatively few stations."

Gutierrezia [FNA20, HC, HC2]
Gen. Sp. Pl. 30. 1816.
matchbrush, matchweed, snakeweed

Gutierrezia sarothrae (Pursh) Britton & Rusby [FNA20, HC, HC2]
Trans. New York Acad. Sci. 7: 10. 1887.
kindlingweed, matchweed, broom snakeweed

FNA20: "Gutierrezia sarothrae is often abundant in overgrazed pastures."

Helenium [FNA21, HC, HC2]
Sp. Pl. 2: 886. 1753; Gen. Pl. ed. 5, 377. 1754.
sneezeweed

Helenium autumnale L. [FNA21, HC, HC2]
Sp. Pl. 2: 886. 1753.
common sneezeweed, large flowered sneezeweed

Helenium autumnale L. var. *autumnale*
Helenium autumnale L. var. *grandiflorum* Torr. & A. Gray [HC]
Helenium autumnale L. var. *montanum* (Nutt.) Fernald [HC]

Helianthella [FNA21, HC, HC2]
Fl. N. Amer. 2: 333. 1842.
helianthella, little-sunflower

Helianthella uniflora (Nutt.) Torr. & A. Gray [FNA21, HC, HC2]
Fl. N. Amer. 2: 334. 1842.
Rocky Mountain helianthella

var. *douglasii* (Torr. & A. Gray) W.A. Weber [FNA20, HC, HC2]
Fl. N. Amer. 2: 334. 1842.
Douglas helianthella, false sunflower

FNA20: "Two infraspecific taxa within Helianthella uniflora may be distinguished; they have been named at varietal rank. Variety douglasii has stems hirsute; involucres (15?)20?25(?30) mm diam.; outer phyllaries rarely elongated, margins ciliate, abaxial faces sparsely puberulent; ray laminae 30?40 mm; and 2n = 30. It grows in grasslands in the northern Rocky Mountains and on the east side of the Cascade Range (B.C.; Idaho, Oreg., Wash.) at 300?2500 m where it flowers May?Jul." See Weber (1952)

Helianthus [FNA21, HC, HC2]
Sp. Pl. 2: 904. 1753; Gen. Pl. ed. 5, 386. 1754.
sunflower

Helianthus annuus L. [FNA21, HC, HC2]
Sp. Pl. 2: 904. 1753.
common sunflower

Helianthus annuus L. ssp. *lenticularis* (Douglas ex Lindl.) Cockerell

FNA21: "Helianthus annuus is widely distributed, including weedy, cultivated, and escaped plants. It is the only native North American species to become a major agronomic crop. Despite its considerable variability, attempts have failed to produce a widely adopted infraspecific system of classification. Forms with red-colored ray laminae, known from cultivation and occasionally seen escaped, trace their ancestry to a single original mutant plant. It hybridizes with many of the other annual species."

**Helianthus ciliaris* DC. [FNA21, HC2]
Prodr. 5: 587. 1836.
blueweed

Helianthus cusickii A. Gray [FNA21, HC, HC2]
Proc. Amer. Acad. Arts. 21: 413. 1886.
Cusick's sunflower, turniproot sunflower

Helianthus nuttallii Torr. & A. Gray [FNA21, HC, HC2]
Fl. N. Amer. 2: 324. 1842.
Nuttall's sunflower

ssp. *nuttallii* [FNA21, HC2]
Fl. N. Amer. 2: 324. 1842.
cordilleran sunflower, Nuttall's sunflower

Helianthus nuttallii Torr. & A. Gray var. *nuttallii* [HC]

**Helianthus petiolaris* Nutt. [FNA21, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 2: 115. 1821.
prairie sunflower

Helianthus petiolaris Nutt. var. *petiolaris*

**ssp. *petiolaris* [FNA21, HC2]
prairie sunflower

**Helianthus tuberosus* L. [FNA21, HC, HC2]
Sp. Pl. 2: 905. 1753.
Jerusalem artichoke

Hemizonella [FNA21, HC2]
Proc. Amer. Acad. Arts. 9: 189. 1874.
miniature tarweed

Hemizonella minima (A. Gray) A. Gray [FNA21, HC2]
Proc. Amer. Acad. Arts. 9: 189. 1874.
smallhead tarplant, least tarweed, small-head tarweed, smallhead tarweed

Hemizonia minima A. Gray
Madia minima (A. Gray) D.D. Keck [HC]

FNA21: "Hemizonella minima is self-compatible, like most other tarweeds that are distributed widely in western North America."

Heterotheca [FNA20, HC2]
Bull. Sci. Soc. Philom. Paris. 1817: 137. 1817.
camphorweed, goldaster

Heterotheca oregona (Nutt.) Shinners [FNA20, HC2, OFP]
Field & Lab. 19: 71. 1951.
Oregon goldenaster

Chrysopsis oregona (Nutt.) A. Gray [HC]
Chrysopsis oregona (Nutt.) A. Gray var. *oregona*

var. *oregona* [FNA20, HC2]
Oregon goldenaster

Heterotheca villosa (Pursh) Shinners [FNA20, HC2]

Field & Lab. 19: 71. 1951.
hairy goldaster

Chrysopsis villosa (Pursh) Nutt. ex DC. [HC]

var. *foliosa* (Nutt.) V.L. Harms [FNA20, HC2]
Wrightia. 4: 15. 1968.
leafy goldenaster

Chrysopsis villosa (Pursh) Nutt. ex DC. var. *foliosa* (Nutt.) Cronquist [HC]
Chrysopsis villosa (Pursh) Nutt. ex DC. var. *foliosa* (Nutt.) D.C. Eaton, orthographic variant

Voucher? OR reports in Peck (1961) misapplied (Chambers and Sundberg 2000). FNA20: "Variety foliosa is most common at the base of the Front Range in Colorado and Wyoming; it occurs scattered across the northern part of its range in the mountains and western prairies. Plants that are glandular but otherwise like var. foliosa are presumed here to be hybrids with either var. minor or var. nana. Variety foliosa is most similar to var. ballardii."

var. *minor* (Hook.) Semple [FNA20, HC2]
Novon. 4: 54. 1994.
hairy goldenaster, hispid goldenaster

Chrysopsis villosa (Pursh) Nutt. ex DC. var. *hispida* (Hook.) A. Gray [HC]
Heterotheca villosa (Pursh) Shinners var. *hispida* (Hook.) V.L. Harms

FNA20:"Variety minor is distinguished by its usually narrowly to broadly oblancelate distal cauline leaves (sometime oblong or ovate) and moderately glandular and hispido-strigose indument. The leaf bases are usually narrowly to broadly cuneate or attenuate (rarely rounded). Distal leaf faces usually have about 10?50 hairs/mm 2 and about 4?20 glands/mm 2 . The variety is the most variable in the species and includes some local distinctive morphotypes that grade into other forms. Plants intermediate between this and all other varieties occur in areas where the ranges are sympatric, and they make infraspecific taxonomy of the species difficult. The variety has been incorrectly referred to as var. hispida (a later synonym) in most floras. The status of Heterotheca barbata (Rydberg) Semple (Chrysopsis barbata Rydberg), the Spokane goldenaster, is uncertain. J. C. Semple (1996) treated it as a separate species to draw attention to the problem; a detailed description based on the type and detailed illustrations were included. It is known from the type collection along the Spokane River Valley east of Spokane, Idaho, and two down-river, atypical collections (Benton and Spokane counties, Washington). It flowers in July (sometimes August). It is similar to H. villosa var. minor, but differs in having lanceolate-elliptic distal cauline leaves (34?38 × 8?9 mm) that are little reduced distally, long branches (each with one to a few large heads), and disc corollas with a few, very long hairs on the tube. Further work is needed to increase the number of specimens available for a detailed comparison with H. villosa var. minor in order to clarify whether H. barbata warrants species level recognition, should be included in H. villosa as a variety, or placed in synonymy under var. minor."

var. *villosa* [FNA20, HC2]
Field & Lab. 19: 71. 1951.
hairy goldaster, hairy goldenaster

Chrysopsis villosa (Pursh) Nutt. ex DC. var. *villosa* [HC]

Hieracium [FNA19, HC, HC2]
Sp. Pl. 2: 799. 1753; Gen. Pl. ed. 5, 350. 1754.
hawkweed

Hieracium albiflorum Hook. [FNA19, HC, HC2]
Fl. Bor.-Amer. 1: 298. 1833.
white hawkweed, white-flowered hawkweed

**Hieracium aurantiacum* L. [FNA19, HC, HC2]
Sp. Pl. 2: 801. 1753.
orange hawkweed

**Hieracium caespitosum* Dumort. [FNA19, HC2]
Fl. Belg. 62. 1827.
meadow hawkweed, yellow king devil

Hieracium pratense Tausch [HC]

**Hieracium flagellare* Willd. [FNA19, HC2]
Enum. Pl. suppl.: 54. 1814.
whip hawkweed

Hieracium flagellare Willd. var. *amauracron* (Missback & Zahn) Lepage [KZ99]
Hieracium flagellare Willd. var. *cernuiforme* (Naegeli & Peter) Lepage [KZ99]
Hieracium ×*flagellare* Willd. var. *flagellare* [KZ99]
Hieracium flagellare Willd. var. *pilosius* Lepage [KZ99]

FNA19: "The type of Hieracium flagellare may have resulted from a cross between plants of H. caespitosum and H. pilosella (A. Cronquist 1980)." Although generally treated as a hybrid, this plant is often found in the absence of both of its parents, and is a widespread weed in eastern North America (Lepage 1967). Recently collected in San Juan County.

**Hieracium* ×*floribundum* Wimm. & Grab. [HC2]
flowery hawkweed

Also written as Hieracium floribundum.

**Hieracium glomeratum* Froel. [HC2]
Prodromus Systematis Naturalis Regni Vegetabilis 7(1): 207. 1838.
yellow devil hawkweed

**Hieracium lachenalii* C.C. Gmel. [HC2]
Fl. Bad. 3: 322. 1808.
common hawkweed, English hawkweed, European hawkweed

Hieracium vulgatum Fr. [FNA19, HC], misapplied

FNA19: "The correct name for the species here called Hieracium vulgatum may be H. lachenallii C. C. Gmelin (E. Lepage 1971; E. G. Voss 1972?1996, vol. 3)." Weedy on the west side of the Cascades (Zika 2002), where first collected in 1966.

Hieracium longiberbe Howell [FNA19, HC, HC2]
Fl. N.W. Amer. 395. 1901.
long-bearded hawkweed

FNA19: "Hieracium longiberbe is known only from along the Columbia River."

**Hieracium maculatum* Sm. [HC2, Stace 1997]
Baier. Fl. 2: 319. 1789.
mottled hawkweed

**Hieracium murorum* L. [FNA19, HC2]
Sp. Pl. 2: 802. 1753.
wall hawkweed

**Hieracium pilosella* L. [FNA19, HC, HC2]
Sp. Pl. 2: 800. 1753.
mouse-ear hawkweed

Hieracium pilosella L. var. *nivea* Muell.Arg. [KZ99]
Hieracium pilosella L. var. *pilosella* [KZ99]
Pilosella officinarum F.W. Schultz & Sch. Bip.

**Hieracium piloselloides* Vill. [FNA19, HC2]
Prosp. Hist. Pl. Dauphiné. 34. 1779.
tall hawkweed

Hieracium florentinum All.

FNA19: "Plants called Hieracium praealtum Villars ex Gochnat (at least those called H. praealtum var. decipiens W. D. J. Koch) reputedly differ from members of H. piloselloides in having blades of their proximal leaves stellate-pubescent abaxially (M. L. Fernald 1950); such plants may be found in the flora and may merit taxonomic recognition."

**Hieracium sabaudum* L. [FNA19, HC2]

Sp. Pl. 2: 804. 1753.
savoy hawkweed

Hieracium laevigatum Willd., misapplied

Hieracium scouleri Hook. [FNA19, HC, HC2]
Fl. Bor.-Amer. 1: 298. 1833.
hound-tongue hawkweed, Scouler's hawkweed

Hieracium albertinum Farr [HC]
Hieracium chapacanum Zahn
Hieracium cusickii Gand.
Hieracium cynoglossoides Arv.-Touv. [HC]
Hieracium scouleri Hook. var. *albertinum* (Farr) G.W. Douglas & G.A. Allen
Hieracium scouleri Hook. var. *griseum* A. Nelson
Hieracium scouleri Hook. var. *scouleri*

**Hieracium* ×*stoloniflorum* Waldst. & Kit. [HC2]
Descr. Icon. Pl. Hung. 3: 303, t. 273. 1806.
forked hawkweed
(= *Hieracium aurantiacum* × *Hieracium pilosella*)

Hieracium ×*stoloniflorum* Waldst. & Kit. var. *cayouetteanum* Lepage [KZ99]
Hieracium ×*stoloniflorum* Waldst. & Kit. var. *laurentianum* Lepage [KZ99]
Hieracium ×*stoloniflorum* Waldst. & Kit. var. *stoloniflorum* [KZ99]

Hieracium triste Willd. ex Spreng. [FNA19, HC2]
Syst. Veg. 3: 640. 1826.
alpine hawkweed, slender hawkweed

Hieracium gracile Hook. [HC]
Hieracium gracile Hook. var. *densifloccosum* (Zahn) Cronquist
Hieracium gracile Hook. var. *detonsum* (A. Gray) A. Gray
Hieracium gracile Hook. var. *gracile*
Hieracium triste Willd. ex Spreng. var. *gracile* (Hook.) A. Gray

Hieracium umbellatum L. [FNA19, HC, HC2]
Sp. Pl. 2: 804. 1753.
narrowleaf hawkweed, umbellate hawkweed

Hieracium canadense Michx. [HC]
Hieracium kalmii L.
Hieracium umbellatum L. ssp. *umbellatum*

FNA19: "The circumscription of Hieracium umbellatum adopted here is supported by research done by others, especially G. A. Guppy (1978) and E. Lepage (1960). Hieracium canadense var. kalmii (Linnaeus) Scoggan, referable here, is an illegitimate name."

Hulsea [FNA21, HC, HC2]
Pacif. Railr. Rep. 6(3): 77, plate 13. 1858.
alpinegold, hulsea

Hulsea nana A. Gray [FNA21, HC, HC2]
Pacif. Railr. Rep. 6(3): 76, plate 13. 1858.
small alpinegold, small hulsea

Hulsea nana A. Gray var. *larsenii* A. Gray

FNA19: "Densely lanate or woolly plants of Hulsea nana are referable to var. larsenii. Such plants may occur in distinct populations but can be found together with sparsely lanate and strictly glandular plants. The distribution of lanate to woolly plants appears associated with higher levels of insolation."

Hymenopappus [FNA21, HC, HC2]
Hymenopappus. plate. 1788.
hymenopappus

Hymenopappus filifolius Hook. [FNA21, HC, HC2]
Fl. Bor.-Amer. 1: 317. 1833.
Columbia cut-leaf, fineleaf hymenopappus

var. *filifolius* [FNA21, HC, HC2]
Columbia cutleaf

**Hypochaeris* [FNA19, HC, HC2]
Sp. Pl. 2: 810. 1753; Gen. Pl. ed. 5, 352. 1754.
cats-ear

**Hypochaeris glabra* L. [FNA19, HC, HC2]
Sp. Pl. 2: 811. 1753.
smooth cat's-ear

FNA19: "Hypochaeris glabra is usually distinguishable by its annual habit and relatively small size, slender and shallow roots, fine stems, often glabrous leaves, and beakless, truncate outer cypselae. Occasional specimens are larger and have induments characteristics of H. radicata; they can be distinguished by the dimorphic cypselae."

**Hypochaeris radicata* L. [FNA19, HC, HC2]
Sp. Pl. 2: 811. 1753.
hairy cat's-ear, rough cat's-ear

FNA19: "Hypochaeris radicata is recognized by the coarse, perennial habit, stout roots, coarsely hirsute leaves and phyllaries, yellow corollas, and monomorphic, beaked cypselae. It is weedy and invasive in some areas."

**Inula* [FNA19, HC, HC2]
Sp. Pl. 2: 881. 1753; Gen. Pl. ed. 5, 375. 1754.
inula

**Inula helenium* L. [FNA19, HC, HC2]
Sp. Pl. 2: 881. 1753.
elecampane, inula

Known in WA from a single collection in Stevens County.

Ionactis [FNA20, HC2]
Pittonia. 3: 245. 1897.
ankle-aster

Ionactis stenomeres (A. Gray) Greene [FNA20, HC2]
Pittonia. 3: 246. 1897.
Rocky Mountain ankle-aster, Rocky Mountain aster

Aster stenomeres A. Gray [HC]

Iva [FNA21, HC, HC2]
Sp. Pl. 2: 988. 1753; Gen. Pl. ed. 5, 426. 1754.
poverty-weed
(see also *Cyclachaena*)

Iva axillaris Pursh [FNA21, HC, HC2]
Fl. Amer. Sept. 2: 743. 1813.
deeproot, poverty weed

Iva axillaris Pursh ssp. *robustior* (Hook.) Bassett

**Jacobaea* [HC2]
ragwort

**Jacobaea maritima* (L.) Pelser & Meijden [HC2]
Heukels' Fl. Nederland 677. 2005.
silver ragwort

*_Jacobaea vulgaris_ Gaertn. [HC2]
Fruct. Sem. Pl. 2: 445. 1791.
tansy ragwort

Senecio jacobaea L. [FNA20, HC]

FNA20: "Senecio jacobaea is a weed introduced from Europe and now well established in places of cool, damp summers. It is toxic to livestock and legally noxious in most states and provinces where it occurs. The Russian botanist E. Wiebe (2000) resuscitated Jacobaea for plants that are treated here as Senecio jacobaea, S. erucifolius, and S. cannabifolius. Phylogenetic studies may confirm the utility of recognizing Jacobaea as a distinct genus; to do so here would be premature."

Jaumea [FNA21, HC, HC2]
Syn. Pl. 2: 397. 1807.
jaumea

Jaumea carnosa (Less.) A. Gray [FNA21, HC, HC2]
U.S. Expl. Exped. 17: 360. 1874.
fleshy jaumea, marsh jaumea

Coinogyne carnosa Less.

Lactuca [FNA19, HC, HC2]
Sp. Pl. 2: 795. 1753; Gen. Pl. ed. 5, 348. 1754.
lettuce
(see also *Mycelis*)

Mulgedium [FNA19]

Lactuca biennis (Moench) Fernald [FNA19, HC, HC2]
Rhodora. 42: 300. 1940.
tall blue lettuce, wild blue lettuce

Sonchus biennis Moench

FNA19: "The type of Lactuca terrae-novae Fernald is probably conspecific with that of L. biennis. The type of L. biennis may be conspecific with that of L. floridana."

*_Lactuca canadensis_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 796. 1753.
Canadian wild lettuce, Florida blue lettuce

*_Lactuca ludoviciana_ (Nutt.) Riddell [FNA19, HC, HC2]
W. J. Med. Phys. Sci. 8: 491. 1835.
Louisiana lettuce, prairie lettuce, western lettuce

*_Lactuca saligna_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 796. 1753.
least lettuce, willow lettuce

*_Lactuca sativa_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 795. 1753.
garden lettuce

*_Lactuca serriola_ L. [FNA19, HC, HC2]
Cent. Pl. II. 29. 1756.
prickly lettuce

Lactuca scariola L. var. _integrata_ Gren. & Godr.
Lactuca scariola L. var. _scariola_

Lactuca tatarica (L.) C.A. Mey. [HC2]
Verz. Pfl. Casp. Meer. (C.A. von Meyer). 56. 1831.
blue lettuce

ssp. *pulchella* (Pursh) Stebbins [HC2]
Madroño 5: 123. 1939.

blue lettuce

Lactuca pulchella (Pursh) DC. [HC]
Lactuca tatarica (L.) C.A. Mey. var. *pulchella* (Pursh) Breitung
Mulgedium oblongifolium (Nutt.) Reveal
Mulgedium pulchellum (Pursh) G. Don [FNA19]

FNA19: "The type of Mulgedium pulchellum may be conspecific with that of M. tataricum (Linnaeus) de Candolle, a Eurasian species. Or, if "perennial" plus "Fl. blue" constitutes sufficient description for valid publication of the name Lactuca oblongifolia Nuttall (1813), then a new combination in Mulgedium based on that name may be appropriate for what is here called M. pulchellum."

**Lactuca virosa* L. [FNA19, HC2]
Sp. Pl. 2: 795. 1753.
great lettuce, tall lettuce, wild lettuce

Lagophylla [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 390. 1841.
hareleaf, rabbitleaf

Lagophylla ramosissima Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 391. 1841.
slender hareleaf, common rabbitleaf

Lagophylla ramosissima Nutt. ssp. *ramosissima*

FNA21: "Lagophylla ramosissima occurs widely in dry, often disturbed or poor soils of the California Floristic Province, Great Basin, and Pacific Northwest. Plants with heads in glomerate arrays have been treated as L. congesta or L. ramosissima subsp. congesta; W. C. Thompson (1983, p. 21) concluded that L. congesta represents an "extreme morphological variant of L. ramosissima" unworthy of taxonomic recognition." Chambers and Sundberg (2000) question if ssp. congesta (Greene) D.D. Keck in CA is a good taxon

**Lapsana* [FNA19, HC, HC2]
Sp. Pl. 2: 811. 1753; Gen. Pl. ed. 5, 353. 1754.
nipplewort

**Lapsana communis* L. [FNA19, HC, HC2]
Sp. Pl. 2: 811. 1753.
common nipplewort

FNA19: "Lapsana communis is widely distributed in North America. It is easily recognized by the abruptly constricted lyrate leaves with relatively large terminal lobes, heads of relatively small flowers with yellow corollas, keeled phyllaries, and epappose cypselae. It is aggressively weedy and often found in shady disturbed sites. The milky juice of L. communis is said to be soothing to sensitive skin, particularly on the nipples of nursing mothers."

Lasthenia [FNA21, HC, HC2]
Opusc. Phytol. 3: 88. 1834.
goldfields

Lasthenia glaberrima DC. [FNA21, HC, HC2]
Prodr. 5: 664. 1836.
smooth goldfields, smooth lasthenia

Lasthenia maritima (A. Gray) M.C. Vasey [FNA21, HC2]
Madroño. 32: 139. 1985.
maritime goldfields, seaside goldfields

Baeria maritima (A. Gray) A. Gray
Baeria minor (DC.) Ferris ssp. *maritima* (A. Gray) Ferris
Lasthenia minor (DC.) Ornduff var. *maritima* (A. Gray) Cronquist [HC]

FNA21: "Lasthenia maritima is a self-pollinating, "guano endemic" of seabird nesting grounds. It is typically found on offshore islands and rocks from the Farallon Islands, California, to the northern tip of Vancouver

Island, British Columbia and rarely occurs on the mainland."

Lasthenia minor (DC.) Ornduff [FNA21, HC, HC2]
Univ. Calif. Publ. Bot. 40: 80. 1966.
coastal goldfields

Baeria minor (DC.) Ferris

FNA21 lists this as endemic to California, however Eugene Kozloff collected a plant in 1990 annotated to this name by Robert Ornduff. This determination was confirmed by D. Giblin in 2008 after comparison with L. maritima and L. minor specimens.

Layia [FNA21, HC, HC2]
Prodr. 7: 294. 1838.
layia, tidytips

Layia glandulosa (Hook.) Hook. & Arn. [FNA21, HC, HC2]
Bot. Beechey Voy. 358. 1839.
white layia, white daisy tidytips

Layia glandulosa (Hook.) Hook. & Arn. ssp. *glandulosa*
Layia glandulosa (Hook.) Hook. & Arn. ssp. *lutea* D.D. Keck

FNA21: "Layia glandulosa occurs in deserts of western North America, extending to the Pacific coast in central and southern California. As treated here (provisionally) and previously, L. glandulosa corresponds to a paraphyletic group; molecular phylogenetic data have indicated that L. discoidea is most closely related to a subset of lineages in L. glandulosa, including yellow-rayed populations previously recognized as subsp. lutea or var. lutea (B. G. Baldwin, unpubl.). Report of L. glandulosa from British Columbia has not been confirmed."

**Leontodon* [FNA19, HC, HC2]
Sp. Pl. 2: 798. 1753; Gen. Pl. ed. 5, 349. 1754.
hawkbit

**Leontodon autumnalis* L. [FNA19, HC, HC2]
Sp. Pl. 2: 798. 1753.
autumn hawkbit

Leontodon autumnalis L. ssp. *autumnalis*

FNA19: "Leontodon autumnalis is recognized by the usually branched stems with (1)2-5 heads, peduncles bracteate proximal to heads, non-beaked cypselae, and pappi wholly of plumose bristles. It is now established in eastern North America and is sporadic in the west. Specimens with coarsely hirsute phyllaries have been recognized as var. pratensis; intermediates occur and the characteristic does not seem to correlate with other characters." Stace (1997) notes distinctness of subspp. & vars. need study

**Leontodon saxatilis* Lam. [FNA19, HC2]
Fl. Franç. 2: 115. 1779.
hairy hawkbit

*ssp. *saxatilis* [FNA19, HC2]
Fl. Franç. 2: 115. 1779.
lesser hawkbit

Leontodon leysseri (Wallr.) G. Beck
Leontodon nudicaulis Mérat [HC]
Leontodon nudicaulis Mérat ssp. *taraxacoides* (Vill.) Schinz & Thell. [HC]
Leontodon taraxacoides (Vill.) Mérat ssp. *taraxacoides*
Lomatium nudicaulis Mérat

**Leucanthemum* [FNA19, HC2]
Gard. Dict. Abr. ed. 4. vol. 2. 1754.
daisy

**Leucanthemum* ×*superbum* (Bergmans ex J.W. Ingram) D.H. Kent [FNA19, HC2]
Watsonia 18(1): 89. 1990.

Shasta daisy

voucher? WA report A. Jacobson (pers. comm.) Seattle area reseeding in gardens, truly naturalized? FNA19: "The name Shasta daisy of horticulture is associated also with Leucanthemum ×superbum (Bergmans ex J. Ingram) Bergmans ex D. H. Kent, which is generally thought to have been derived from hybrids between L. maximum and L. lacustre. Cultivars of "Shasta daisy" number in the dozens, including "single," "double," "quill," and "shaggy" forms; they may be encountered as waifs or persisting from abandoned plantings."

**Leucanthemum vulgare* Lam. [FNA19, HC2]
Fl. Franç. 2: 137. 1779.
oxeye daisy

Chrysanthemum leucanthemum L. [HC]
Chrysanthemum leucanthemum L. var. *pinnatifidum* Lecoq & Lamotte

**Logfia* [FNA19, HC2]
Bull. Sci. Soc. Philom. Paris. 1819: 143. 1819 (as "genre ou sous-genre"). in F. Cuvier, Dict. Sci. Nat. ed. 2, 23: 564. 1822.
cottonrose, cottonweed

**Logfia gallica* (L.) Cosson & Germain [FNA19, HC2]
Ann. Sci. Nat., Bot., sér. 2. 20: 291. 1843.
daggerleaf cottonweed

**Logfia minima* (Sm.) Dumort. [FNA19, HC2]
Fl. Belg. 68. 1827.
little cottonrose

Filago minima (Sm.) Pers.

Luina [FNA20, HC, HC2]
Hooker?s Icon. Pl. 12: 35, plate 1139. 1873.
luina
(see also *Cacaliopsis*, *Rainiera*)

Luina hypoleuca Benth. [FNA20, HC, HC2]
Hooker?s Icon. Pl. 12: 36, plate 1139. 1873.
littleleaf luina, silverback luina, littleleaf silverback

Lygodesmia [FNA19, HC, HC2]
Edinburgh New Philos. J. 6: 311. 1829.
rush-pink, skeletonplant
(see also *Pleiacanthus*)

Lygodesmia juncea (Pursh) D. Don ex Hook. [FNA19, HC, HC2]
Fl. Bor.-Amer. 1: 295. 1833.
rush skeletonplant

FNA19: "Lygodesmia juncea is the most widespread species of the genus, occurring throughout the High Plains region of North America. It is easily distinguished by its bushy habit, greatly reduced cauline leaves, relatively small heads and involucres, and phyllaries lacking appendages. Mature cypselae are rarely found on this species, and the plants are presumably sterile and reproduce mainly by vegetative means. Many specimens have round galls to 10 mm diameter on the stems, produced by solitary wasps and apparently unique to this species."

Madia [FNA21, HC, HC2]
Sag. Stor. Nat. Chili. 136, 354. 1782.
madia, tarweed
(see also *Anisocarpus*, *Hemizonella*)

Madia citriodora Greene [FNA21, HC, HC2]
Bull. Torrey Bot. Club. 9: 63. 1882.
lemon-scented tarplant, lemon tarweed, lemon-scented tarweed

Madia elegans D. Don ex Lindl. [FNA21, HC, HC2]
Edwards?s Bot. Reg. 17: plate 1458. 1831.
common madia, autumn showy tarweed

Madia elegans D. Don ex Lindl. ssp. *densiflora* (Greene) D.D. Keck
Madia elegans D. Don ex Lindl. ssp. *elegans*
Madia elegans D. Don ex Lindl. ssp. *vernalis* D.D. Keck
Madia elegans D. Don ex Lindl. var. *densifolia* (Greene) Jeps. [HC]
Madia elegans D. Don ex Lindl. var. *elegans* [HC]

FNA21: "Madia elegans occurs widely in California outside the deserts and in southwestern Oregon and locally in western Nevada and Washington. It is unusually variable in morphology, ecology, and phenology. Molecular data have indicated that D. D. Keck\'s (1959) infraspecific taxonomy for M. elegans needs revision."

Madia exigua (Sm.) A. Gray [FNA21, HC, HC2]
Proc. Amer. Acad. Arts. 8: 391. 1872.
threadstem madia, little tarplant, little tarweed

FNA21: "Madia exigua occurs in seasonally dry situations in much of western North America outside the warm deserts. Morphologically, M. exigua is somewhat similar to Hemizonella minima, which (unlike M. exigua) has subumbellate arrays of heads and obcompressed, sparsely hairy ray cypselae."

Madia glomerata Hook. [FNA21, HC, HC2]
Fl. Bor.-Amer. 2: 24. 1834.
mountain tarplant, cluster tarweed, mountain tarweed

Madia gracilis (Sm.) D.D. Keck [FNA21, HC, HC2]
Madroño. 5: 169. 1940.
grassy tarplant, common tarweed, slender tarweed

Madia gracilis (Sm.) D.D. Keck ssp. *gracilis*

Hybridizes with M. citriodora, M. sativa

Madia sativa Molina [FNA21, HC, HC2]
Sag. Stor. Nat. Chili. 136. 1782.
Chilean tarplant, coast tarweed

Madia capitata Nutt.
Madia sativa Molina ssp. *capitata* (Nutt.) Piper
Madia sativa Molina ssp. *sativa*
Madia sativa Molina var. *congesta* Torr. & A. Gray [HC]
Madia sativa Molina var. *sativa* [HC]

Matricaria [FNA19, HC, HC2]
Sp. Pl. 2: 890. 1753; Gen. Pl. ed. 5, 380. 1754.
chamomile, matricaria, mayweed
(see also *Tripleurospermum*)

**Matricaria chamomilla* L. [FNA19, HC, HC2]
Sp. Pl. 2: 891. 1753.
wild chamomile, scented mayweed

Matricaria recutita L.

FNA19: "Although the name Matricaria chamomilla has been considered to be misapplied (e.g., S. Rauschert 1974; A. Cronquist 1994; E. G. Voss 1972?1996, vol. 3), W. L. Applequist (2002) argued convincingly that the name is indeed correctly applied to the taxon described here. Among the North American material, specimens with coronate ray cypselae (var. chamomilla), or wholly without coronas [var. recutita (Linnaeus) Grierson] have been encountered but none with fully coronate cypselae (var. coronata J. Gay ex Boissier), even though synonymy under this name includes M. courrantiana, reported for Texas and New Mexico (specimens not seen). The varieties may not be worth recognizing (Applequist; Q. O. N. Kay 1976) and are not treated formally here." Rauschert (1974) transferred this from Matricaria to Chamomilla

Matricaria discoidea DC. [FNA19, HC2]
Prodr. 6: 50. 1838.
pineapple weed

Chamomilla discoidea (DC.) J. Gay ex A. Braun
Chamomilla suaveolens (Pursh) Rydb.
Matricaria matricarioides (Less.) Porter [HC], illegitimate name
Santolina suaveolens Pursh

FNA19: "Matricaria discoidea has been used as a medicinal and aromatic plant by Native American tribes (D. E. Moerman 1998). It also is considered a weed, and it is resistant to a photosystem II inhibitor herbicide in the United Kingdom (www.weedscience.org). It is a northwestern North American native that has spread to eastern and northern North America and elsewhere (E. McClintock 1993b; E. G. Voss 1972?1996, vol. 3; A. Cronquist 1994). NatureServe (www.natureserve.org) and Natural Resources Conservation Service (plants.usda.gov) erroneously present M. discoidea as introduced on the continent. Its natural habitat is ill-defined because the species has become ruderal even in its native range. For discussion of the nomenclature of this taxon, see S. Rauschert (1974); K. N. Gandhi and R. D. Thomas (1991); Cronquist; and Voss. Matricaria matricarioides (Lessing) Porter cannot be applied to the American taxon; M. matricarioides was originally published as Artemisia matricarioides Lessing, a new name for Tanacetum pauciflorum Richardson (see S. Rauschert 1974), itself a synonym of T. huronense Nuttall. W. Greuter (pers. comm.), who accepts M. discodea, considers Rauschert\'s treating Artemisia matricarioides as homotypic with T. pauciflorum as equivalent to a lectotype designation."

**Mauranthemum* [FNA19, HC2]
Taxon. 44: 377. 1995.

Micropus californicus Fisch. & C.A. Mey. [FNA19, HC, HC2]
Index Seminum (St. Petersburg). 2: 42. 1836.
cottontop, Q-tips

var. *californicus* [FNA19, HC, HC2]
cottontop, Q-tips

Photographed in Klickitat County by R.L. Carr in 2015: http://web.ewu.edu/ewflora/Asteraceae/Micropus%20californicus.html

Microseris [FNA19, HC, HC2]
Philos. Mag. Ann. Chem. 11: 388. 1832.
microseris
(see also *Nothocalais*, *Uropappus*)

Apargidium [HC]

Microseris bigelovii (A. Gray) Sch. Bip. [FNA19, HC, HC2]
Jahresber. Pollichia. 22?24: 308. 1866.
coast microseris, coastal silverpuffs

FNA19: "Microseris bigelovii is the most characteristically coastal of the annual taxa and the only one to include plants with obtuse, spatulate leaves (K. Bachmann et al. 1984). A statistical analysis of its morphologic variation was published by Bachmann (1992). It sometimes has been collected at inland sites at 500?600 m, where the cypselae may have been introduced by domestic animals. The northern populations near Victoria, British Columbia, and the San Juan Islands, Washington, are disjunct from the main range, which extends from Oregon to Santa Barbara County, California."

Microseris borealis (Bong.) Sch. Bip. [FNA19, HC2]
Jahresber. Pollichia. 22?24: 310. 1866.
apargidium, bog microseris, northern silverpuffs

Apargia borealis Bong.
Apargidium boreale (Bong.) Torr. & A. Gray [HC]
Scorzonella borealis (Bong.) Greene

Microseris laciniata (Hook.) Sch. Bip. [FNA19, HC, HC2]
Jahresber. Pollichia. 22?24: 309. 1866.

cut-leaved microseris

ssp. *laciniata* [FNA19, HC2]
Jahresber. Pollichia. 22?24: 309. 1866.
cutleaf microseris, cut leaved scorzonella

Scorzonella laciniata (Hook.) Sch. Bip. var. *laciniata*
Scorzonella laciniata (Hook.) Sch. Bip. var. *pratensis* (Greene) Jeps.
Scorzonella procera (A. Gray) Greene

FNA19: "Subspecies laciniata occurs principally away from the coast, in interior valleys and hills, rarely reaching high elevations. The width of the outer phyllaries is a convenient way to separate it from subsp. leptosepala, with which it intergrades in the Klamath Mountains and at various sites east of the Cascade Range."

ssp. *leptosepala* (Nutt.) K.L. Chambers [FNA19, HC2]
Contr. Dudley Herb. 5: 61. 1957.
cut-leaved silverpuffs, cutleaf silverpuffs

Microseris leptosepala (Nutt.) A. Gray

FNA19: "Subspecies leptosepala is known from the Klamath Mountains of California and Oregon and rare northward."

Microseris nutans (Hook.) Sch. Bip. [FNA19, HC, HC2]
Jahresber. Pollichia. 22?24: 309. 1866.
nodding microseris, nodding scorzonella, nodding silverpuffs

Microseris nutans (Hook.) Sch. Bip. ssp. *nutans*
Scorzonella nutans Hook.
Scorzonella nutans Hook. var. *major* (A. Gray) M. Peck

**Mycelis* [FNA19, HC2]
Dict. Sci. Nat. ed. 2. 33: 483. 1824.
mycelis

**Mycelis muralis* (L.) Dumort. [FNA19, HC2]
Fl. Belg. 60. 1827.
wall lettuce

Lactuca muralis (L.) Gaertn. [HC]

Nabalus [HC2]
nabalus, rattlesnake-root

Nabalus alatus Hook. [HC2]
Fl. Bor. -Amer. 1: 294, plate 102. 1833.
western white lettuce, western rattlesnakeroot

Prenanthes alata (Hook.) D. Dietr. [FNA19, HC]
Prenanthes lessingii Hultén

Nestotus Urbatsch & Neubig [FNA20, HC2]
Sida. 21: 1650. 2005.
mock goldenweed

Nestotus stenophyllus (A. Gray) R.P. Roberts, Urbatsch & Neubig [FNA20, HC2]
Sida. 21: 1652. 2005.
narrowleaf goldenweed

Haplopappus stenophyllus A. Gray [HC]
Stenotus stenophyllus (A. Gray) Greene

Nothocalais [FNA19, HC2]
Bull. Calif. Acad. Sci. 2: 54. 1886.
false dandelion

Nothocalais alpestris (A. Gray) K.L. Chambers [FNA19, HC2]
Contr. Dudley Herb. 5: 66. 1957.
alpine lake agoseris

Agoseris alpestris (A. Gray) Greene
Agoseris barbellulata Greene
Microseris alpestris (A. Gray) Q. Jones ex Cronquist [HC]

Nothocalais troximoides (A. Gray) Greene [FNA19, HC2]
Bull. Calif. Acad. Sci. 2: 55. 1886.
weevil prairie dandelion, false agoseris

Microseris troximoides A. Gray [HC]
Scorzonella troximoides (A. Gray) Jeps.

**Onopordum* [FNA19, HC, HC2]
Sp. Pl. 2: 827. 1753; Gen. Pl. ed. 5, 359. 1754.
cotton-thistle

**Onopordum acanthium* L. [FNA19, HC, HC2]
Sp. Pl. 2: 827. 1753.
cotton thistle, Scotch thistle, Scots thistle

*ssp. *acanthium* [FNA19, HC2]
Scotch thistle, cotton thistle, Scots thistle

Oreostemma [FNA20, HC2]
Pittonia. 4: 224. 1900.
mountain-crown

Oreostemma alpigenum (Torr. & A. Gray) Greene [FNA20, HC2]
Pittonia. 4: 224. 1900.
alpine aster

Aster alpigenus (Torr. & A. Gray) A. Gray [HC]

var. *alpigenum* [FNA20, HC2]
Pittonia. 4: 224. 1900.
alpine aster, tundra mountaincrown

Aster alpigenus (Torr. & A. Gray) A. Gray ssp. *alpigenus*
Aster alpigenus (Torr. & A. Gray) A. Gray var. *alpigenus* [HC]

Packera [FNA20, HC2]
Bot. Not. 128: 520. 1976.
butterweed, groundsel

Packera bolanderi (A. Gray) W.A. Weber & Á. Löve [FNA20, HC2]
Phytologia. 49: 45. 1981.
Bolander's groundsel

Senecio bolanderi A. Gray [HC]

var. *harfordii* (Greenm.) Trock & T.M. Barkley [FNA20, HC2]
Sida. 18: 386. 1998.
Harford's groundsel, Harford's ragwort

Senecio bolanderi A. Gray var. *harfordii* (Greenm.) T.M. Barkley [HC]
Senecio harfordii Greenm.

Packera cana (Hook.) W.A. Weber & Á. Löve [FNA20, HC2]
Phytologia. 49: 46. 1981.
woolly groundsel

Senecio canus Hook. [HC]
Senecio howellii Greene
Senecio purshianus Nutt.

Packera contermina (Greenm.) J.F. Bain [FNA20, HC2]
Novon. 9: 457. 1999.
dwarf arctic butterweed

Packera cymbalaria (Pursh) W.A. Weber & Á. Löve [FNA], misapplied

In Washington, Senecio cymbalaria, now Packera cymbalaria, are misapplied names referential to a species distributed in the Arctic.

FNA20: "Packera contermina grows in rocky areas and produces relatively short rhizomes and abundant thin fibrous roots. In mesic sites, the rhizomes are more robust and the fibrous roots are fewer. This taxon has been treated as part of P. cymbalaria or P. subnuda. Morphologic and cytologic data lend support to its recognition at species rank."

Packera flettii (Wiegand) W.A. Weber & Á. Löve [FNA20, HC2]
Phytologia. 49: 46. 1981.
Flett's groundsel

Senecio flettii Wiegand [HC]

Packera indecora (Greene) Á. Löve & D. Löve [FNA20, HC2]
Bot. Not. 128: 520. 1976.
rayless mountain butterweed, elegant groundsel

Senecio indecorus Greene [HC]

Packera macounii (Greene) W.A. Weber & Á. Löve [FNA20, HC2]
Phytologia. 49: 47. 1981.
Puget butterweed, long-rayed groundsel, Macoun's groundsel, Siskiyou Mountain ragwort

Senecio macounii Greene [HC]

FNA20: "Packera macounii is similar in overall morphology to P. cana. Leaves of P. macounii are narrower and frequently revolute. It is often cited as being collected on serpentine soils; it is not restricted to them. Senecio fastigiatus Nuttall (1840) is a later homonym of S. fastigiatus Schweinitz ex Elliott (1823), a name of uncertain application." Chambers and Sundberg (2000) note this species is weakly separated from S. canus in sw OR

Packera pauciflora (Pursh) Á. Löve & D. Löve [FNA20, HC2]
Bot. Not. 128: 520. 1976.
rayless alpine butterweed, rayless alpine groundsel

Senecio pauciflorus Pursh [HC]

FNA20: "Heads of Packera pauciflora are usually discoid. Its range and habitat overlap those of P. indecora; the two can be difficult to distinguish."

Packera paupercula (Michx.) Á. Löve & D. Löve [FNA20, HC2]
Bot. Not. 128: 520. 1976.
Canadian butterweed, balsam groundsel

Senecio pauperculus Michx. [HC]
Senecio pauperculus Michx. var. *thompsoniensis* (Greenm.) B. Boivin [HC]

FNA20": "Ecologically and morphologically, Packera paupercula is the most variable species of the genus in North America. Some "phases" have been treated as separate species, subspecies, varieties, forms, and races. Variation within P. paupercula hints at some interesting evolutionary relationships; characteristics used to separate taxa overlap. Much of the morphologic variation in this species may be due to hybridization and introgression. I do not recognize any of the infraspecific taxa that have been proposed."

Packera porteri (Greene) C. Jeffrey [FNA20, HC2]
Kew Bull. 47: 101. 1992.
Porter's groundsel

Senecio porteri Greene [HC]

FNA20: "Multiple collections of Packera porteri are known from Colorado; single collections are known from Oregon (1899; collector indicated few plants were seen) and Washington (1996)." Specimen at Kansas State University.

Packera pseudaurea (Rydb.) W.A. Weber & Á. Löve [FNA20, HC2]
Phytologia. 49: 48. 1981.
streambank butterweed

Senecio pseudaureus Rydb. [HC]

var. *pseudaurea* [FNA20, HC2]
Phytologia. 49: 48. 1981.
stream bank butterweed, falsegold groundsel

Senecio pseudaureus Rydb. ssp. *pseudaureus*
Senecio pseudaureus Rydb. var. *pseudaureus* [HC]

Packera streptanthifolia (Greene) W.A. Weber & Á. Löve [FNA20, HC2]
Phytologia. 49: 48. 1981.
Rocky Mountain butterweed, cleftleaf groundsel, Rocky Mountain groundsel

Packera cymbalarioides W.A. Weber & A. Löve, invalidly published
Senecio cymbalarioides Nutt. var. *suksdorfii* (Greenm.) M. Peck
Senecio leonardii Rydb.
Senecio streptanthifolius Greene [HC]
Senecio streptanthifolius Greene var. *laetiflorus* (Greene) J.F. Bain
Senecio streptanthifolius Greene var. *wallowensis* J.F. Bain

FNA20: "Packera streptanthifolia is widespread and variable throughout the Western Cordillera. It includes weakly defined phases that have been treated as distinct species or as varieties. Characteristics used to delimit those taxa often overlap and are difficult to score; some "phases" grade into each other. Northern populations are sometimes segregated as a distinct taxon (e.g., Senecio streptanthifolia var. borealis; J. F. Bain 1988)." Chambers and Sundberg (2000) follow Bain (1988) in recognizing varieties, but here we do not, following Douglas et al. (1998) and the species concept of Weber

Packera subnuda (DC.) Trock & T.M. Barkley [FNA20, HC2]
Sida. 18: 635. 1999.
alpine meadow butterweed, few-leaved groundsel

Packera buekii Trock & T.M. Barkley
Senecio aureus L. var. *subnudus* (DC.) A. Gray
Senecio cymbalarioides Buek [HC]
Senecio subnudus DC.

var. *subnuda* [FNA20, HC2]
Sida. 18: 635. 1999.
cleftleaf groundsel

Packera ovina (Greene) J.F. Bain
Senecio ovinus Greene

FNA20: "Plants of Packera subnuda var. subnuda are scapiform and usually have a single head."

Petasites [FNA20, HC, HC2]
Gard. Dict. Abr. ed. 4. vol. 3. 1754.
butterbur, coltsfoot

Petasites frigidus (L.) Fr. [FNA20, HC, HC2]
Summa Veg. Scand. 182. 1845.
alpine butterbur, sweet coltsfoot

var. *frigidus* [FNA20, HC2]
Summa Veg. Scand. 182. 1845.
alpine butterbur, arctic butterbur, sweet coltsfoot

Petasites frigidus (L.) Fr. var. *nivalis* (Greene) Cronquist [HC]

var. *palmatus* (Aiton) Cronquist [FNA20, HC, HC2]
Rhodora. 48: 124. 1946.
western coltsfoot

Nardosmia palmata (Aiton) Hook.
Petasites arcticus A.E. Porsild
Petasites frigidus (L.) Fr. ssp. *arcticus* (A.E. Porsild) Cody
Petasites palmatus (Aiton) A. Gray
Petasites palmatus (Aiton) A. Gray ssp. *speciosus* (Nutt.) Toman
Petasites speciosus (Nutt.) Piper
Tussilago palmata Aiton

var. *sagittatus* (Pursh) Cherniawsky & R.J. Bayer [FNA20, HC2]
Canad. J. Bot. 76: 2070.
arrowhead sweet coltsfoot, arrowleaf coltsfoot

Petasites sagittatus (Pursh) A. Gray [HC]

The taxonomy of this complex, including Petasites frigidus and P. sagittatus, is disputed. Cherniawsky and Bayer (1998a,b,c) have shown the group has diverged only recently, and proposed a series of varieties with broadly overlapping ranges. We prefer the classification of H&C and JPM, and maintain P. sagittatus as a full species.

var. ×*vitifolius* (Greene) Cherniawsky & R.J. Bayer [FNA20, HC2, KZ99]
Canad. J. Bot. 76: 2072. 1999.
hybrid coltsfoot, Wenatchee coltsfoot

Petasites nivalis Greene ssp. *vitifolius* (Greene) J. Toman
Petasites trigonophyllus Greene
Petasites ×vitifolius Greene [HC]
Petasites warrenii H. St. John

FNA20: "Petasites frigidus var. ×vitifolius often grows in association with one or both putative parents (P. frigidus var. palmatus and P. frigidus var. sagittatus)." Bogle (1961, 1968) produced this hybrid through artificial crosses.

**Petasites japonicus* (Siebold & Zucc.) Maxim. [HC2, ILBC1]
Award 34th Demidovian Prize 212. 1866.
Japanese sweet coltsfoot

Petasites japonicus (Siebold & Zucc.) Maxim. var. *giganteus* (F. Schmidt ex Trautv.) G. Nicholson [HC2]
Petasites japonicus (Siebold & Zucc.) Maxim. var. *japonicus*

**Picris* [FNA19, HC2]
Sp. Pl. 2: 792. 1753; Gen. Pl. ed. 5, 347. 1754.
oxtongue, picris

**Picris hieracioides* L. [FNA19, HC2]
Sp. Pl. 2: 792. 1753.
hawkweed oxtongue

Picris hieracioides L. ssp. *hieracioides*

Pleiacanthus [FNA19, HC2]
Fl. Rocky Mts. 1069. 1917.
skeletonweed

**Pleiacanthus spinosus* (Nutt.) Rydb. [FNA19, HC2]
Fl. Rocky Mts. 1069. 1917.
thorny skeletonweed

Lygodesmia spinosa Nutt. [HC]

Collected once (2009) in Yakima County. Uncertain as to whether a relictual native stand or an introduction. Closest populations are in central Oregon and southern Idaho.

Pseudognaphalium [FNA19, HC2]
Trudy Bot. Inst. Akad. Nauk S.S.S.R., Ser. 1. Fl. Sist. Vyssh. Rast. 9: 33. 1950.
cudweed

Pseudognaphalium californicum (DC.) Anderb. [FNA19, HC2]
Opera Bot. 104: 147. 1991.
California cudweed, California everlasting

Gnaphalium californicum DC. [HC]

FNA19 does not show this species occurring in WA. Specimen at WTU from Grays Harbor County (1998).

**Pseudognaphalium luteoalbum* (L.) Hilliard & B.L. Burtt [FNA19, HC2]
Bot. J. Linn. Soc. 82: 206. 1981.
weedy cudweed, red-tip rabbit-tobacco, jersey rabbit tobacco

Gnaphalium luteo-album L. [HC], orthographic variant
Gnaphalium luteoalbum L.

Pseudognaphalium macounii (Greene) Kartesz [FNA19, HC2]
Synth. N. Amer. Fl. nomencl. innov. 30. 1999.
sticky cudweed, winded cudweed, Macoun's rabbit-tobacco, Macoun's rabbit tobacco

Gnaphalium macounii Greene
Pseudognaphalium viscosum (Kunth) Anderb. [FNA19], misapplied

FNA20: "Pseudognaphalium macounii is recognized by its stipitate-glandular, proximally glabrescent stems, bicolor and decurrent leaves, relatively large and many-flowered heads, and hyaline, shiny phyllaries." Reported in WA by Creso (1984); Chambers and Sundberg (2000) separate from viscosum but BC flora lumps them. WTU voucher needs check of identity.

Pseudognaphalium stramineum (Kunth) Anderb. [FNA19, HC2]
Opera Bot. 104: 148. 1991.
cotton batting cudweed

Gnaphalium chilense Spreng. [HC]
Gnaphalium stramineum Kunth
Pseudognaphalium stramineum (Kunth) W.A. Weber, invalid name

FNA19 lists this species as occurring in WA. FNA19: "Pseudognaphalium stramineum is probably native from South America to western North America; it is adventive in sandy fields on the Atlantic coastal plain, where it flowers May?Aug."

Pseudognaphalium thermale (E.E. Nelson) G.L. Nesom [FNA19, HC2]
Sida. 21: 781. 2004.
slender cudweed, northwestern rabbit-tobacco

Gnaphalium canescens DC. ssp. *thermale* (E.E. Nelson) Stebbins & D.J. Keil
Gnaphalium microcephalum Nutt. ssp. *thermale* (E.E. Nelson) G.W. Douglas
Gnaphalium microcephalum Nutt. var. *thermale* (E.E. Nelson) Cronquist [HC]
Pseudognaphalium canescens (DC.) Anderb. ssp. *thermale* (E.E. Nelson) Kartesz
Pseudognaphalium microcephalum (Nutt.) Anderb. [FNA19], misapplied

Psilocarphus [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 340. 1840.
woolly-heads, woolly-marbles

Psilocarphus brevissimus Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 340. 1840.
dwarf woolly-marbles

var. *brevissimus* [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 340. 1840.
dwarf woollyheads

Psilocarphus globiferus Nutt.

FNA19: "Variety brevissimus occupies nearly the full range of the genus (uncommon west of the

Cascade Range); some occurrences toward the northeast appear to be recent introductions."

Psilocarphus elatior (A. Gray) A. Gray [FNA19, HC, HC2]
Syn. Fl. N. Amer. ed. 2. 1: 448. 1886.
tall woollyheads

Psilocarphus oregonus Nutt. var. *elatior* A. Gray

perhaps best treated as a geographic subspecies of P. brevissimus (Chambers and Sundberg 2000). FNA19: "Psilocarphus elatior occurs west of the Cascade Range from California to Vancouver Island, British Columbia, and in scattered areas eastward (northwestern Montana, mountains surrounding the border area common to Oregon, Washington, and Idaho). Reports of P. elatior from Alberta and Saskatchewan were based on relatively erect forms of P. brevissimus var. brevissimus. Psilocarphus elatior has been of conservation concern in Canada (J. M. Illingworth and G. W. Douglas 1994). Where sympatric, Psilocarphus elatior tends to inhabit relatively dry or seasonally flooded sites in more mesic coastal or montane climates and P. brevissimus var. brevissimus occurs mainly in wetter, seasonally inundated sites in semiarid climates. Some specimens appear to be intermediate; further study may show the two taxa to be better treated as varietally distinct. See also under P. brevissimus var. multiflorus."

Psilocarphus oregonus Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 341. 1840.
Oregon woollyheads

FNA19: "Psilocarphus oregonus occurs from west-central California through most of Oregon to southeastern Washington, western Idaho, and northern Nevada. Relatively narrow-leaved, montane forms of P. tenellus account for reports of P. oregonus from the southern Sierra Nevada to Baja California; further study may show these to be intermediates between the two taxa."

Psilocarphus tenellus Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 341. 1840.
slender woollyheads

Psilocarphus tenellus Nutt. var. *tenellus* [HC]

Pyrrocoma [FNA20, HC2]
Fl. Bor.-Amer. 1: 306, plate 107. 1833.
goldenweed

Pyrrocoma carthamoides Hook. [FNA20, HC2]
Fl. Bor.-Amer. 1: 307, plate 107. 1803.
large-flowered goldenweed

Haplopappus carthamoides (Hook.) A. Gray [HC]

var. *carthamoides* [FNA20, HC2]
Fl. Bor.-Amer. 1: 307, plate 107. 1803.
Columbia goldenweed, rayless goldenweed

Haplopappus carthamoides (Hook.) Gray ssp. *carthamoides*
Haplopappus carthamoides (Hook.) A. Gray ssp. *rigidus* (Rydb.) H.M. Hall
Haplopappus carthamoides (Hook.) Gray var. *carthamoides* [HC]

FNA20: "Variety carthamoides is recognized by its relatively robust stems, large leaves and involucres, and overlapping, oblong to obovate phyllaries."

var. *cusickii* (A. Gray) Kartesz & Gandhi [FNA20, HC2]
Phytologia. 71: 60. 1991.
narrowhead goldenweed

Haplopappus carthamoides (Hook.) A. Gray ssp. *cusickii* (A. Gray) H.M. Hall
Haplopappus carthamoides (Hook.) A. Gray var. *cusickii* A. Gray [HC]

FNA20: "Variety cusickii is recognized by its generally smaller size, and campanulate to turbinate involucres with loose, lanceolate phyllaries."

Pyrrocoma hirta (A. Gray) Greene [FNA20, HC2]
Erythea. 2: 69. 1894.

hairy goldenweed, sticky goldenweed

Haplopappus hirtus A. Gray [HC]
Haplopappus hirtus A. Gray var. *hirtus* [HC]

var. *sonchifolia* (Greene) Kartesz & Gandhi [FNA20, HC2]
Phytologia. 71: 60. 1991.
large sticky goldenweed

Haplopappus hirtus A. Gray ssp. *sonchifolius* (Greene) H.M. Hall
Haplopappus hirtus A. Gray var. *sonchifolius* (Greene) M. Peck [HC]

FNA20: "Variety sonchifolia is recognized by its wider leaves and its preference for moist habitats. More study is needed to determine the status of this taxon."

Pyrrocoma liatriformis Greene [FNA20, HC2]
Leafl. Bot. Observ. Crit. 2: 17. 1909.
Palouse goldenweed

Haplopappus integrifolius Porter ex A. Gray ssp. *liatriformis* (Greene) H.M. Hall
Haplopappus integrifolius Porter ex A. Gray ssp. *scaberulus* (Greene) H.M. Hall
Haplopappus liatriformis (Greene) H. St. John [HC]
Haplopappus racemosus (Nutt.) Torr. ssp. *liatriformis* (Greene) D.D. Keck

FNA20: "Pyrrocoma liatriformis is one of the dominants of virgin Palouse prairies and appears to be threatened. It is recognized by its hirsute stems, leaves, and phyllaries, and the small, pedunculate heads."

Pyrrocoma scaberula Greene [HC2]
Leaflets of Botanical Observation and Criticism 2(1): 19. 1909.
palouse goldenweed

Rainiera [FNA20, HC2]
Pittonia. 3: 291. 1898.
rainiera

Rainiera stricta (Greene) Greene [FNA20, HC2]
Pittonia. 3: 291. 1898.
false silverback

Luina stricta (Greene) B.L. Rob. [HC]

**Ratibida* [FNA21, HC, HC2]
Fl. Ludov. 73. 1817.
prairie coneflower, Mexican-hat

**Rhaponticum* [HC2], conserved name
hardheads, maral root

**Rhaponticum repens* (L.) Hidalgo [HC2]
Ann. Bot. (Oxford) n.s., 97(5): 714. 2006.
hardheads, creeping knapweed, Russian knapweed

Acroptilon repens (L.) DC. [FNA19]
Centaurea repens L. [HC]

FNA19: "In most American floristic literature Acroptilon has been included within Centaurea, from which it differs by the subbasal rather than lateral attachment scars on the cypselae and the absence of sterile outer florets. The chromosome base number. = 13 is higher than that in most species of Centaurea in the strict sense. Molecular phylogenetic studies of the relationships of Cynareae genera (A. Susanna et al. 1995) support the segregation of Acroptilon from Centaurea."

Rigiopappus [FNA20, HC, HC2]
Proc. Amer. Acad. Arts. 6: 548. 1865.

Rigiopappus leptocladus A. Gray [FNA20, HC, HC2]
Proc. Amer. Acad. Arts. 6: 548. 1865.

bristlehead, false wireweed

Rudbeckia [FNA21, HC, HC2]
Sp. Pl. 2: 906. 1753; Gen. Pl. ed. 5, 387. 1754.
coneflower, rudbeckia

Rudbeckia alpicola Piper [FNA21, HC2]
Erythea. 7: 173. 1899.
showy black-eyed Susan, Washington showy black-eyed Susan, Wenatchee Mountain showy black-eyed Susan

Rudbeckia occidentalis Nutt. var. *alpicola* (Piper) Cronquist [HC]

**Rudbeckia hirta* L. [FNA21, HC, HC2]
Sp. Pl. 2: 907. 1753.
black-eyed Susan

*var. *pulcherrima* Farw. [FNA21, HC, HC2]
Rep. (Annual) Michigan Acad. Sci. 6: 209. 1904.
black-eyed Susan

**Rudbeckia laciniata* L. [FNA21, HC, HC2]
Sp. Pl. 2: 906. 1753.
green-headed black-eyed Susan, tall black-eyed Susan

*var. *ampla* (A. Nelson) Cronquist [FNA21, HC, HC2]
Vasc. Pl. Pacif. N.W. 5: 280. 1955.
tall black-eyed Susan

Rudbeckia ampla A. Nelson

FNA21: "Cultivars of Rudbeckia laciniata are grown as ornamentals. The cultivar "?golden-glow\\' is widely planted and occasionally escapes cultivation."

Rudbeckia occidentalis Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 355. 1840.
western black-eyed Susan, western chocolate black-eyed Susan
(see also *Rudbeckia alpicola*)

Rudbeckia occidentalis Nutt. var. *occidentalis* [HC]

Saussurea [FNA19, HC, HC2]
Ann. Mus. Natl. Hist. Nat. 16: 156, 196, plates 10?13. 1810.
saw-wort

Saussurea americana D.C. Eaton [FNA19, HC, HC2]
Bot. Gaz. 6: 283. 1881.
American sawwort

Senecio [FNA20, HC, HC2]
Sp. Pl. 2: 866. 1753; Gen. Pl. ed. 5, 373. 1754.
butterweed, groundsel, ragwort
(see also *Jacobaea*, *Packera*)

Senecio elmeri Piper [FNA20, HC, HC2]
Erythea. 7: 173. 1899.
Elmer's ragwort

Senecio fremontii Torr. & A. Gray [FNA20, HC, HC2]
Fl. N. Amer. 2: 445. 1843.
dwarf mountain butterweed

Senecio ductoris Piper

var. *fremontii* [FNA20, HC, HC2]
Fl. N. Amer. 2: 445. 1843.
dwarf mountain groundsel

Senecio hydrophiloides Rydb. [FNA20, HC2]
Mem. New York Bot. Gard. 1: 441. 1900.
sweet marsh butterweed, stout meadow groundsel

Senecio foetidus Howell [HC]
Senecio foetidus Howell var. *foetidus* [HC]
Senecio foetidus Howell var. *hydrophiloides* (Rydb.) T.M. Barkley ex Cronquist [HC]
Senecio oreganus Howell

FNA20: "Plants of Senecio hydrophiloides from toward the western end of the range tend to have the heads more or less congested and eradiate and stems loosely clustered; plants from toward the eastern edge tend to have heads loosely arrayed and radiate and stems single. The two forms have been recognized as weakly defined species (or varieties), the former as Senecio foetidus and the latter as S. hydrophiloides. They intergrade so completely that they are best treated as a single, variable taxon. The use of the epithet foetidus for the broadly conceived single species was based on a bibliographic misunderstanding; the correct epithet is hydrophiloides (T. M. Barkley 1978; A. Cronquist 1994). In 1900, Thomas Howell gave the name Senecio oreganus to a collection from Lake Labish, near Salem, Oregon. The area has seen much disturbance and development since Howell\'s time, and the plant appears to be extinct in the region. The collection is difficult to exclude from S. hydrophiloides, and the collection is here regarded as an odd outlier of S. hydrophiloides, which is known chiefly from east of the Cascade uplift. Howell\'s collection and therefore the name S. oreganus also have been treated within S. sphaerocephalus (T. M. Barkley 1978; A. Cronquist 1955); that attribution appears to be in error. The "type" materials are now in the herbarium of Oregon State University in Corvallis."

Senecio hydrophilus Nutt. [FNA20, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 411. 1841.
alkali marsh butterweed, water groundsel, alkali marsh ragwort

Senecio hydrophilus Nutt. var. *pacifica* Greene

Senecio integerrimus Nutt. [FNA20, HC, HC2]
Gen. N. Amer. Pl. 2: 165. 1818.
one-stemmed butterweed, western groundsel

var. *exaltatus* (Nutt.) Cronquist [FNA20, HC, HC2]
Leafl. W. Bot. 6: 48. 1950.
one-stemmed butterweed, lambs-tongue groundsel, tall western groundsel

Senecio integerrimus Nutt. var. *vaseyi* (Greenm.) Cronquist [HC]
Senecio vaseyi Greenm.

FNA20: "Variety exaltatus is the most widespread and variable variety of the species. Eradiate plants of var. exaltatus have been recognized as var. vaseyi; there appears to be no populational integrity to the eradiate condition." Chambers and Sundberg (2000) note this is very similar to S. hydrophiloides and differs only in the pubescence.

var. *ochroleucus* (A. Gray) Cronquist [FNA20, HC, HC2]
Leafl. W. Bot. 6: 48. 1950.
white western groundsel

Senecio exaltatus Nutt. ssp. *ochraceus* Piper

Chambers and Sundberg (2000) note the flower color cannot be determined on older herbarium sheets, but the cordate or sub-cordate leaves are unique

Senecio lugens Richardson [FNA20, HC, HC2]
Narr. Journey Polar Sea. 748. 1823.
black-tipped groundsel

Senecio integerrimus Nutt. var. *lugens* (Richardson) B. Boivin

Senecio neowebsteri S.F. Blake [FNA20, HC, HC2]
Leafl. W. Bot. 8: 143. 1957.
Olympic Mountain ragwort

Senecio serra Hook. [FNA20, HC, HC2]
Fl. Bor.-Amer. 1: 333. 1834.

tall butterweed, butterweed groundsel

var. *serra* [FNA20, HC2]
Fl. Bor.-Amer. 1: 333. 1834.
tall butterweed, butterweed groundsel

Senecio andinus Nutt.
Senecio lanceolatus Torr. & A. Gray
Senecio millikenii Eastw.
Senecio serra Hook. var. *altior* Jeps.
Senecio solidago Rydb.

**Senecio sylvaticus* L. [FNA20, HC, HC2]
Sp. Pl. 2: 868. 1753.
wood groundsel, woodland groundsel, woodland ragwort

FNA20: "Senecio sylvaticus is a Eurasian weed that favors cool, wet climates. It is well established in coastal areas of the Pacific Coast and in parts of Newfoundland and Quebec; elsewhere in the flora, it appears to be sporadic."

Senecio triangularis Hook. [FNA20, HC, HC2]
Fl. Bor.-Amer. 1: 332, plate 115. 1834.
arrowleaf groundsel, arrowleaf ragwort

Senecio triangularis Hook. var. *angustifolius* G.N. Jones [HC]

FNA20: "Plants of Senecio triangularis with narrow, subentire leaves that taper to the petioles are occasionally encountered in acid bogs in Oregon and Washington and less frequently elsewhere. They are regarded as edaphic variants; they have been recognized as var. angustifolius." Var. angustifolius of southern OR & CA is distinct (Chambers and Sundberg, 2000).

var. *triangularis* [HC, HC2]
arrowleaf groundsel, arrowleaf ragwort

**Senecio viscosus* L. [FNA20, HC2]
Sp. Pl. 2: 868. 1753.
sticky ragwort

FNA 20: "Senecio viscosus is a smelly, Eurasian weed now widely scattered in areas of cool damp climates, often as a casual waif. The viscid hairs trap wind-blown particles of sand, dust, and soot, which give the surfaces varying textures and colors."

**Senecio vulgaris* L. [FNA20, HC, HC2]
Sp. Pl. 2: 867. 1753.
common groundsel, old man in the spring

Sericocarpus [FNA20, HC2]
Gen. Sp. Aster. 10, 148. 1832.
white-topped aster

Sericocarpus oregonensis Nutt. [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 302. 1840.
Oregon white-topped aster

Aster oregonensis (Nutt.) Cronquist [HC]

ssp. *oregonensis* [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 302. 1840.
Oregon white-topped aster

Aster oregonensis (Nutt.) Cronquist ssp. *oregonensis*
Sericocarpus oregonensis Nutt. var. *oregonensis*

Sericocarpus rigidus Lindl. [FNA20, HC2]
Fl. Bor. Amer. 2: 14. 1834.
Columbian white-topped aster, Columbian whitetop aster, rigid white-topped aster

Aster curtus Cronquist [HC]

*_Silybum_ [FNA19, HC, HC2]
Fam. Pl. 2: 116, 605. 1763.
milk-thistle

*_Silybum marianum_ (L.) Gaertn. [FNA19, HC, HC2]
Fruct. Sem. Pl. 2: 378. 1791.
milk-thistle

Solidago [FNA20, HC, HC2]
Sp. Pl. 2: 878. 1753; Gen. Pl. ed. 5, 374. 1754.
goldenrod
(see also *Euthamia*)

*_Solidago altissima_ L. [FNA20, HC2]
Sp. Pl. 2: 878. 1753.
Great Plains goldenrod, late goldenrod

*ssp. _altissima_ [FNA20]
late goldenrod

Known from several locations in Grant County.

Solidago elongata Nutt. [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 327. 1841.
Cascade Canada goldenrod, West Coast goldenrod

Solidago canadensis L. ssp. _elongata_ (Nutt.) D.D. Keck
Solidago lepida DC. var. _caurina_ (Piper) M. Peck
Solidago lepida DC. var. _elongata_ (Nutt.) Fernald

FNA20: "This species can be similar to S. lepida, which usually has much larger distal cauline leaves."

Solidago lepida DC. [FNA20, HC2]
Prodr. 5: 339. 1836.
western Canada goldenrod

Solidago canadensis L. var. _lepida_ (DC.) Cronquist
Solidago canadensis L. var. _subserrata_ (DC.) Cronquist [HC]

FNA20: "Solidago lepida is the only member of subsect. Triplinerviae that is nearly always minutely, sometimes sparsely, stipitate-glandular in the arrays. These glands can be very small and visible only with 30?70× magnification. The enlarged head of the stalked gland may be little bigger than a pollen grain. The species occurs in the west from the Aleutian Islands and central Alaska south just into northern California, and in the Rocky Mountains to Arizona and New Mexico. Its range extends across Canada to Newfoundland, the Gaspé (Quebec), and northern New Brunswick. It also appears to be introduced at scattered locations across the Canadian prairies."

var. *lepida* [FNA20, HC2]
In A. P. de Candolle and A. L. P. P. de Candolle, Prodr. 5: 339. 1836.
western Canada goldenrod

FNA20: "Variety lepida can be difficult to distinguish from Solidago elongata in the Cascades and coastal areas of southern British Columbia and Washington. Involucre height increases with ploidy level."

var. *salebrosa* (Piper) Semple [FNA20, HC2]
Sida. 20: 1611. 2003.
Canada goldenrod, meadow goldenrod, Rocky Mountains Canada goldenrod

Solidago canadensis L. ssp. _salebrosa_ (Piper) D.D. Keck
Solidago canadensis L. var. _salebrosa_ (Piper) M.E. Jones [HC]
Solidago gigantea Aiton [FNA20, HC, HC2], misapplied

FNA20: "FNA20: "Variety salebrosa strongly resembles Solidago canadensis, and is found throughout most of the Rocky Mountains in the United States and adjacent Canada. It has been included in S. canadensis by many authors (e.g., A. Cronquist 1994). In extreme forms the array is broader than tall with long, arching proximal branches. Hairier plants can be similar in appearance to S. altissima; the

latter is usually not glandular and is much hairier. Glabrate plants of var. salebrosa can be difficult to distinguish from hexaploid S. gigantea near and in the mountains from Alberta south to New Mexico. Glabrate plants in the mountains often treated as S. gigantea are glandular and belong in S. lepida var. salebrosa. Small-headed diploids found in the Rocky Mountains from southern British Columbia to Colorado are usually sparsely glandular and could be confused with short-array forms of S. elongata." Check WTU colls for specimens of S. altissima, reported N to BC by Semple (1993)

Solidago missouriensis Nutt. [FNA20, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 7: 32. 1834.
Missouri goldenrod

Solidago missouriensis Nutt. var. *extraria* A. Gray [HC]
Solidago missouriensis Nutt. var. *fasciculata* Holz. [HC]
Solidago missouriensis Nutt. var. *missouriensis* [HC]
Solidago missouriensis Nutt. var. *tolmieana* (A. Gray) Cronquist [HC]

FNA20: "Solidago missouriensis was often introduced along railroad lines farther east. It is a highly variable species. In the east, it can be similar to S. juncea and is not always easily distinguished where ranges overlap. In the west, it can similar to smaller plants of S. spectabilis. It is distinguished from the related species by its usually 3-nerved proximal leaves and the usually thin, elongate rhizomes. Across the prairies the species is known to be diploid only (2n = 18). In the Rocky Mountains, tetraploids (2n = 36) are common, the diploids infrequent. A number of varieties have been described. Shorter, often larger-headed plants (tetraploids when known) from the Rocky Mountains have been treated as var. missouriensis (including var. extraria). Taller, more leafy-stemmed plants, mostly from the eastern half of the range, but occasionally west to Washington, have been treated as var. fasciculata. Plants from Arizona, Colorado, and New Mexico with long, linear leaves have been treated as var. tenuissima. Larger-headed plants with narrow bracts from prairies west of the Cascades in Oregon and Washington have been treated as var. tolmieana. A. Cronquist (1994) opted not to recognize varieties, noting that all appeared to grade continuously into each other. A detailed study of the species is needed."

Solidago multiradiata Aiton [FNA20, HC, HC2]
Hort. Kew. 3: 218. 1789.
northern goldenrod, Rocky Mountain goldenrod

Solidago multiradiata Aiton ssp. *scopulorum* (A. Gray) W.A. Weber
Solidago multiradiata Aiton var. *scopulorum* A. Gray [HC]

FNA20: "Solidago multiradiata is the North American species most closely related to S. virgaurea, the type species of the genus, native to mostly arctic and alpine regions of Eurasia. Plants of S. multiradiata from the Rocky Mountains have been treated as var. scopulorum; they differ so little from those of other parts of the range that recognition of the variety without further support does not appear justified."

Solidago simplex Kunth [FNA20, HC2]
Nov. Gen. Sp. 4(fol.): 81. 1818; 4(qto.): 103. 1820.
sticky goldenrod

var. *nana* (A. Gray) G.S. Ringius [FNA20, HC2]
Phytologia. 70: 397. 1991.
dwarf goldenrod

Solidago spathulata DC. var. *nana* (A. Gray) Cronquist [HC]

var. *simplex* [FNA20, HC2]
In A. von Humboldt et al., Nov. Gen. Sp. 4(fol.): 81. 1818; 4(qto.): 103. 1820.
sticky goldenrod

Solidago decumbens Greene
Solidago spathulata DC. ssp. *glutinosa* (Nutt.) D.D. Keck
Solidago spathulata DC. var. *neomexicana* (A. Gray) Cronquist [HC]

FNA20: "Variety simplex is found in western North America and is disjunct along the shores of the upper Great Lakes and in southern Quebec."

Solidago spathulata DC. [FNA20, HC, HC2]
Prodr. 5: 339. 1836.
coast goldenrod, dune goldenrod

Solidago spathulata DC. var. *spathulata* [HC]

**Soliva* [FNA19, HC2]
Fl. Peruv. Prodr. 113, plate 24. 1794.
burrweed

**Soliva sessilis* Ruiz & Pav. [FNA19, HC2]
Syst. Veg. Fl. Peruv. Chil. 113, plate 24. 1798.
lawn burrweed, common soliva, prickly soliva

Soliva pterosperma (Juss.) Less.

**Sonchus* [FNA19, HC, HC2]
Sp. Pl. 2: 793. 1753; Gen. Pl. ed. 5, 347. 1754.
sow-thistle

**Sonchus arvensis* L. [FNA19, HC, HC2]
Sp. Pl. 2: 793. 1753.
field sow-thistle, perennial sow-thistle

**ssp. arvensis* [FNA19, HC2]
corn sow-thistle, field sow-thistle, perennial sow-thistle

Sonchus arvensis L. var. *arvensis*

**ssp. uliginosus* (M. Bieb.) Nyman [FNA19, HC2]
Consp. Fl. Eur. 433. 1879.
field sow-thistle, marsh sow-thistle, wet ground sow-thistle

Sonchus arvensis L. var. *glabrescens* Günther
Sonchus uliginosus M. Bieb. [HC]

**Sonchus asper* (L.) Hill [FNA19, HC, HC2]
Herb. Brit. 1: 47. 1769.
prickly sow-thistle, spiny leaf sow-thistle

Sonchus oleraceus L. var. *asper* L.

**ssp. asper* [HC2]

**Sonchus oleraceus* L. [FNA19, HC, HC2]
Sp. Pl. 2: 794. 1753.
common sow-thistle

Stenotus [FNA20, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 334. 1840.
mock goldenweed

Stenotus lanuginosus (A. Gray) Greene [FNA20, HC2]
Erythea. 2: 72. 1894.
woolly goldenweed

Haplopappus lanuginosus A. Gray [HC]

var. *lanuginosus* [FNA20, HC2]
Erythea. 2: 72. 1894.
woolly goldenweed, woolly stenotus

Haplopappus lanuginosus Gray var. *lanuginosus* [HC]

Stephanomeria [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 427. 1841.
wirelettuce

Stephanomeria exigua Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 428. 1841.
small wirelettuce

ssp. *exigua* [FNA19]
Trans. Amer. Philos. Soc., n. s. 7: 428. 1841.
skeletonplant, small wirelettuce

Stephanomeria paniculata Nutt. [FNA19, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 428. 1841.
stiff-branched stephanomeria, stiff-branched wirelettuce

Stephanomeria tenuifolia (Raf.) H.M. Hall [FNA19, HC, HC2]
Univ. Calif. Publ. Bot. 3: 256. 1907.
wire lettuce, narrowleaf stephanomeria

Stephanomeria minor (Hook.) Nutt. var. *minor*
Stephanomeria tenuifolia (Raf.) H.M. Hall var. *myrioclada* (D.C. Eaton) Cronquist [HC]
Stephanomeria tenuifolia (Raf.) H.M. Hall var. *tenuifolia* [HC]

FNA19: "Stephanomeria tenuifolia is distributed over an immense region and is the most widespread species of the genus. It shows remarkable variability in the form and dimensions of its stems and branches. Plants described as S. myrioclada, from the northeasternmost corner of Nevada, present an architecture of relatively numerous, almost threadlike, densely crowded stems (1.5?4 dm) and branches with an irregularly dichotomous pattern. Continuous variation occurs from this form to another in the same region and elsewhere in which the stems are longer (3?7 dm), sparingly branched, and flexuous. The extreme variability in vegetative architecture may be adaptive and deserves further study."

Symphyotrichum [FNA20, HC2]
Gen. Sp. Aster. 9, 135. 1832.
aster

**Symphyotrichum ×amethystinum* (Nutt.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 294. 1995.
amethyst aster, hybrid aster

Aster amethystinus Nutt.

FNA20: "Symphyotrichum ×amethystinum is the F 1 hybrid between S. ericoides and S. novae-angliae, encountered sometimes throughout the area where the two parental species co-occur. It is morphologically intermediate; it has non-spiny, sparsely stipitate-glandular phyllaries and rose-violet rays in mid-sized heads. Forma leucerythros Bemis and forma leucos Bemis have been described within this hybrid and may represent recombinants or normal population color variants."

Symphyotrichum ascendens (Lindl.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 276. 1995.
intermountain aster, long-leaved aster, western American aster, western aster

Aster adscendens Lindl.
Aster ascendens Lindl.
Aster chilensis Nees ssp. *adscendens* (Lindl.) Cronquist [HC]

Aster adscendens orth. error in Abrams FNA20: "Symphyotrichum ascendens is widely distributed in the Great Basin. It is an allopolyploid derived from the hybrid between S. spathulatum (x = 8) and S. falcatum (x = 5). Chromosome numbers differ markedly in their geographic distribution, 2n = 26 prevailing in the southwestern part of the range, and 2n = 52 in the northeastern part (G. A. Allen 1985) Backcrosses to both parental species or hybrids with related taxa are sometimes seen where the ranges overlap."

Symphyotrichum boreale (Torr. & A. Gray) Á. Löve & D. Löve [FNA20, HC2]
Taxon. 31: 358. 1982.
northern bog aster, rush aster, slender white aster

Aster borealis (Torr. & A. Gray) Provancher
Aster junciformis Rydb. [HC]
Aster laxiflorus Lindl. var. *borealis* Torr. & A. Gray

Symphyotrichum bracteolatum (Nutt.) G.L. Nesom [HC2, JPM2]
Phytologia 77(3): 276. 1994 [1995] 1994.
bracted aster, Eaton's aster, Oregon aster

Aster eatonii (A. Gray) Howell [HC]
Symphyotrichum eatonii (A. Gray) G.L. Nesom [FNA20]

Jepson 2nd: "The name S. bracteolatum has nomenclatural priority over S. eatonii (Brummitt 2011 Taxon 60:230)."

Symphyotrichum campestre (Nutt.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 276. 1995.
western meadow aster

Aster campestris Nutt. [HC]
Aster campestris Nutt. var. *bloomeri* (A. Gray) A. Gray [HC]
Aster campestris Nutt. var. *campestris* [HC]
Symphyotrichum campestre (Nutt.) G.L. Nesom var. *bloomeri* (A. Gray) G.L. Nesom
Symphyotrichum campestre (Nutt.) G.L. Nesom var. *campestre*

FNA20: "Two poorly defined varieties of Symphyotrichum campestre have been described. Variety campestre has glabrous or sparsely strigose leaves and occurs in southern British Columbia, Colorado, Idaho, Montana, Nevada, Oregon, Washington, and Wyoming. Bloomer?s Aster, var. bloomeri, has moderately strigose leaves and occurs in California, Nevada, and Oregon. The varieties are not sufficiently distinct to warrant recognition. Symphyotrichum ×columbianum (Piper) G. L. Nesom (syn. Aster columbianus Piper, A. multiflorus Aiton var. columbianus (Piper) S. F. Blake, Virgulus ×columbianus (Piper) Reveal & Keener) is the hybrid between S. campestre and S. ericoides subsp. pansum."

Symphyotrichum chilense (Nees) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 277. 1995.
common California aster, Pacific aster
(see also *Symphyotrichum ascendens*, *Symphyotrichum hallii*)

Aster chilensis Nees [HC]
Aster chilensis Nees ssp. *chilensis* [HC]
Aster chilensis Nees var. *chilensis*
Symphyotrichum chilense (Nees) G.L. Nesom var. *chilense*

FNA20: "Symphyotrichum chilense is restricted to coastal habitats from southwestern British Columbia to central California. It is almost entirely coastal in Oregon, Washington, and southern British Columbia, where it is mainly hexaploid (2n = 48). In Oregon, where it is sympatric with S. subspicatum, the latter is mainly duodecaploid (2n = 96). The distinction does not hold in British Columbia, however, where S. subspicatum is both 2n = 48 and 96, and where S. chilense is less common (G. A. Allen 1984). The species was erroneously thought by Nees to occur in Chile. The plants named Aster chilensis var. medius Jepson are hybrids of S. chilense and S. lentum."

Symphyotrichum ciliatum (Ledeb.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 277. 1995.
alkali American aster, rayless alkali aster, rayless annual aster

Aster brachyactis S.F. Blake [HC]

Symphyotrichum ×columbianum (Piper) G.L. Nesom [FNA20, HC2]
hybrid aster

Aster columbianus Piper

Symphyotrichum ericoides (L.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 280. 1995.
heath-leaved aster, tufted white prairie aster

var. *pansum* (S.F. Blake) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 280. 1995.
little gray aster, tufted white prairie aster, white heath aster

Aster ericoides L. ssp. *pansus* (S.F. Blake) A.G. Jones
Aster ericoides L. var. *pansus* (S.F. Blake) B. Boivin
Aster pansus (S.F. Blake) Cronquist [HC]

FNA21: "Variety pansum is reported to be rare in extreme western Kansas and Ontario (where it is introduced), extreme northeastern Arizona, and northwestern New Mexico. It has been introduced

along railroads farther east. A. G. Jones (1978) treated this taxon as a subspecies with two varieties. Plants forming clumps with many, erect to arching, stout, usually densely hispido-strigose stems were called var. pansum; these occur mostly in British Columbia, Idaho, Oregon, and Washington. Plants in clusters with few, decumbent or ascending, slender, usually sparsely strigose stems were recognized by Jones as var. stricticaule; these are encountered mostly on the prairies and in the foothills of the Rocky Mountains from Alberta to Manitoba, Utah, and Wyoming."

Symphyotrichum foliaceum (Lindl. ex DC.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 282. 1995.
alpine leafybract aster, Canby's leafybract aster, Cusick's American aster, Cusick's aster, Henderson's aster, Kootenai aster, leafy aster, leafy-bracted aster, Parry's aster

Aster cusickii A. Gray
Aster foliaceus Lindl. ex DC. [HC]
Aster foliaceus Lindl. ex DC. var. *apricus* A. Gray [HC]
Aster foliaceus Lindl. ex DC. var. *canbyi* A. Gray [HC]
Aster foliaceus Lindl. var. *cusickii* (A. Gray) Cronquist [HC]
Aster foliaceus Lindl. ex DC. var. *foliaceus* [HC]
Aster foliaceus Lindl. ex DC. var. *frondeus* A. Gray
Aster foliaceus Lindl. ex DC. var. *lyallii* (A. Gray) Cronquist [HC]
Aster foliaceus Lindl. ex DC. var. *parryi* (D.C. Eaton) A. Gray [HC]
Aster hendersonii Fernald
Symphyotrichum cusickii (A. Gray) G.L. Nesom [FNA20]
Symphyotrichum foliaceum (Lindl. ex DC.) G.L. Nesom var. *apricum* (A. Gray) G.L. Nesom [FNA20]
Symphyotrichum foliaceum (Lindl. ex DC.) G.L. Nesom var. *canbyi* (A. Gray) G.L. Nesom [FNA20]
Symphyotrichum foliaceum (Lindl. ex DC.) G.L. Nesom var. *foliaceum* [FNA20]
Symphyotrichum foliaceum (Lindl. ex DC.) G.L. Nesom var. *parryi* (D.C. Eaton) G.L. Nesom [FNA20]
Symphyotrichum hendersonii (Fernald) G.L. Nesom [FNA20]

Symphyotrichum frondosum (Nutt.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 282. 1995.
alkali aster, short rayed aster, short-rayed alkali aster

Aster frondosus (Nutt.) Torr. & A. Gray [HC]
Brachyactis frondosa (Nutt.) A. Gray

Symphyotrichum hallii (A. Gray) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 283. 1995.
Hall's aster

Aster chilensis Nees ssp. *hallii* (A. Gray) Cronquist [HC]
Aster hallii A. Gray

FNA20: "Symphyotrichum hallii is restricted to open habitats of the Puget Trough of western Washington and the Willamette Valley of western Oregon, with outlying stations in the Columbia Gorge and central Washington. Some of the polyploid races appear to be alloploids involving the sympatric S. subspicatum, with larger leaves and fewer, larger heads with violet rays."

Symphyotrichum jessicae (Piper) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 283. 1995.
Jessica's aster, Palouse aster

Aster jessicae Piper [HC]

FNA20: "Symphyotrichum jessicae is known only from the Palouse and Clearwater river drainages of eastern Washington and adjacent northwestern Idaho."

Symphyotrichum laeve (L.) Á. Löve & D. Löve [FNA20, HC2]
Taxon. 31: 359. 1982.
Geyer's aster, smooth aster

Aster laevis L. [HC]

var. *geyeri* (A. Gray) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 284. 1995.
Geyer's smooth aster

Aster geyeri (A. Gray) Howell
Aster laevis L. var. *geyeri* A. Gray [HC]

Symphyotrichum lanceolatum (Willd.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 284. 1995.
marsh aster, western willow aster

var. *hesperium* (A. Gray) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 284. 1995.
lance-leaved aster, panicled aster, white panicled aster

Aster hesperius A. Gray [HC]

FNA20: "This variety has been treated mostly as a distinct species in floras. Character ranges overlap considerably with var. lanceolatum, and it is often difficult to distinguish the two entities where their distributions overlap. In areas of sympatry, the two taxa hybridize to form septaploid plants (2n = 56)."

**Symphyotrichum novae-angliae* (L.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 287. 1995.
New England aster

Aster novae-angliae L. [HC]

FNA20: "Symphyotrichum novae-angliae is escaped from cultivation and introduced in Montana, Oregon, Utah, Washington, and Wyoming, and has been reported as an ephemeral escape in British Columbia. It possibly escaped from cultivation elsewhere. The Michaelmas daisy is widely sold in the horticultural trade, where cultivars have been developed. Forms have been described that correspond to color genetic variants within natural populations {Aster novae-angliae forma roseus (Desfontaines) Britton; A. novae-angliae forma geneseensis House}; they are not recognized here. Symphyotrichum novae-angliae resembles Canadanthus modestus, but the ranges of the two do not overlap, and the latter has sparsely hairy cypselae with dark ribs. Symphyotrichum novae-angliae hybridizes with S. ericoides, forming the F 1 intersectional hybrid S. ×amethystinum."

**Symphyotrichum novi-belgii* (L.) G.L. Nesom [FNA20]
Phytologia. 77: 287. 1995.
New York aster

See "A taxonomic revision of the genera Antennaria and Symphyotrichum (Asteraceae) in British Columbia, Canada, with additional perspectives on the role of taxonomy within the biological sciences" by Jamie Fenneman (https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0378325) for additional information on the occurrence of this species in the Pacific Northwest.

**Symphyotrichum pilosum* (Willd.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 289. 1995.
hairy aster

Aster pilosus Willd. [HC]

*var. *pilosum* [FNA20, HC2]
hairy aster

Aster pilosus Willd. var. *pilosus* [HC]

Symphyotrichum spathulatum (Lindl.) G.L. Nesom [FNA20, HC2]
Phytologia. 77: 291. 1995.
western aster, western mountain aster

Aster occidentalis (Nutt.) Torr. & A. Gray [HC]
Aster occidentalis (Nutt.) Torr. & A. Gray var. *intermedius* A. Gray [HC]
Aster occidentalis (Nutt.) Torr. & A. Gray var. *occidentalis* [HC]
Aster spathulatus Lindl. var. *spathulatus*
Aster vallicola Greene
Symphyotrichum spathulatum (Lindl.) G.L. Nesom var. *intermedium* (A. Gray) G.L. Nesom [FNA20]
Symphyotrichum spathulatum (Lindl.) G.L. Nesom var. *spathulatum* [FNA20]
Symphyotrichum spathulatum (Lindl.) G.L. Nesom var. *yosemitanum* (A. Gray) G.L. Nesom [FNA20]

Symphyotrichum subspicatum (Nees) G.L. Nesom [FNA20, HC2]

Phytologia. 77: 293. 1995.
Douglas' aster, Douglas's aster

Aster bulteri Rydb.
Aster douglasii Lindl.
Aster maccallae Rydb.
Aster subspicatus Nees [HC]
Aster subspicatus Nees var. *grayi* (Suksd.) Cronquist
Aster subspicatus Nees var. *subspicatus*
Symphyotrichum subspicatum (Nees) G.L. Nesom var. *grayi* (Suksd.) G.L. Nesom
Symphyotrichum subspicatum (Nees) G.L. Nesom var. *subspicatum*

See FNA Volume 20 for description of taxonomic boundaries for this species. FNA20: "Symphyotrichum subspicatum is a weedy, highly polyploid species, probably of allopolyploid derivation from different combinations of species including S. chilense, S. eatonii, S. foliaceum, S. laeve, and S. spathulatum. Hybrids with S. hallii are known from western Oregon. The species passes into S. foliaceum in southeastern Alaska."

Tanacetum [FNA19, HC, HC2]
Sp. Pl. 2: 843. 1753; Gen. Pl. ed. 5, 366. 1754.
tansy
(see also *Artemisia*)

**Tanacetum balsamita* L. [FNA19, HC2]
Sp. Pl. 2: 845. 1753.
costmary

Balsamita major Desf.
Chrysanthemum balsamita (L.) Baillon [HC]

Tanacetum bipinnatum (L.) Sch. Bip. [FNA19, HC2]
Tanaceteen. 48. 1844.
camphor tansy, dune tansy

Tanacetum bipinnatum (L.) Sch. Bip. ssp. *huronense* (Nutt.) Breitung
Tanacetum camphoratum Less.
Tanacetum douglasii DC. [HC]

FNA19: "The circumscription of Tanacetum bipinnatum adopted here includes not only T. huronense (see E. Hultén 1941?1950, vol. 10, 1968) but T. camphoratum and T. douglasii as well (see D. W. Kyhos and P. H. Raven 1982; C. J. Mickelson and H. H. Iltis 1966). Subspecies bipinnatum has been distinguished from subsp. huronense by having heads borne singly or 2?4 together versus (1?)3?12(?20+) in corymbiform arrays, phyllary margins dark brown versus pale brown, and laminae of ray corollas mostly 3?7 mm versus 1?3 mm. Relatively low plants, 10?20(?40 cm) from dune habitats along the southern shore of Lake Athabasca, Saskatchewan, with mostly 1?4, lanate cauline leaves and 1(?2) heads per flowering stem have been called T. huronense var. floccosum."

**Tanacetum parthenium* (L.) Sch. Bip. [FNA19, HC2]
Tanaceteen. 55. 1844.
featherfew, feverfew

Chrysanthemum parthenium (L.) Bernh. [HC]

FNA19:"Tanacetum parthenium is widely cultivated throughout North America."

**Tanacetum vulgare* L. [FNA19, HC, HC2]
Sp. Pl. 2: 844. 1753.
common tansy

FNA20: "Tanacetum vulgare escapes from and/or persists after cultivation. In the flora area, it is naturalized mostly in the northeastern and Pacific Coast states and provinces and sporadically elsewhere."

Taraxacum [FNA19, HC, HC2]
Prim. Fl. Holsat. 56. 1780.
dandelion

Taraxacum alaskanum Rydb. [FNA19, HC2]
Bull. Torrey Bot. Club. 28: 512. 1901.
dwarf alpine dandelion

Taraxacum kamtschaticum Dahlst.

First collected in WA in Skagit County in 2019.

Taraxacum ceratophorum (Ledeb.) DC. [FNA19, HC, HC2]
Prodr. 7: 146. 1838.
horned dandelion

Taraxacum eriophorum Rydb. [HC]
Taraxacum officinale F.H. Wigg. ssp. *ceratophorum* (Ledeb.) Schinz ex Thell.
Taraxacum paucisquamosum M. Peck
Taraxacum sibiricum Dahlst.

FNA19: "Taraxacum ceratophorum is the most widespread native dandelion in North America, ranging from the low Arctic and boreal zone to the western Cordilleras, in the montane and alpine zones. This complex has been subdivided into many microspecies in North America, most of which appear unworthy of recognition." See Douglas et al. (1998) for review of taxonomic treatments, complicated by apomixis, polyploidy, and hybridization

**Taraxacum erythrospermum* Andrz. ex Besser [FNA19, HC2]
Enum. Pl. 75. 1822.
red-seeded dandelion

Taraxacum laevigatum (Willd.) DC. [HC]
Taraxacum laevigatum (Willd.) DC. var. *erythrospermum* (Andrz. ex Besser) J. Weiss
Taraxacum officinale F.H. Wigg. var. *erythrospermum* (Andrz. ex Besser) Bab.
Taraxacum scanicum Dahlst.

FNA19: "Early leaves of Taraxacum erythrospermum sometimes may be broadly winged along the midvein, making distinction from T. officinale difficult; usually, its later leaves become more deeply lobed with time. The name Taraxacum laevigatum has been used for L. erythrospermum in North America, following H. Handel-Mazzetti (1907). L. H. Shinners (1949) questioned that usage. The name is listed in the index of Flora Europaea (A. J. Richards and P. D. Sell 1973) as an unassigned synonym; it could be related to three different entities of sect. Spectabilia. And, it is not mentioned by other modern students of the group. Therefore, (1) given that the North American entity has not been identified with a particular Eurasian taxon; (2) to avoid using a microspecies name such as T. scanicum; and (3) despite the lack of typification of the name, I am using T. erythrospermum as a place holder until nomenclatural issues are resolved. This clearly associates the taxon with the section to which it belongs."

**Taraxacum officinale* F.H. Wigg. [FNA19, HC, HC2]
Prim. Fl. Holsat. 56. 1780.
common dandelion

Taraxacum officinale F.H. Wigg. ssp. *vulgare* (Lam.) Schinz & R. Keller

FNA19: " Taraxacum officinale is the most widespread dandelion in temperate North America, though its abundance decreases in the arid south. It is a familiar weed of lawns and roadsides. It is also the species most commonly used for medicinal and culinary purposes (e.g., E. Small and P. M. Catling 1999).

Phenotypic and genotypic variation of this species have been studied in North America (L. M. King 1993; King and B. A. Schaal 1990; J. C. Lyman and N. C. Ellstrand 1998; O. T. Solbrig 1971; R. J. Taylor 1987), but results of those studies did not lead to the recognition of microspecies.

Specimens of Taraxacum officinale with deeply lobed leaves are sometimes difficult to distinguish from those of T. erythrospermum when fruits are missing (see also R. J. Taylor 1987). Usually, however, early leaves of the former are much less deeply lobed than those of the latter, which are more consistently lacerate throughout development, though broadly winged initially. The two taxa are easily distinguished in fruit, the red cypselae of T. erythrospermum standing out from the dull olive ones of T. officinale.

In northeastern North America, Taraxacum officinale and T. lapponicum often are confused, which has led

to reports of the common dandelion farther north than I have been able to verify (it has yet to be collected from the Nunavik region of Quebec, for instance). The characters in the key above help separate the two taxa.

The typification by A. J. Richards (1985) would leave the common dandelion of both Europe and North America without a valid name (J. Kirschner and J. ?tepánek 1987). For the time being, with the nomenclatural situation still not resolved, I am following traditional usage of the name Taraxacum officinale.

Taraxacum scopulorum (A. Gray) Rydb. [FNA19, HC2]
Mem. New York Bot. Gard. 1: 455. 1900.
alpine dandelion

Taraxacum lyratum (Ledeb.) DC. [HC], Misapplied

First collected in WA in Whatcom County in 1934. Determination confirmed in 2019.

Tetradymia [FNA20, HC, HC2]
Prodr. 6: 440. 1838.
horse-brush

Tetradymia canescens DC. [FNA20, HC, HC2]
Prodr. 6: 440. 1838.
gray horsebrush, spineless horsebrush

Tetradymia inermis Nutt.

Tonestus [FNA20, HC2]
Bot. Gaz. 37: 262. 1904.
serpentweed

Tonestus lyallii (A. Gray) A. Nelson [FNA20, HC2]
Bot. Gaz. 37: 262. 1904.
Lyall's goldenweed, Lyall's serpentweed

Haplopappus lyallii A. Gray [HC]

FNA20: "Tonestus lyallii is widespread in the central Rocky Mountains and ranges of the Pacific Northwest, and is known in the Great Basin from collections in the Ruby Mountains in Elko County, Nevada. Populations documented from the Coast Range in Siskyou and Trinity counties, California, are disjunct from those in Oregon and Washington by more than 700 km."

Townsendia [FNA20, HC, HC2]
Fl. Bor.-Amer. 2: 16, plate 119. 1834.
townsend daisy, townsendia

Townsendia florifer (Hook.) A. Gray [FNA20, HC, HC2]
Proc. Amer. Acad. Arts. 16: 84. 1880.
showy Townsend-daisy, showy townsendia

Townsendia florifer (Hook.) A. Gray var. *florifer*
Townsendia florifera (Hook.) A. Gray var. *watsonii* (A. Gray) Cronquist, orthographic variant

Townsendia florifera is used in the Intermountain Flora, and treated as an orthographic error by Chambers and Sundberg (2000)

Tragopogon [FNA19, HC, HC2]
Sp. Pl. 2: 789. 1753; Gen. Pl. ed. 5, 346. 1754.
goatsbeard, salsify

**Tragopogon dubius* Scop. [FNA19, HC, HC2]
Fl. Carniol. ed. 2. 2: 95. 1772.
yellow salsify

FNA19: "Tragopogon dubius,/i> is naturalized across much of North America. It typically grows in sites drier than those where T. pratensis is found."

*_Tragopogon floccosus_ Waldst. & Kit. [HC2]
Descriptiones et Icones Plantarum Rariorum Hungariae 2: 116, t. 112. 1861.
woolly goatsbeard

Tragopogon mirus Ownbey [FNA19, HC, HC2]
Amer. J. Bot. 37: 497. 1950.
remarkable goatsbeard

FNA19: "Tragopogon mirus is allotetraploid, formed from T. dubius and T. porrifolius. It originated (probably repeatedly) in the United States (eastern Washington, adjacent Idaho, and near Flagstaff, Arizona). F1 hybrids between T. dubius and T. porrifolius resemble T. mirus but are less robust, have low pollen stainability, and set few, if any, seeds. Tragopogon mirus does not occur in Europe, but T. dubius and T. porrifolius may occasionally hybridize there when sympatric."

Tragopogon miscellus Ownbey [FNA19, HC, HC2]
Amer. J. Bot. 37: 498. 1950.
hybrid goatsbeard

FNA19: "Tragopogon mirus is allotetraploid, formed from T. dubius and T. porrifolius. It originated (probably repeatedly) in the United States (eastern Washington, adjacent Idaho, and near Flagstaff, Arizona). F1 hybrids between T. dubius and T. porrifolius resemble T. mirus but are less robust, have low pollen stainability, and set few, if any, seeds. Tragopogon mirus does not occur in Europe, but T. dubius and T. porrifolius may occasionally hybridize there when sympatric."

*_Tragopogon porrifolius_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 789. 1753.
oyster plant, purple salsify

FNA19: "Tragopogon porrifolius is occasionally cultivated in Europe and naturalized across much of North America. It grows typically in sites drier than those of T. pratensis and in sites shadier and/or moister than those of T. dubius. As currently circumscribed, it may not be monophyletic, and nomenclatural changes for the populations here may be required. In North America, T. porrifolius hybridizes with both T. dubius and T. pratensis (= T. ×neohybridus Farwell, described from North America, and T. ×mirabilis Rouy, described from Europe)."

*_Tragopogon pratensis_ L. [FNA19, HC, HC2]
Sp. Pl. 2: 789. 1753.
jack go to bed at noon, meadow salsify

Tragopogon pratensis L. ssp. _pratensis_

FNA19: "Tragopogon pratensis is naturalized across much of North America. The circumscription and infraspecific taxonomy of T. pratensis in Europe are debated, and the name T. pratensis may prove to be inaccurately assigned to the introduced populations in North America." ssp. taxonomy needs more study, using key in Stace (1997)

*_Tripleurospermum_ [FNA19, HC2]
Tanaceteen. 31. 1844.
mayweed

*_Tripleurospermum inodorum_ (L.) Sch. Bip. [FNA19, HC2]
Tanaceteen. 32. 1844.
false chamomile, false mayweed, scentless mayweed

Matricaria inodora L. [HC]
Matricaria maritima L. ssp. _inodora_ (L.) Soó
Matricaria perforata Mérat
Tripleurospermum maritimum (L.) W.D.J. Koch ssp. _inodorum_ (L.) Applequist
Tripleurospermum perforatum (Mérat) M. Lainz

FNA19: "Tripleurospermum inodorum has been classified as a noxious weed (class C) in the state of Washington and is considered invasive in other states (it is resistant to some herbicides); it is a weed of cereals in western Canada. W. L. Applequist (2002) has shown that the name Matricaria inodora is not a superfluous new name for M. chamomilla as earlier stated by S. Rauschert (1974). Therefore, the appropriate name under Tripleuro-spermum is T. inodorum. She also considered its type to belong in T.

maritimum and formally recognized it there as subsp. inodorum, on the basis of hybridization with other T. maritimum subspecies (A. Vaarama 1953); on the same basis, however, Hämet-Ahti maintained the species distinction between T. inodorum and T. maritimum, while making T. phaeocephalum a subspecies of the latter. Q. O. N. Kay (1994), in a more extensive review of the literature and of hybridization data, also maintained T. inodorum and T. maritimum as distinct species, a conclusion followed here. From the standpoint of weed science, taxonomic merging of T. inodorum and T. maritimum has the inconvenience of grouping under a single specific name taxa that have different physiologies, ecologies, weed potentials, and, possibly, reactions to weed control measures. The name Matricaria inodora var. agrestis Weiss was not validly published."

**Tussilago* [FNA20, HC, HC2]
Sp. Pl. 2: 865. 1753; Gen. Pl. ed. 5, 372. 1754.
coltsfoot

**Tussilago farfara* L. [FNA20, HC, HC2]
Sp. Pl. 2: 865. 1753.
coltsfoot

FNA20: "Flowering heads of Tussilago farfara close at night (laminae of ray corollas arch and roll inward). The species is becoming an invasive weed in some areas."

Uropappus [FNA19, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 424. 1841.
silverpuffs

Uropappus lindleyi (DC.) Nutt. [FNA19, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 425. 1841.
Lindley's false silverpuffs

Microseris lindleyi (DC.) A. Gray [HC]
Microseris linearifolia (Nutt.) Schultz Bipontinus
Uropappus linearifolius Nutt.

FNA19: "Uropappus lindleyi was placed in Microseris (K. L. Chambers 1955) because of two allotetraploid species formed by hybridization with annual members of that genus. A number of morphologic features, including narrow, acuminate leaves with villous-ciliate margins, erect heads, relatively long outer phyllaries, cypselae often short-beaked, and pappi of white, lustrous scales suggest a connection with Nothocalaïs, especially N. troximoides. Phylogenetic studies of chloroplast DNA variation (R. K. Jansen et al. 1991b; J. Whitton et al. 1995) link Uropappus with Nothocalaïs and Agoseris as a sister clade to Microseris. Consequently, Jansen et al. separated Uropappus from Microseris and placed the two allotetraploid species in Stebbinsoseris."

Wyethia [FNA21, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 7: 39, plate 5. 1834.
mule's-ears, wyethia

Wyethia amplexicaulis (Nutt.) Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 352. 1840.
northern mule's ears, smooth dwarf sunflower

Wyethia angustifolia (DC.) Nutt. [FNA21, HC, HC2]
Trans. Amer. Philos. Soc., n. s. 7: 352. 1840.
narrowleaf mule's ears, narrowleaf wyethia

Alarconia angustifolia DC.
Wyethia angustifolia (DC.) Nutt. var. *angustifolia*
Wyethia angustifolia (DC.) Nutt. var. *foliosa* (Congdon) H.M. Hall

Xanthium [FNA21, HC, HC2]
Sp. Pl. 2: 987. 1753; Gen. Pl. ed. 5, 424. 1754.
cocklebur

**Xanthium spinosum* L. [FNA21, HC, HC2]

Sp. Pl. 2: 987. 1753.
spiny clotbur, spiny cockleburr

Xanthium ambrosioides Hook. & Arn.
Xanthium spinosum L. var. *inerme* Bel

FNA21: "Some authors have contended that Xanthium spinosum originated in South America and is introduced and/or naturalized everywhere else that it is found." Considered native to California in Jepson Manual (1993).

Xanthium strumarium L. [FNA21, HC, HC2]
Sp. Pl. 2: 987. 1753.
Canada cocklebur, common cocklebur

Xanthium strumarium L. var. *canadense* (Mill.) Torr. & A. Gray [HC]
Xanthium strumarium L. var. *glabratum* (DC.) Cronquist [HC]
Xanthium strumarium L. var. *oviforme* (Wallr.) M. Peck
Xanthium strumarium L. var. *pensylvanicum* (Wallr.) M. Peck
Xanthium strumarium L. var. *strumarium*
Xanthium strumarium L. var. *wootonii* (Cockerell) W.C. Martin & C.R. Hutchins, invalidly published

FNA21: "Recognition of a dozen or more taxa (treated as species, subspecies, varieties, and/or forms) has been proposed for plants treated together here as Xanthium strumarium. Bases for the various taxa mostly involved subtle differences in the burs."

Balsaminaceae [HC, HC2] Touch-Me-Not Family

Impatiens [HC, HC2]
balsam, jewelweed, touch-me-not

Impatiens aurella Rydb. [HC, HC2]
Bulletin of the Torrey Botanical Club 28: 34. 1901.
varied jewelweed

Impatiens aurella Rydb. f. *badia* H. St. John
Impatiens aurella Rydb. f. *coccinea* H. St. John

**Impatiens capensis* Meerb. [HC, HC2]
Afbeeldingen van zeldzaame Gewassen. Plate 10. 1775.
spotted jewelweed

Impatiens capensis Meerb. f. *albiflora* (E.L.Rand & Redfield) Fernald & B.G.Schub.
Impatiens capensis Meerb. f. *citrina* (Weath.) Fernald & B.G.Schub.
Impatiens capensis Meerb. f. *immaculata* (Weath.) Fernald & B.G.Schub.
Impatiens capensis Meerb. f. *peasei* (A.H.Moore ex Weath.) Fernald & B.G.Schub.
Impatiens capensis Meerb. f. *platymeris* (Weath.) Fernald & B.G.Schub.

Impatiens ecornuta Gerry Moore, Zika, & Rushworth [HC2]
Novon 22:60?61. 2012.
spurless jewelweed

Impatiens ecalcarata Blank. [HC]

**Impatiens glandulifera* Royle [HC, HC2]
Ill. Bot. Himalaya Mts t. 28, fig. 2. 1834.
policeman's helmet

Impatiens glandulifera Royle f. *pallidiflora* (Hook. f.) Weath.

Impatiens noli-tangere L. [HC, HC2]
Sp. Pl. 2: 938. 1753.
boreal jewelweed, western touch-me-not

Impatiens occidentalis Rydb.

Impatiens ×pacifica Zika [HC2]
Novon 16: 443-448. Figure 1. 2006.
Pacific jewelweed

**Impatiens parviflora* DC. [HC2]
Prodr. 1: 687 1824.
small-flowered jewelweed, small-flowered touch-me-not

Recently (2016) collected in King County along Novelty Hill Road.

Berberidaceae [FNA3, HC, HC2] Barberry Family

Achlys [FNA3, HC, HC2]
Syst. Nat. 2: 35. 1821.
deerfoot, vanillaleaf

Achlys californica Fukuda & H.G. Baker [FNA3, HC2]
Taxon. 19: 341. 1970.
deer's-foot

FNA3: "Triploid plants have been reported from one locality in central Washington and from a site in northwestern California."

Achlys triphylla (Sm.) DC. [FNA3, HC, HC2]
Syst. Nat. 2: 35. 1821.
deerfoot, vanillaleaf
(see also *Achlys californica*)

Leontice triphylla Sm.

ssp. *triphylla* [HC2]
deerfoot, vanillaleaf
(see also *Achlys californica*)

Berberis [FNA3, HC, HC2]
Sp. Pl. 1: 330. 1753; Gen. Pl. ed. 5, 153, 1754.
barberry, mahonia, Oregon-grape

**Berberis darwinii* Hook. [FNA3, HC2]
Icon. Pl. 7: 672. 1844.
darwin's barberry

Native to southern South America. FNA3: "Berberis darwinii only rarely escapes from cultivation. It is resistant to infection by Puccinia graminis."

**Berberis julianae* C.K. Schneid. [HC2]
wintergreen barberry

**Berberis thunbergii* DC. [FNA3, HC2]
Syst. Nat. 2: 19. 1821.
Japanese barberry

FNA3: "The U.S. Department of Agriculture lists Berberis thunbergii as resistant to infection by Puccinia graminis , and the species is widely grown as an ornamental in the United States. Preliminary tests carried out by Agriculture Canada, however, suggest that some strains may be susceptible to Puccinia graminis infection, and cultivation of B . thunbergii is illegal in Canada."

**Berberis vulgaris* L. [FNA3, HC2]
Sp. Pl. 1: 330. 1753.
common barberry, European barberry

FNA3: "During the eighteenth and nineteenth centuries, Berberis vulgaris was very commonly cultivated in North America for thorn hedges and as a source of jam and yellow dye. It frequently escaped from cultivation and became naturalized over a wide area of eastern North America. It is susceptible to infection by Puccinia graminis . As the most important alternate host of this fungus, it has been the subject of vigorous eradication programs, and it is now infrequent or absent in many areas where it was once frequent (A. P. Roelfs 1982)."

Mahonia [HC2]

Mahonia aquifolium (Pursh) Nutt.
Gen. N. Amer. Pl. [Nuttall]. 1: 212. 1818.
holly-leaf Oregon-grape, shining Oregon-grape, tall Oregon-grape

Berberis aquifolium Pursh [FNA3, HC, HC2]
Berberis aquifolium Pursh var. *aquifolium* [JPM]
Berberis nutkana
Odostemon aquifolium (Pursh) Rydb.

Mahonia nervosa (Pursh) Nutt.
Gen. N. Amer. Pl. [Nuttall]. 1: 212. 1818.
Cascade Oregon-grape, dull Oregon-grape

Berberis nervosa Pursh [FNA3, HC, HC2]
Berberis nervosa Pursh var. *mendocinensis* Roof
Mahonia nervosa (Pursh) Nutt. var. *mendocinensis* (Roof) Roof
Odostemon nervosus (Pursh) Rydb.

Mahonia repens (Lindl.) G. Don
Gen. Hist. 1: 118. 1831.
creeping Oregon-grape, low Oregon-grape

Berberis aquifolium Pursh var. *repens* (Lindl.) Scoggan [JPM]
Berberis aquilifolium Pursh f. *repens* (Lindl.) B. Boivin
Berberis nana
Berberis repens Lindl. [FNA3, HC, HC2]
Berberis sonnei (Abrams) McMinn
Mahonia sonnei Abrams
Odostemon repens (Lindl.) Cockerell

Vancouveria [FNA3, HC, HC2]
inside-out-flower

Vancouveria hexandra (Hook.) C. Morren & Decne. [FNA3, HC, HC2]
Ann. Sci. Nat. Bot., sér. 2, 2: 351. 1834.
white inside-out-flower

Epimedium hexandrum Hook.
Vancouveria brevicula Greene
Vancouveria picta Greene

Betulaceae [FNA3, HC, HC2] Birch Family

Alnus [FNA3, HC, HC2]
Gard. Dict. Abr., ed. 4. 1754.
alder

**Alnus glutinosa* (L.) Gaertn. [FNA3]
Fruct. Sem. Pl. 2: 54. 1790.
Black alder, European alder

Recently (2020) collected in King County, where apparently established and escaping from a wetland restoration project.

Alnus incana (L.) Moench [FNA3, HC, HC2]
Methodus. 424. 1794.
mountain alder

ssp. *tenuifolia* (Nutt.) Breitung [FNA3, HC2]
Amer. Midl. Naturalist. 58: 25. 1957.
mountain alder

Alnus incana (L.) Moench var. *occidentalis* (Dippel) C.L. Hitchc. [HC]
Alnus incana (L.) Moench var. *virescens* S. Watson
Alnus occidentalis Dippel
Alnus ×*purpusii* Callier
Alnus rugosa (Du Roi) Spreng. var. *occidentalis* (Dippel) C.L. Hitchc.
Alnus tenuifolia Nutt. [VPBC1]
Alnus tenuifolia Nutt. var. *occidentalis* (Dippel) Collier [VPBC, VPBC]

FNA3: "Alnus incana subsp. tenuifolia is somewhat more treelike than the eastern A . incana subsp. rugosa , from which it also differs in leaf shape, leaf margins, and other characters. It is a frequent component of streamside vegetation throughout the Rocky Mountains and other mountainous parts of western North America. Native Americans used alnus incana subsp. tenuifolia medicinally for pains in the lungs or hips, for scrofula, as a laxative, and as a diuretic for gonorrhea (D. E. Moerman 1986)."

Alnus rhombifolia Nutt. [FNA3, HC, HC2]
N. Amer. Sylv. 1: 49. 1842.
white alder

Alnus rhombifolia Nutt. var. *bernardina* Munz & I.M. Johnst.

FNA3: "Alnus rhombifolia is the common alder throughout the dry Mediterranean climatic zone of coastal western United States. Mexican populations are not known, but because A . rhombifolia has been collected as far south as San Diego, California, it should be expected in adjacent Baja California. Native Americans used various parts of Alnus rhombifolia medicinally for diarrhea, consumption, and burns, as a blood purifier, an emetic, and a wash for babies with skin diseases, and to facilitate childbirth (D. E. Moerman 1986)."

Alnus rubra Bong. [FNA3, HC, HC2]
Mém. Acad. Sci. St.-Pétersbourg. Sér. 6, Sci. Math. 2: 162. 1833.
red alder

Alnus oregona Nutt.
Alnus oregona Nutt. var. *pinnatisecta* Starker
Alnus rubra Bong. var. *pinnatisecta* Starker

FNA3: "Alnus rubra is the largest alder in North America north of Mexico; it often forms extensive stands along streams and on low-lying flood plains in the Pacific Northwest. The strongly revolute margins of its leaf blades make it easily distinguished from all of the other alders in the flora. It is an important commercial tree; the wood is used to make inexpensive furniture, small wooden items, and paper pulp. Native Americans used various parts of plants of Alnus rubra medicinally as a purgative, an emetic, for aching bones, headaches, coughs, biliousness, stomach problems, scrofula sores, tuberculosis, asthma, and eczema, and as a general panacea (D. E. Moerman 1986)."

Alnus viridis (Chaix) DC. [FNA3, HC2]
Fl. France, ed. 3. 3: 304. 1805.
green alder, mountain alder

ssp. *fruticosa* (Rupr.) Nyman [FNA3, HC2]
Consp. Fl. Eur. 672. 1881.
Siberian alder

Alnus fruticosa Rupr.
Alnus viridis (Chaix) DC. var. *fruticosa* (Rupr.) Regel

Not included in H&C FNA3: "This primarily subarctic Asian subspecies has long been mistaken in

western North America for Alnus viridis subsp. crispa, which it closely resembles, or for subsp. sinuata (J. J. Furlow 1983b). It can be separated from the former by its larger and more coarsely toothed leaves, and from the latter by its much thicker, mostly single-toothed leaf blades."

ssp. *sinuata* (Regel) A. Löve & D. Löve [FNA3, HC2]
Univ. Colorado Stud., Ser. Biol. 17: 20. 1965.
mountain alder, Sitka alder

Alnus alnobetula (Ehrh.) K. Koch
Alnus crispa (Aiton) Pursh ssp. *laciniata* Hultén [VPBC1]
Alnus crispa (Aiton) Pursh ssp. *sinuata* (Regel) Hultén [VPBC1]
Alnus sinuata (Regel) Rydb. [HC]
Alnus sitchensis (Regel) Sarg.
Alnus viridis (Chaix) DC. var. *sinuata* Regel
Duschekia sinuata (Regel) Pouzar

FNA3: "Alnus viridis subsp. sinuata is one of the first successional taxa to appear in the northwestern mountains following disruption of the mature vegetation. It often forms dense thickets on avalanche and talus slopes. Sitka alder differs from the two previous subspecies in its paper-thin, light or yellowish green, doubly serrate leaves. The Bella Coola used Alnus viridis subsp. sinuata medicinally although D. E. Moerman (1986) did not specify the nature of the remedies."

Betula [FNA3, HC, HC2]
Sp. Pl. 2: 982. 1753; Gen. Pl. ed. 5, 433, 1754.
birch

Betula glandulosa Michx. [FNA3, HC, HC2]
Fl. Bor.-Amer. 2: 180. 1803.
resin birch, swamp birch
(see also *Betula pumila*)

Betula crenata Rydb. ex B.T. Butler
Betula glandulosa Michx. var. *glandulosa* [HC]

FNA3: "Betula glandulosa is the characteristic dwarf birch of upland habitats throughout much of the mountainous west, occurring as well in dry open areas across the north. Where their ranges meet, B . glandulosa intergrades with both B . pumila Linnaeus and B . nana Linnaeus subsp. exilis (Sukaczev) Hultén, creating a confusing complex of intermediate forms."

Betula occidentalis Hook. [FNA3, HC, HC2]
Fl. Bor.-Amer. 2: 155. 1838.
red birch, river birch, water birch

Betula beeniana A. Nelson
Betula fontinalis Sarg.
Betula fontinalis Sarg. var. *inopina* (Jeps.) Jeps.
Betula microphylla Bunge var. *fontinalis* (Sarg.) M.E. Jones
Betula occidentalis Hook. var. *fecunda* Fernald
Betula occidentalis Hook. var. *inopina* (Jeps.) C.L. Hitchc. [HC]
Betula occidentalis Hook. var. *occidentalis* [HC]
Betula papyrifera Marshall ssp. *occidentalis* (Hook.) Hultén
Betula papyrifera Marshall var. *occidentalis* (Hook.) Sarg.

FNA3: "Betula occidentalis is a common, streamside, shrubby birch throughout much of the Rocky Mountains, extending eastward to northwestern Ontario. It has been widely known by the later name B . fontinalis because of questions concerning the legitimacy of Hooker\'s epithet (J. R. Dugle 1966). Recent changes to the International Code of Botanical Nomenclature (W. Greuter et al. 1994) have clarified the situation, however, and the consensus now is that the earlier name is correct. E. Hultén (1968) believed that the species in Alaska that has been called B . occidentalis consists of an extensive hybrid swarm between B . neoalaskana (as B . resinifera) and B . glandulosa . The studies of J. R. Dugle (1966) do not support a hybrid origin of B . occidentalis in other parts of its range. Additional study will be needed to resolve this problem, both in Alaska and southward."

Betula papyrifera Marshall [FNA3, HC, HC2]

Arbust. Amer. 19. 1785.
canoe birch, paper birch, western paper birch, white birch
(see also *Betula utahensis*)

Betula alba L. var. *commutata* Regel
Betula montanensis
Betula papyrifera Marshall var. *commutata* (Regel) Fernald [HC]

FNA3: "Variants having more or less close, dark brown bark (B . papyrifera var. commutata) occur locally throughout the wide range of this species; this characteristic appears to be largely environmentally caused. Betula × sandbergii Britton is a fairly common hybrid, occurring where the ranges of the parents (B . papyrifera Marshall and B . pumila Linnaeus) come into contact. In most vegetative features it is intermediate between the parental conditions (K. E. Clausen 1963; C. O. Rosendahl 1928)."

**Betula pendula* Roth [FNA3, HC2]
Tent. Fl. Germ. 1: 405. 1788.
European weeping birch

Betula verrucosa Ehrh.

FNA3: "The Eurasian weeping birch (Betula pendula) is extensively cultivated throughout the temperate range of the flora, and it has been known to persist or to become locally naturalized in several areas, particularly in the Northeast. In vegetative features it resembles B . populifolia Marshall, to which it is closely allied; it can easily be distinguished from the latter by its peeling bark, as well as by its mostly pubescent leaves with somewhat shorter, acuminate apices."

**Betula populifolia* Marshall [FNA3, HC2]
Arbust. Amer. 19. 1785.

**Betula pubescens* Ehrh. [FNA3, HC2]
Beitr. Naturk. 5: 160. 1790.

**ssp. pubescens* [FNA3, HC2]

***Betula pumila* L. [FNA3, HC2]
Mant. Pl. 124. 1767.
bog birch, swamp birch

Betula borealis Spach
Betula glandulifera (Regel) B.T. Butler
Betula glandulosa Michx. var. *glandulifera* (Regel) Gleason
Betula glandulosa Michx. var. *hallii* (Howell) C.L. Hitchc. [HC, VPBC]
Betula hallii Howell
Betula nana L. var. *glandulifera* (Regel) B. Boivin
Betula pubescens Ehrh. ssp. *borealis* (Spach) A. Löve & D. Löve
Betula pumila L. f. *hallii* (Howell) Brayshaw [VPBC, VPBC]
Betula pumila L. var. *glabra* Regel
Betula pumila L. var. *glandulifera* Regel [VPBC1, KZ99, FNA3]
Betula pumila L. var. *renifolia* Fernald

FNA3: "Betula pumila is sometimes treated (in part) as a variety of B . glandulosa Michaux, to which it is related at a subgeneric or sectional level. On the basis of morphology, however, it forms a cohesive and distinct entity (J. J. Furlow 1984). The two main varieties into which B . pumila is often divided (a more southern B . pumila var. pumila , with mostly pubescent, glandless leaves, and a more northern B . pumila var. glandulifera , with less pubescent, gland-bearing leaves) may represent geographic races; these are not well marked, however, and they do not hold up well when the complex is examined as a whole."

***Betula ×utahensis* Britton [FNA3, HC2]
Bull. Torrey Bot. Club 31(3): 165. 1904.
hybrid birch

Betula andrewsii A. Nelson
Betula ×commixta Sarg.
Betula papyrifera Marshall var. *subcordata* (Rydb.) Sarg. [HC]
Betula piperi Britton [HC]

FNA3: "Betula × utahensis Britton (= B . occidentalis Hooker × B . papyrifera Marshall) is a common hybrid marked by intermediate characteristics."

Corylus [FNA3, HC, HC2]
Sp. Pl. 2: 998. 1753; Gen. Pl. ed. 5, 433, 1754.
filbert, hazelnut

**Corylus avellana* L. [FNA3, HC2]
Sp. Pl. 2: 998. 1753.
common filbert, European hazelnut

FNA3: "Corylus avellana is widely grown as an ornamental shrub in temperate North America, and it sometimes persists following cultivation, although it seldom becomes established. Corylus avellana is similar to C . americana in habit, leaves, and fruit characteristics, although it becomes much larger. If fruits are present, the two species can be distinguished by the involucre, which is shorter than the nut in C . avellana . The best technical character for separating these species in the absence of fruits is the length of the peduncles of the staminate catkins (which are formed during the summer prior to the season of blooming)."

Corylus cornuta Marshall [FNA3, HC, HC2]
Arbust. Amer. 37. 1785.
beaked hazelnut

ssp. *californica* (A. DC.) A.E. Murray [FNA3, HC2]
Kalmia. 12: 19. 1982.
California hazelnut

Corylus californica (A. DC.) Rose
Corylus cornuta Marshall var. *californica* (A. DC.) Sharp
Corylus cornuta Marshall var. *glandulosa* B. Boivin
Corylus rostrata Aiton var. *californica* A. DC.
Corylus rostrata Aiton var. *tracyi* Jeps.

FNA3: "The California hazel (Corylus cornuta subsp. californica) is most often treated as a variey of the northern C . cornuta . The two may not be very closely related, however, differing conspicuously in habit, leaf shape, pubescence, the presence of glandular hairs, form and size of the involucre, habitat, phytogeography, and various other features (J. N. Rose 1895; J. S. Drumke 1965). A thorough taxonomic study of this group should be undertaken."

ssp. *cornuta* [FNA3, HC2]
beaked hazelnut

Corylus cornuta Marshall var. *cornuta* [IFBC]
Corylus cornuta Marshall var. *megaphylla* Vict. & J. Rouss.
Corylus rostrata Aiton

FNA3: "Like Corylus americana Walter, the beaked hazel (C . cornuta subsp. cornuta) is a weedy shrub and is sometimes considered a pest in carefully managed northern forests. The fruits are similar to those of C . americana , except that the surrounding bracts are connate into a long, narrow, tubular beak. Vegetative individuals of C . cornuta subsp. cornuta can be distinguished from C . americana by the absence of glandular hairs on the petioles and young twigs."

Bignoniaceae [HC2] Trumpet Creeper Family

**Catalpa* [HC2]
catalpa

**Catalpa bignonioides* Walter [HC2]
Fl. Carol. 64. 1788.
southern catalpa

Catalpa speciosa (Warder) Warder ex Engelm. [HC2]
Bot. Gaz. 5(1): 1-3. 1880.
northern catalpa

Boraginaceae [Draft FNA, HC, HC2] Borage Family

Taxonomy follows recent molecular studies: Weigend, M., Federico Luebert, Marc Gottschling, Thomas L.P., Couvreur, Hartmut H. Hilger and James S. Miller. 2013. From capsules to nutlets?phylogenetic relationships in the Boraginales. Cladistics (2013) 1?11. Nazaire, M., and L Hufford. 2012. A Broad Phylogenetic Analysis of Boraginaceae: Implications for the Relationships of Mertensia. Systematic Botany 37(3): pp. 758?783.

Adelinia [HC2]
Adeline

Adelinia grandis (Douglas ex Lehm.) J.I. Cohen [HC2]
Systematic Botany 40(2): 617. 2015.
Adeline's hound's-tongue, Pacific hound's-tongue, grand hound

Cynoglossum grande Douglas ex Lehm. [HC]

Amsinckia [HC, HC2]
amsinckia, fiddleneck, tarweed

Amsinckia intermedia Fisch. & C.A. Mey. [HC, HC2]
Index Seminum [St.Petersburg (Petropolitanus)] ii. 26. 1836.
fireweed fiddleneck, rancher's fiddleneck

Amsinckia intermedia Fisch. & C.A. Mey. var. *intermedia*
Amsinckia menziesii (Lehm.) A. Nelson & J.F. Macbr. var. *intermedia* (Fisch. & C.A. Mey.) Ganders [JPM]

Amsinckia lycopsoides Lehm. [HC, HC2]
Delectus seminum quae in horto Hamburgensium botanico e collectione anni 1831 mutuae commutationi offeruntur. 1831.
bugloss fiddleneck, tarweed fiddleneck

Amsinckia menziesii (Lehm.) A. Nelson & J.F. Macbr. [HC, HC2]
Bot. Gaz. 61(1): 36. 1916.
harvest fiddleneck, rigid fiddleneck, rancher's fireweed

Amsinckia menziesii (Lehm.) A. Nelson & J.F. Macbr. var. *menziesii* [JPM]
Amsinckia micrantha Suksd.

Amsinckia retrorsa Suksd. [HC, HC2]
Deutsche Bot. Monatsschr. 18: 134. 1834.
harvest fiddleneck, rigid fiddleneck

Amsinckia spectabilis Fisch. & C.A. Mey. [HC, HC2]
Index Seminum [St.Petersburg (Petropolitanus)] 2: 26 (-27). 1836.
seaside amsinckia, seaside fiddleneck

Amsinckia scouleri I.M. Johnst.

var. *spectabilis* [HC2, JPM]
seaside amsinckia, seaside fiddleneck

Amsinckia tessellata A. Gray [HC, HC2]
Proc. Amer. Acad. Arts x. 54. 1874.
bristly amsinckia, bristly fiddleneck, tessellate fiddleneck

var. *tessellata* [HC2, JPM]
bristly amsinckia, bristly fiddleneck, tessellate fiddleneck

*Anchusa [HC, HC2]
alkanet, anchusa, bugloss

*Anchusa azurea Mill. [HC, HC2]
Gard. Dict., ed. 8. n. 9. 1768.
Italian alkanet, Italian bugloss

*var. azurea [HC2]
Italian alkanet, Italian bugloss

*Anchusa officinalis L. [HC, HC2]
Sp. Pl. 1: 133. 1753.
common alkanet, common bugloss

*Asperugo [HC, HC2]
catchweed, madwort

*Asperugo procumbens L. [HC, HC2]
Sp. Pl. 1: 138. 1753.
catchweed, madwort

*Borago [HC, HC2]
borage

*Borago officinalis L. [HC, HC2]
Sp. Pl. 1: 137. 1753.
borage, common borage

*Buglossoides [HC2]
gromwell

*Buglossoides arvensis (L.) I.M. Johnst. [HC2]
Journal of the Arnold Arboretum 35. 1954.
corn gromwell, field gromwell

Lithospermum arvense L. [HC]

Cryptantha [HC, HC2]
cryptantha, white forget-me-not
(see also *Greeneocharis*)

Cryptantha affinis (A. Gray) Greene [HC, HC2]
Pittonia 1(7): 119. 1887.
quill cat's-eye, common cryptantha, slender cryptantha

Krynitzkia affinis A. Gray

Cryptantha ambigua (A. Gray) Greene [HC, HC2]
Pittonia 1(7): 113. 1887.
basin cat's-eye, obscure cryptantha, wilke's cryptantha

Cryptantha fendleri (A. Gray) Greene [HC, HC2]
Pittonia 1(7): 120. 1887.
sand dune cat's eye, Fendler's cryptantha

Cryptantha flaccida (Douglas ex Lehm.) Greene [HC, HC2]
Pittonia 1(7): 115. 1887.
weakstem cat's-eye, flaccid cryptantha

Cryptantha gracilis Osterh. [HC2, JPM]
Bull. Torrey Bot. Club 30(4): 236. 1903.
narrow-stem cryptantha, slender cryptantha

Cryptantha grandiflora Rydb. [Draft FNA, HC2]
Bull. Torrey Bot. Club 36(12): 679?680. 1909.
large-flowered cryptantha

(see also *Cryptantha intermedia*)

Cryptantha intermedia (A. Gray) Greene var. *grandiflora* (Rydb.) Cronquist [HC]

Cryptantha intermedia (A. Gray) Greene [HC, HC2]
Pittonia 1(7): 114. 1887.
Clearwater cat's-eye, common cryptantha
(see also *Cryptantha grandiflora*)

Cryptantha fragilis M. Peck

var. *hendersonii* (A. Nelson) Jeps. & Hoover [HC, HC2]
Fl. Calif. [Jepson] 3: 339. 1943.
Henderson's common cryptantha

Cryptantha hendersonii (A. Nelson) Piper ex J.C. Nelson

Cryptantha pterocarya (Torr.) Greene [HC, HC2, JPM]
Pittonia 1(7): 120. 1887.
wingnut cryptantha

var. *pterocarya* [HC2]
wingnut cryptantha

Cryptantha rostellata (Greene) Greene [HC, HC2]
Pittonia 1(7): 116. 1887.
beaked cryptantha

Cryptantha rostellata (Greene) Greene var. *spithamea* (I.M. Johnst.) Jeps.

Cryptantha scoparia A. Nelson [HC, HC2]
Botanical Gazette 54(2): 144-145. 1912.
desert cryptantha, pinyon desert cat's eye

Cryptantha simulans Greene [HC, HC2]
Pittonia 5(26B): 54. 1902.
pine woods cat's eye, pine woods cryptantha

Cryptantha torreyana (A. Gray) Greene [HC2, JPM2]
Pittonia 1(7): 118. 1887.
Torrey's cryptantha

Cryptantha torreyana (A. Gray) Greene var. *pumila* (A. Heller) I.M. Johnst.

Similar to C. ambigua, and they intergrade.

var. *torreyana* [HC2]
Torrey's cryptantha

Cryptantha watsonii (A. Gray) Greene [HC, HC2]
Pittonia 1(7): 120. 1887.
Watson's cryptantha

**Cynoglossum* [HC, HC2]
hound's-tongue
(see also *Adelinia*)

**Cynoglossum officinale* L. [HC, HC2]
Sp. Pl. 1: 134. 1753.
common hound's-tongue

**Echium* [HC, HC2]
viper's bugloss

**Echium vulgare* L. [HC, HC2]
Sp. Pl. 1: 139. 1753.
common viper's bugloss

Eritrichium [HC, HC2]
eritrichium, alpine forget-me-not, false forget-me-not

Eritrichium argenteum W. Wight [Draft FNA, HC2]
Bull. Torrey Bot. Club 29(6): 411?412. 1902.
alpine forget-me-not

Eritrichium nanum (Vill.) Schrad. ex Gaudin [HC]
Eritrichium nanum (Vill.) Schrad. ex Gaudin [HC], misapplied
Eritrichium nanum (Vill.) Schrad. ex Gaudin var. *elongatum* (Rydb.) Cronquist [HC], misapplied

Greeneocharis [HC2]
Greeneocharis

Greeneocharis circumscissa (Hook. & Arn.) Rydb. [HC2]
Bull. Torrey Bot. Club 36(12): 677. 1909.
cushion cryptantha, matted cryptantha

Cryptantha circumscissa (Hook. & Arn.) I.M. Johnst. [HC, JPM]

var. *circumscissa* [HC2]

Cryptantha circumscissa (Hook. & Arn.) I.M. Johnst. var. *circumscissa*
Cryptantha circumscissa (Hook. & Arn.) I.M. Johnst. var. *hispida* (J.F. Macbr.) I.M. Johnst.
Greeneocharis circumscissa (Hook. & Arn.) Rydb. var. *circumcissa* [Abrams]

Gruvelia [HC2]
little combseed, little pectocarya

Gruvelia pusilla A. DC. [Draft FNA, HC2]
Prodr. [A. P. de Candolle] 10: 119. 1846.
little gruvelia

Pectocarya pusilla (A. DC.) A. Gray [HC]

Hackelia [HC, HC2]
wild forget-me-not, hackelia, stickseed

Hackelia americana (A. Gray) Fernald [HC2]
Rhodora 40: 341. 1938.
nodding stickseed

Hackelia deflexa (Wahlenb.) Opiz ssp. *americana* (A. Gray) Á. Löve & D. Löve
Hackelia deflexa (Wahlenb.) Opiz var. *americana* (A. Gray) Fernald & I.M. Johnst. [HC]
Lappula deflexa (Wahlenb.) Garcke ssp. *americana* (A. Gray) Hultén

Hackelia ciliata (Douglas ex Lehm.) I.M. Johnst. [HC, HC2]
Contributions from the Gray Herbarium of Harvard University 68: 46. 1923.
Okanogan stickseed

Hackelia cinerea (Piper) I.M. Johnst. [HC, HC2]
gray stickseed

Hackelia diffusa (Lehm.) I.M. Johnst. [HC, HC2]
Contr. Gray Herb. 68: 48 1923.
diffuse stickseed

var. *arida* (Piper) R.L. Carr [HC2]
Mem. New York Bot. Gard. 26(1): 190. 1976.
sagebrush stickseed, steppe stickseed

Hackelia arida (Piper) I.M. Johnst. [HC]

Taxonomy follows Gentry and Carr (1976).

var. *cottonii* (Piper) R.L. Carr [HC2]
Mem. New York Bot. Gard. 26(1): 192. 1976.
Cotton's stickseed

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var. *diffusa* [HC2]
Contr. Gray Herb. 68: 48. 1923.
diffuse stickseed

Hackelia saxatilis (Piper) Brand

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Hackelia floribunda (Lehm.) I.M. Johnst. [HC, HC2]
Contr. Gray Herb. 68: 46. 1923.
many-flowered stickseed

Hackelia hispida (A. Gray) I.M. Johnst. [HC, HC2]
Contr. Gray Herb. 68: 46. 1923.
hispid stickseed, rough stickseed

var. *disjuncta* R.L. Carr [HC2]
Mem. New York Bot. Gard. 26(1): 180-181, f. 16. 1976.
sagebrush stickseed

var. *hispida* [HC2]
Contr. Gray Herb. 68: 46. 1923.
rough stickseed

Hackelia micrantha (Eastw.) J.L. Gentry [HC, HC2]
Madroño 21(7): 490. 1972.
meadow forget-me-not, blue stickseed

Hackelia jessicae (McGregor) Brand

Hackelia taylorii Harrod, Malmquist & R.L. Carr [HC2]
Journal of the Botanical Research Institute of Texas 7(2): 652?657, f. 4. 2013.
Taylor's stickseed

Hackelia venusta (Piper) H. St. John [HC, HC2]
Research Studies of the State College of Washington 1(2): 104. 1929.
lesser showy stickseed

**Lappula* [HC, HC2]
stickseed

Lappula longispina [HC2], unpublished name
long-spined stickseed

Lappula montana Greene [HC2]
Pittonia 4(21): 96. 1899.
montane stickseed

Lappula occidentalis (S. Watson) Greene [HC2]
western stickseed

var. *cupulata* (A. Gray) Higgins [FNA]
Brigham Young Univ. Sci. Bull., Biol. Ser. 16(3): 62. 1972.
cupulate stickseed

Lappula occidentalis (S. Watson) Greene var. *stricta* (S. Watson) Rolfsmeier [HC2], unpublished

**Lappula squarrosa* (Retz.) Dumort. [HC2, JPM2]
Fl. Lit. Inch. 1: 25. 1781.
bristly sheepburr, bristly stickseed, common stickseed, European stickseed, bristly-fruited tickweed

Lappula echinata Gilib. [HC]

Lithospermum [HC, HC2]
(see also *Buglossoides*)

Onosmodium [HC]

Lithospermum incisum Lehm. [HC, HC2]
Pl. Asperif. Nucif. 2: 303. 1818.
fringed stoneseed

This species is known in Washington from a single historical collection (1926) from Osoyoos Lake. It is possible that this species is extirpated from Washington.

Lithospermum ruderale Douglas ex Lehm. [HC, HC2]
Nov. Stirp. Pug. 2: 28. 1830.
western gromwell, Columbian puccoon, western stoneseed

**Lycopsis* [HC2]
bugloss, small bugloss

**Lycopsis arvensis* L. [HC2]
Sp. Pl. 1: 139. 1753.
annual bugloss, European bugloss, small bugloss

Anchusa arvensis (L.) M. Bieb. [JPM]

*ssp. *arvensis* [HC2]
annual bugloss, European bugloss, small bugloss

Mertensia [HC, HC2]
bluebells, lungwort, mertensia

Mertensia amoena A. Nelson [HC2]
Bot. Gaz. 30(3): 195. 1900.
beautiful bluebells, sagebrush bluebells

Mertensia oblongifolia (Nutt.) G. Don var. *amoena* (A. Nelson) L.O. Williams [JPM]

Mertensia brachycalyx Piper [HC2]
Contr. U.S. Natl. Herb. xi. 477. 1906.
short-sepaled bluebells

Mertensia longiflora Greene [HC, HC2]
Pittonia 3(18A): 261. 1898.
long-flowered bluebells, trumpet bluebells, long-flowered lungwort

Mertensia oblongifolia (Nutt.) G. Don [HC, HC2]
Gen. Hist. 4(1): 372. 1837.
oblong-leaved bluebell, sagebrush bluebell

Mertensia oblongifolia (Nutt.) G. Don var. *oblongifolia* [JPM]
Mertensia perplexa Rydb. [HC]
Mertensia viridis (A. Nelson) A. Nelson [HC]

Mertensia paniculata (Aiton) G. Don [HC, HC2]
Gen. Hist. iv. 318. 1837.
northern bluebell, tall bluebell

var. *borealis* (J.F. Macbr.) L.O. Williams [HC, HC2, JPM]
Ann. Missouri Bot. Gard. 24(1): 49. 1937.
northern bluebell
(see also *Mertensia brachycalyx*)

var. *paniculata* [HC, HC2, JPM]
Gen. Hist. 4: 318. 1837.
tall bluebell

Mertensia platyphylla A. Heller [HC, HC2]
Bull. Torrey Bot. Club 26(10): 548-549. 1899.
broadleaf bluebell

Mertensia platyphylla A. Heller var. *platyphylla*
Mertensia platyphylla A. Heller var. *subcordata* (Greene) L.O. Williams

Mertensia umbratilis Greenm. [HC, HC2]
Erythea 7(11): 118-119. 1899.
shade bluebell

Myosotis [HC, HC2]
forget-me-not, scorpion-grass

**Myosotis arvensis* (L.) Hill [HC, HC2]
Veg. Syst. 7: 55. 1764.
field forget-me-not, field scorpion-grass, field scorpiongrass

**Myosotis discolor* Pers. [HC, HC2]
Syst. Veg. (ed. 15) 190 [1798]. 1797.
yellow and blue forget-me-not, yellow and blue scorpiongrass

Myosotis versicolor (Pers.) Sm.

Myosotis laxa Lehm. [HC, HC2]
Pl. Asperif. Nucif. 1: 83. 1818.
bay forget-me-not, small forget-me-not

**Myosotis ramosissima* Rochel.
Oestr. Fl., ed. 2 1: 366, adnot. 1814.
early forget-me-not

**Myosotis scorpioides* L. [HC, HC2]
Sp. Pl. 1: 131. 1753.
common forget-me-not, true forget-me-not, water forget-me-not

Myosotis palustris (L.) Hill

**Myosotis stricta* Link ex Roem. & Schult. [ILBC2]
blue scorpiongrass

Myosotis micrantha Pall. ex Lehm., misapplied

The name M. micrantha is a misapplied name for this species.

**Myosotis sylvatica* Ehrh. ex Hoffm. [HC, HC2, Stace 1997]
Deut. Fl. 1: 61. 1791.
woodland forget-me-not

Myosotis alpestris F.W. Schmidt [Davis 1952, HC2], misapplied

This is the common garden escape, often confused with M. arvensis (Stace 1997).

Myosotis verna Nutt. [HC, HC2]
Gen. N. Amer. Pl. 2: Add. 1818.
early forget-me-not, spring forget-me-not, early scorpion-grass, spring scorpion-grass

Myosotis macrosperma Engelm. [Peck], misapplied
Myosotis virginica (L.) B.S.P. [Abrams]

Oreocarya
oreocarya

Oreocarya glomerata (Pursh) Greene
Pittonia 1(2): 58. 1887.
cockscomb oreocarya

Cryptantha celosioides (Eastw.) Payson [HC, HC2]
Cryptantha sheldonii (Brand) Payson
Oreocarya celosioides Eastw.
Oreocarya sheldonii Brand

Oreocarya leucophaea (Douglas ex Lehm.) Greene
Pittonia 1(2): 58. 1887.
gray oreocarya

Cryptantha leucophaea (Douglas ex Lehm.) Payson [HC, HC2]

Oreocarya spiculifera Piper [FNA, OFP]
Contr. U.S. Natl. Herb. 11: 481. 1906.
Snake River cat's-eye, Snake River oreocarya

Cryptantha interrupta (Greene) Payson [HC], misapplied
Cryptantha spiculifera (Piper) Payson [HC2]

Oreocarya thompsonii (I.M. Johnst.) Abrams
Ill. Fl. Pacific States 3: 600. 1951.
Thompson's cat's-eye, Thompson's oreocarya

Cryptantha thompsonii I.M. Johnst. [HC, HC2]

Pectocarya [HC, HC2]
combseed, pectocarya
(see also *Gruvelia*)

Pectocarya penicillata (Hook. & Arn.) A. DC. [HC2, IFBC]
Prodr. 10: 120. 1846.
shortleaf combseed, winged pectocarya

Pectocarya linearis (Ruiz & Pav.) DC. var. *penicillata* (Hook. & Arn.) M.E. Jones [HC]

Pectocarya setosa A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 12: 81. 1876.
bristly combseed

**Pentaglottis* [HC2]
alkanet

**Pentaglottis sempervirens* (L.) Tausch ex L.H. Bailey [HC2, IFBC]
Flora 12: 643. 1829.
green alkanet

Anchusa sempervirens L.

Plagiobothrys [HC, HC2]
plagiobothrys, popcorn-flower

Plagiobothrys cognatus (Greene) I.M. Johnst. [HC2, JPM]
Contr. Arnold Arbor. 3: 59. 1932.
cognate popcorn-flower

Allocarya cognata Greene

Plagiobothrys cusickii (Greene) I.M. Johnst. [HC2, JPM]
Contr. Arnold Arbor. 3: 63. 1932.
matted popcorn-flower

Allocarya cusickii Greene
Plagiobothrys scouleri (Hook. & Arn.) I.M. Johnst. var. *cusickii* (Greene) Higgins
Plagiobothrys scouleri (Hook. & Arn.) I.M. Johnst. var. *penicillatus* (Greene) Cronquist [HC]

Plagiobothrys figuratus (Piper) I.M. Johnst. ex M. Peck [HC, HC2]
Man. Pl. Oregon 609. 1941.
fragrant popcorn-flower

Allocarya figurata Piper [Abrams]

var. *figuratus* [HC2]
fragrant popcorn-flower

Plagiobothrys figuratus (Piper) I.M. Johnst. ex M. Peck ssp. *figuratus*
Plagiobothrys hirtus (Greene) I.M. Johnst. var. *figuratus* (Piper) I.M. Johnst.

Plagiobothrys hispidulus (Greene) I.M. Johnst. [HC2, JPM]

Contr. Arnold Arbor. 3: 71. 1932.
harsh popcorn-flower
(see also *Plagiobothrys cognatus*, *Plagiobothrys cusickii*)

Allocarya hispidula Greene
Plagiobothrys scouleri (Hook. & Arn.) I.M. Johnst. var. *hispidulus* (Greene) Dorn

Plagiobothrys leptocladus (Greene) I.M. Johnst. [HC, HC2]
Contr. Arnold Arbor. 3: 38. 1932.
alkali popcorn-flower, slender-branched popcorn-flower

Plagiobothrys nothofulvus (A. Gray) A. Gray [HC, HC2]
Proc. Amer. Acad. Arts xx. 285. 1885.
rusty popcorn-flower

Plagiobothrys scouleri (Hook. & Arn.) I.M. Johnst. [HC, HC2]
Contr. Gray Herb. 68: 75. 1923.
Scouler's popcorn flower
(see also *Plagiobothrys cognatus*, *Plagiobothrys cusickii*, *Plagiobothrys hispidulus*)

Allocarya granulata Piper
Allocarya scouleri (Hook. & Arn.) Greene
Plagiobothrys granulatus (Piper) I.M. Johnst.
Plagiobothrys scouleri (Hook. & Arn.) I.M. Johnst. var. *scouleri* [HC]

Plagiobothrys tenellus (Nutt. ex Hook.) A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 20: 283. 1885.
Pacific popcorn-flower, slender popcorn-flower

Plagiobothrys asper Greene

**Pulmonaria*

**Symphytum* [HC, HC2]
comfrey

**Symphytum asperum* Lepech. [HC, HC2]
Ber. Thätigk. St. Gallischen Naturwiss. Ges. 1876--77: 296 (Gen. Sp. Musc. 2: 1114). 1878.
prickly comfrey, rough comfrey
(see also *Symphytum uplandicum*)

Symphytum asperrimum Donn ex Sims

**Symphytum officinale* L. [HC, HC2]
Sp. Pl. 1: 136. 1753.
common comfrey

**Symphytum ×uplandicum* Nyman [HC2, Stace 1997]
Syll. Fl. Eur. 80. 1855.
hybrid comfrey

Brassicaceae [FNA7, HC2] Mustard Family

Synonyms:
Cruciferae [HC]

Our taxonomy and nomenclature follows the treatments of Flora of North America Vol. 7 (2010) and Rollins (1993a, 1993b, 1993c), unless otherwise noted.

**Alliaria* [FNA7, HC, HC2]
Enum. 161. 1759.

garlic mustard

**Alliaria petiolata* (M. Bieb.) Cavara & Grande [FNA7, HC2]
Bull. Orto Bot. Regia Univ. Napoli. 3: 418. 1913.
garlic mustard

Alliaria officinalis Andrz. ex M. Bieb. [HC]

**Alyssum* [FNA7, HC, HC2]
Sp. Pl. 2: 650. 1753; Gen. Pl. ed. 5, 293. 1754.
alyssum

**Alyssum alyssoides* (L.) L. [FNA7, HC, HC2]
Syst. Nat. ed. 10. 2: 1130. 1759.
small alyssum, pale madwort

**Alyssum desertorum* Stapf [FNA7, HC, HC2]
Denkschr. Kaiserl. Akad. Wiss., Wien. Math.-Naturwiss. Kl. 51: 302. 1886.
desert alyssum

Arabidopsis [FNA7, HC, HC2]
Fl. Sachsen. 1: 538. 1842.
[name conserved]
mouse-ear cress, thale cress

Arabidopsis kamchatica (Fisch. ex DC.) K. Shimizu & Kudoh [HC2]
Acta Phytotax. Geobot. 56(2): 167. 2005.
kamchatka rockcress, lyre-leaved rockcress, western rockcress
(= *Arabidopsis halleri ssp. gemmifera* × *Arabidopsis lyrata ssp. petraea*)

Arabidopsis lyrata (L.) O?Kane & Al-Shehbaz [FNA7], misapplied
Arabidopsis lyrata (L.) O?Kane & Al-Shehbaz ssp. *kamchatica* (Fisch. ex DC.) O?Kane & Al-Shehbaz [FNA7]
Arabis kamchatica (Fisch. ex DC.) Ledeb. [KZ99]
Arabis lyrata L. var. *kamchatica* Fisch. ex DC. [HC]
Arabis lyrata L. var. *occidentalis* S. Watson

FNA7: "G. A. Mulligan (1996) treated subsp. kamchatica as a species of Arabis; R. C. Rollins (1993) treated it as a variety of A. lyrata."

**Arabidopsis thaliana* (L.) Heynh. [FNA7, HC, HC2]
Fl. Sachsen. 1: 538. 1842.
mouse-ear cress, thalecress

Arabis [FNA7, HC, HC2]
Sp. Pl. 2: 664. 1753; Gen. Pl. ed. 5, 298. 1754.
rockcress
(see also *Arabidopsis*, *Boechera*, *Turritis*)

**Arabis caucasica* Willd. [FNA7, HC2]
Enum. Pl., Suppl. 45. 1814.
mountain rockcress

In Washington known only as a garden escape in San Juan County.

Arabis crucisetosa Constance & Rollins [FNA7, HC, HC2]
Proc. Biol. Soc. Wash. 49: 147. 1936.
crosshaired rockcress

FNA7: "Arabis crucisetosa is known from Idaho, Lewis, and Nez Perce counties in Idaho, from Wallowa County in Oregon, and from Asotin County in Washington."

Arabis eschscholtziana Andrz. [FNA7, HC2]
Fl. Altaica. 3: 25. 1831.
hairy rockcress, Pacific coast rockcress

Arabis hirsuta (L.) Scop. [HC], misapplied
Arabis hirsuta (L.) Scop. var. *eschscholtziana* (Andrz.) Rollins [HC]
Arabis hirsuta (L.) Scop. var. *glabrata* Torr. & A. Gray [HC]

FNA7: " G. A. Mulligan (1996) recognized Arabis eschscholtziana as a distinct species; R. C. Rollins (1941, 1993) treated it as a variety of A. hirsuta. As discussed under A. pycnocarpa, A. hirsuta does not occur in North America, and the characters separating all three species (see key to species), as well as the different ploidy levels, support Mulligan\\'s conclusion. Both M. Hopkins (1937) and R. C. Rollins (1941, 1993) recognized the glabrous or subglabrate forms native to North America as a distinct variety, var. glabrata; G. A. Mulligan (1996) did not accord such forms any taxonomic status. Glabrous and subglabrate forms occur in both Arabis eschscholtziana and A. pycnocarpa and sometimes even within a population that has moderately to densely pubescent forms. I support Mulligan\\'s view in not recognizing the glabrous forms as an infraspecific taxon."

Arabis furcata S. Watson [FNA7, HC, HC2]
Proc. Amer. Acad. Arts. 17: 362. 1882.
Cascade rockcress, Columbia Gorge rockcress, fork-haired rockcress

Arabis furcata S. Watson var. *furcata* [KZ99]
Arabis suksdorfii Howell

Although accepted by Rollins (1993b), A. furcata var. olympica, a Washington endemic, is known only from the type collection, which apparently was from a single depauperate and anomalous plant and may be synonymous with A. hirsuta var. glabrata (VPPN2; Buckingham et al. 1995). FNA7: "Arabis furcata is known in Washington from Chelan, Kittitas, Klickitat, Okanogan, Skamania, and Yakima counties, and in Oregon from Clackamas, Hood River, Multnomah, and Wasco counties."

Arabis nuttallii (Kuntze) B.L. Rob. [FNA7, HC, HC2]
Syn. Fl. N. Amer. 1(1,1): 160. 1895.
Nuttall's rockcress

Arabis bridgeri M.E. Jones
Arabis macella Piper [Abrams]
Erysimum nuttallii Kuntze

Arabis olympica Piper [FNA7, HC2]
Contr. U.S. Natl. Herb. 16: 208. 1913.
Olympics rockcress

Arabis furcata S. Watson var. *olympica* (Piper) Rollins [Rollins 1993a]

FNA7: "Arabis olympica, which is known from two collections, J. B. Flett s.n. (holotype, US; isotype, WS) and N. Buckingham 1577 (WS) that were made from Jefferson and Clallam counties, respectively, was reduced by R. C. Rollins (1936, 1941, 1993) to a variety of A. furcata. An examination of the type collections of both species reveals that they are distinct. Although the fruits and seeds of A. olympica are not fully mature, they are clearly different in width and orientation from those of A. furcata at the same developmental stage. The striking differences in fruit width and orientation, stem indument, and seed and flower size support their maintenance as distinct species. Although both species grow in Washington, the range of A. olympica seems to be restricted to Clallam and Jefferson counties and is disjunct from Chelan, Kittitas, and Yakima counties, where A. furcata grows."

**Armoracia* B. Mey. & Scherbius [FNA7, HC2]
Oekon. Fl. Wetterau. 2: 426. 1800.
horseradish

**Armoracia rusticana* P. Gaertn., B. Mey. & Scherb. [FNA7, HC2]
Oekon. Fl. Wetterau. 2: 426. 1800.
horseradish

Rorippa armoracia (L.) A.S. Hitchc. [HC]

Athysanus [FNA7, HC, HC2]
Bull. Calif. Acad. Sci. 1: 72. 1885.
athysanus, sandweed

Athysanus pusillus (Hook.) Greene [FNA7, HC, HC2]
Bull. Calif. Acad. Sci. 1: 72. 1885.
sandweed

Athysanus pusillus (Hook.) Greene var. *glabrior* S. Watson
Thysanocarpus oblongifolius Nutt.
Thysanocarpus pusillus Hook.

**Aubrieta* [FNA7, HC2]
Fam. Pl. 2: 420. 1763.

**Aubrieta deltoidea* (L.) DC. [FNA7, HC2]
Syst. Nat. 2: 294. 1821.
rockcress

Barbarea [FNA7, HC, HC2]
Hortus Kew. 4: 109. 1812.
[name conserved]
wintercress

Barbarea orthoceras Ledeb. [FNA7, HC, HC2]
Index Seminum (Dorpat). 2. 1824.
American wintercress rocket, yellow rocket

Barbarea americana Rydb. [Abrams]
Barbarea orthoceras Ledeb. var. *dolichocarpa* Fernald [Peck]
Barbarea stricta Andrz. [FNA7], misapplied
Campe orthoceras (Ledeb.) A. Heller

**Barbarea verna* (Mill.) Asch. [FNA7, HC, HC2]
Fl. Brandenb. 1: 36. 1860.
Belle Isle cress, land cress, early yellow rocket, scurvygrass, early wintercress

Barbarea praecox (Sm.) R. Br.
Campe verna (Mill.) A. Heller
Erysimum praecox Sm.
Erysimum vernum Mill.

**Barbarea vulgaris* W.T. Aiton [FNA7, HC, HC2]
Hortus Kew. 4: 109. 1812.
yellow rocket, bitter wintercress

Barbarea arcuata (Opiz ex C. Presl) Rchb.
Barbarea vulgaris W.T. Aiton var. *arcuata* (Opiz ex C. Presl) Fr.
Barbarea vulgaris W.T. Aiton var. *brachycarpa* Rouy & Foucaud [Peck]
Erysimum arcuatum Opiz ex C. Presl
Erysimum barbarea L.

**Berteroa* [FNA7, HC, HC2]
Mém. Mus. Hist. Nat. 7: 232: 290. 1821.
berteroa

**Berteroa incana* (L.) DC. [FNA7, HC, HC2]
Syst. Nat. 2: 291. 1821.
hoary alyssum

Alyssum incanum L.

Boechera [FNA7, HC2]
Bot. Not. 128: 513. 1976.
rockcress

Boechera atrorubens (Suksd. ex Greene) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 64. 2006.

dark-red-flowered rockcress

Arabis atrorubens Suksd. ex Greene [Abrams]
Arabis sparsiflora Nutt. var. *atrorubens* (Suksd. ex Greene) Rollins [HC]

FNA7: "Boechera atrorubens is often treated as a variety of B. sparsiflora (e.g., R. C. Rollins 1993), it is readily separated from that species by having proximal stems sparsely (versus densely) pubescent with much smaller (0.15 versus 1.5 mm) trichomes. The two taxa rarely grow in proximity and, in areas where they are sympatric, B. atrorubens is further distinguished by its narrower (1.5-2 versus 2-5 mm) petals that are dark reddish purple to indigo (versus lavender or white)."

Boechera calderi (G.A. Mulligan) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 259. 2007.
Calder's rockcress

Arabis calderi G.A. Mulligan

FNA7: "Morphological evidence suggests that Boechera calderi is an apomictic species that arose through hybridization between B. lyallii and B. stricta (see M. D. Windham and I. A. Al-Shehbaz 2007 for detailed comparison)."

Boechera cascadensis Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 260. 2007.
Cascades rockcress

Arabis microphylla Nutt. var. *thompsonii* Rollins [KZ99]

FNA7: "Morphological evidence suggests that Boechera cascadensis is an apomictic species that arose through hybridization between B. microphylla and B. paupercula (see M. D. Windham and I. A. Al-Shehbaz 2007 for detailed comparison). It is known from two collections: the type specimens from Kittitas County, Washington, and a more recent collection from Baker County, Oregon."

Boechera cusickii (S. Watson) Al-Shehbaz [FNA7, HC2]
Novon. 13: 384. 2003.
Cusick's rockcress

Arabis cusickii S. Watson [HC]

FNA7: "Peripheral populations of Boechera cusickii in south-central Idaho and northern Nevada have a higher proportion of branched hairs, possibly resulting from hybridization with B. sparsiflora."

Boechera divaricarpa (A. Nelson) Á. Löve & D. Löve [FNA7, HC2]
Bot. Not. 128: 513. 1976.
spreading-pod rockcress

Arabis ×*divaricarpa* A. Nelson [HC, Rollins 1993a]
Arabis divaricarpa A. Nels. var. *divaricarpa* [VPPNW2]

FNA7: "The name Arabis (Boechera) divaricarpa has been applied to nearly every hybrid containing a genome derived from B. stricta. This presents a serious barrier to understanding the evolution of Boechera and also is contrary to the International Code of Botanical Nomenclature, because some names usually placed in synonymy (i.e., B. grahamii and B. brachycarpa) have priority at species level (M. D. Windham and I. A. Al-Shehbaz 2007b). To address this problem, we treat the following as distinct species: B. acutina, B. grahamii (= B. brachycarpa of R. D. Dorn 2001), and B. pratincola (all considered synonyms of A. divaricarpa by R. C. Rollins 1993), and B. calderi, B. elkoensis, and B. quebecensis (taxa described after 1993). Detailed comparison among these taxa are provided by Windham and Al-Shehbaz (2007, 2007b). The narrow concept of B. divaricarpa advocated here encompasses apomictic triploid populations containing three distinct genomes, one each derived from B. retrofracta, B. sparsiflora, and B. stricta. If the species is defined more broadly, the name B. grahamii has priority."

Boechera grahamii (Lehm.) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 12: 241. 2007.
Graham's rockcress

Arabis dacotica Greene

NA7: "Morphological evidence suggests that Boechera grahamii is an apomictic species that arose through hybridization between B. collinsii and B. stricta. Previous authors have assigned these specimens to Arabis

(Boechera) divaricarpa (see M. D. Windham and I. A. Al-Shehbaz 2007b for detailed comparison); if these taxa are treated as conspecific, the name B. grahamii has priority."

Boechera lemmonii (S. Watson) W.A. Weber [FNA7, HC2]
Phytologia. 51: 370. 1982.
Lemmon's rockcress
(see also *Boechera drepanoloba*, *Boechera paddoensis*)

Arabis lemmonii S. Watson [HC, Peck]
Arabis lemmonii S. Watson var. *lemmonii* [HC]

FNA7: "Boechera lemmonii is easily recognized by its combination of secund fruits, mat-forming habit, purplish sepals, and obovate-oblanceolate cauline leaves. Both sexual and apomictic collections are known; further study is needed to determine whether they truly are conspecific. The taxa traditionally treated as Arabis (Boechera) lemmonii vars. depauperata, drepanoloba, and paddoensis are apomictic hybrids here recognized as distinct species (see M. D. Windham and I. A. Al-Shehbaz 2007 for detailed comparison)."

Boechera lyallii (S. Watson) Dorn [FNA7, HC2]
Vasc. Pl. Wyoming ed. 3. 376. 2001.
Lyall's rockcress, murry's rockcress

Arabis lyallii S. Watson [HC]
Arabis lyallii S. Watson var. *lyallii* [KZ99]
Arabis murrayi G.A. Mulligan

FNA7: "Completely glabrous individuals of B. lyallii are sometimes confused with B. davidsonii, but they are easily distinguished by the absence of persistent leaf bases on caudex branches, erect and appressed (versus ascending) fruits, and biseriate to sub-biseriate (versus uniseriate) seeds. Both sexual and apomictic collections are known; further study is needed to determine whether they truly are conspecific."

Boechera microphylla (Nutt.) Dorn [FNA7, HC2]
Vasc. Pl. Wyoming ed. 3. 376. 2001.
little-leaf rockcress, small-leaved rockcress

Arabis microphylla Nutt. [HC]
Arabis microphylla Nutt. var. *microphylla* [HC]

FNA7: "Boechera microphylla is recognizable by its minute (0.05-0.1 mm), 4-8-rayed leaf trichomes, mat-forming habit, simple and 2-rayed trichomes on stems proximally, and ascending fruits. Both sexual and apomictic collections are known; further study is needed to determine whether they truly are conspecific. The taxa traditionally treated as Arabis (Boechera) microphylla vars. macounii and thompsonii are here recognized as B. macounii and B. cascadensis, respectively (see M. D. Windham and I. A. Al-Shehbaz 2007 for detailed comparison)."

Boechera paddoensis (Rollins) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 268. 2007.
Mt. Adams rockcress

Arabis lemmonii S. Watson var. *paddoensis* Rollins [HC]

FNA7: "Morphological evidence suggests that Boechera paddoensis is an apomictic species that arose through hybridization between B. lemmonii and B. lyallii (see M. D. Windham and I. A. Al-Shehbaz 2007 for detailed comparison). Boechera paddoensis is known only from the mountains of central Washington and northeastern Oregon."

Boechera pauciflora (Nutt.) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 268. 2007.
Columbia rockcress, few-flowered rockcress, small-flowered rockcress

Arabis sparsiflora Nutt. var. *columbiana* (Macoun) Rollins [HC]
Arabis sparsiflora Nutt. var. *subvillosa* (S. Watson) Rollins [HC]
Boechera holboellii (Hornem.) Á. Löve & D. Löve [FNA7], misapplied
Check which accepted taxa occur in StateProvince.
Boechera pinetorum (Tidestr.) Windham & Al-Shehbaz [FNA7, HC2], misapplied

FNA7: "Morphological evidence suggests that Boechera pauciflora is an apomictic species that arose

through hybridization between B. retrofracta and B. sparsiflora. Specimens of B. pauciflora are commonly identified as Arabis holboellii var. pinetorum (= B. pinetorum), a superficially similar species restricted to the northern Sierra Nevada and southern Cascade Range (see M. D. Windham and I. A. 2007 for detailed comparison). Arabis elegans A. Nelson (1900), not Tineo & Lojacono (1886) is an illegitimate name, sometimes found in synonymy with Boechera pauciflora." "Most authors (e.g., R. C. Rollins 1993; R. D. Dorn 2001; S. L. Welsh et al. 2003; N. H. Holmgren 2005b) have treated Boechera pinetorum as a variety of Arabis (Boechera) holboellii. Under this guise, the name has been applied to a vast array of plants collected throughout western North America. This includes a diversity of sexual diploids plus nearly every hybrid containing a genome from B. retrofracta. Based on re-examination of the type collection, we have adopted a much narrower concept of the species. Morphological evidence suggests that B. pinetorum is an apomictic triploid hybrid containing three different genomes, derived from B. rectissima, B. retrofracta, and B. sparsiflora. Plants closely resembling the type of B. pinetorum are confined to the northern Sierra Nevada and adjacent southern Cascades. The majority of collections previously associated with the epithet pinetorum represent B. pauciflora (see M. D. Windham and I. A. Al-Shehbaz 2007 for detailed comparison)."

Boechera paupercula (Greene) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 75. 2006.
small-flowered rockcress

Arabis lyallii S. Watson var. *nubigena* (J.F. Macbr. & Payson) Rollins

FNA7: "Boechera paupercula is usually subsumed under Arabis (Boechera) lyallii but is amply distinct (see M. D. Windham and I. A. Al-Shehbaz 2006 for detailed comparison)."

Boechera pendulocarpa (A. Nelson) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 77. 2006.
dangle-pod rockcress

Arabis holboellii Hornem. var. *pendulocarpa* (A. Nelson) Rollins [HC]
Boechera holboellii (Hornem.) Á. Löve & D. Löve [FNA7], misapplied
Check which accepted taxa occur in StateProvince.

FNA7: "Though often treated as a variety of Arabis (Boechera) holboellii (e.g., R. C. Rollins 1993), B. pendulocarpa is easily distinguished from that species by having simple and 2-4-rayed (versus 4-8-rayed) trichomes proximally on stems, cauline leaves without auricles, fruiting pedicels gently (versus sharply) recurved, and shorter (2-)2.5-3.8 (versus 3.5-6.5) cm, non-secund fruits. The two taxa have allopatric distributions, with B. pendulocarpa found in the mountains of western North America and B. holboellii apparently confined to Greenland. Recent use of the name A. (Boechera) exilis for this taxon (e.g., G. A. Mulligan 1996; R. D. Dorn 2001; N. H. Holmgren 2005b) is based on misinterpretation of the type (M. D. Windham and I. A. Al-Shehbaz 2006)."]

Boechera polyantha (Greene) Windham & Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 11: 78. 2006.
many-flowered rockcress

Boechera puberula (Nutt.) Dorn [FNA7, HC2]
Brittonia. 55: 3. 2003.
Blue Mountain rockcress, hoary rockcress

Arabis puberula Nutt. [HC]

FNA8: "Boechera puberula is a diploid species that appears to intergrade with both B. retrofracta and B. subpinnatifida. The glabrous-fruited specimens discussed by R. C. Rollins (1993) represent apomictic hybrids with other species, primarily B. pendulocarpa."

Boechera retrofracta (Graham) Á. Löve & D. Löve [FNA7, HC2]
Taxon. 31: 125. 1982.
reflexed rockcress

Arabis exilis A. Nelson [ILBC2]
Arabis holboellii Hornem. var. *retrofracta* (Graham) Rydb. [HC]
Arabis holboellii Hornem. var. *secunda* (Howell) Jeps. [ILBC2]
Arabis retrofracta Graham
Arabis secunda Howell [Abrams]

Boechera holboellii (Hornem.) Á. Löve & D. Löve [FNA7], misapplied
Check which accepted taxa occur in StateProvince.

FNA7: "Though often treated as a variety of Arabis (Boechera) holboellii (e.g., R. C. Rollins 1993; G. A. Mulligan 1996; N. H. Holmgren 2005b), B. retrofracta is easily distinguished from that species by having narrower (0.9-1.8 versus 2-2.5 mm), mostly non-secund fruits that are almost always appressed to rachises. The two taxa have allopatric distributions, with B. retrofracta found on the North American continent (mostly west of the Great Plains) and B. holboellii apparently confined to Greenland. Boechera retrofracta has formed hybrids with at least 12 other species. Besides differing in macromorphological characters, all those hybrids are distinct from B. retrofracta in the strict sense in having wider (20-30 versus 13-16 Âµm), spheroid pollen grains with asymmetric colpi. Arabis kochii Blankinship is an illegitimate name, sometimes found in synonymy with Boechera retrofracta."

Boechera sparsiflora (Nutt.) Dorn [FNA7, HC2]
Vasc. Pl. Wyoming ed. 3. 376. 2001.
elegant rockcress, slender rockcress
(see also *Boechera atrorubens*, *Boechera pauciflora*)

Arabis arcoidea A. Nelson
Arabis campyloloba Greene [Abrams]
Arabis peramoena Greene
Arabis polytricha Greene
Arabis sparsiflora Nutt. [HC]
Arabis sparsiflora Nutt. var. *peramoena* (Greene) Rollins
Arabis sparsiflora Nutt. var. *sparsiflora* [HC]

FNA7: "As circumscribed by R. C. Rollins (1993), Boechera sparsiflora included six varieties encompassing three sexual diploids and a number of apomictic hybrids. The most distinctive of those elements are recognized here as the separate species B. arcuata, B. atrorubens, B. californica, and B. pauciflora. The narrow circumscription of B. sparsiflora adopted here includes only sexual diploids. It is distinguished from other taxa previously assigned to it by having proximal stems densely pubescent with predominantly simple (some 2-rayed) trichomes to 1.5 mm, usually glabrous distal stems, and ascending fruiting pedicels with spreading, usually simple trichomes (rarely glabrous)."

Boechera stricta (Graham) Al-Shehbaz [FNA7, HC2]
Novon. 13: 389. 2003.
Canadian rockcress, Drummond's rockcress

Arabis albertina Greene
Arabis connexa Greene
Arabis drummondii A. Gray [HC]

FNA7: "Arabis drummondii is the correct name for this species in that genus; the epithet stricta has priority in Boechera. This very distinctive species is easily recognized by having basal leaves with branched trichomes, all sessile and 2-rayed (malpighiaceous). It is also the most promiscuous, having formed apomictic hybrids with at least 15 other species of Boechera."

Boechera suffrutescens (S. Watson) Dorn [FNA7, HC2]
Brittonia. 55: 3. 2003.
woody rockcress

Arabis suffrutescens S. Watson [HC]

FNA7: "Boechera suffrutescens is recognizable by its prominently suffrutescent habit and wide (greater than 3 mm), reflexed fruits. Both sexual and apomictic collections are known; further study is needed to determine whether they truly are conspecific. The taxon previously known as Arabis suffrutescens var. horizontalis appears to be of hybrid origin; it is treated here as a distinct species (see M. D. Windham and I. A. Al-Shehbaz 2007 for detailed comparison)."

**Brassica* [FNA7, HC, HC2]
Sp. Pl. 2: 666. 1753; Gen. Pl. ed. 5, 299. 1754.
cabbage, mustard
(see also *Sinapis*)

*_Brassica juncea_ (L.) Czern. [FNA7, HC, HC2]
Consp. Pl. Charcov. 8. 1859.
brown mustard, leaf mustard

Brassica japonica (Thunb.) Siebold ex Miq.
Brassica juncea (L.) Czern. var. _crispifolia_ L.H. Bailey [VPPNW2]
Brassica juncea (L.) Czern. var. _juncea_ [VPPNW2]
Sinapis juncea L.

Czernov published this combination in January 1859, making superfluous the same combination by Cosson, published post-August 1859. FNA7: "Brassica juncea is cultivated in North America primarily as a vegetable and condiment, and is currently being developed as an oilseed crop in western Canada. Its greatest diversity of forms occurs in Asia, where the species is widely cultivated as a vegetable and as an oilseed crop (I. A. Al-Shehbaz 1985). Two main variants are distinguished on the basis of seed color: oriental mustard is yellow-seeded, and brown or Indian mustard is brown-seeded. The species is an allotetraploid derived from hybridization between B. nigra (n = 8) and B. rapa (n = 10). Its center of origin is uncertain but is most likely the Middle East, with possibly independent multiple origins within overlapping ranges of the putative parental taxa (S. I. Warwick and A. Francis 1994)."

*_Brassica napus_ L. [FNA7, HC2]
Sp. Pl. 2: 666. 1753.
rapeseed

Brassica napobrassica (L.) Mill.

Known in Washington mostly from old collections in Bingen, Klickitat Co. FNA7: "Brassica napus is both a crop and a sporadically occurring naturalized weed in North America, grown in two forms recognized by some as subspecies. Subspecies napus (rape, rapeseed, or canola) is an annual with slender roots widely cultivated as an oil crop and is the most commonly naturalized. Subspecies rapifera Metzger [= subsp. napobrassica (Linnaeus) Hanelt] (rutabaga, swede, or Swedish turnip) is a biennial with fleshy roots that rarely escapes from cultivation. Brassica napus is an allotetraploid derived from hybridization between the B. oleracea complex (n = 9) and B. rapa (n = 10). Its center of origin is uncertain but likely Mediterranean Europe, with molecular data supporting evidence of multiple independent origins between the parental taxa B. oleracea and B. rapa and its related n = 9 species (Song K. et al. 1993). Specimens from West Virginia have not been observed."

*_Brassica nigra_ (L.) W.D.J. Koch [WTU]
Deutschl. Fl. ed. 3. 4: 713. 1833.
black mustard

Mutarda nigra Bernh.
Sinapis nigra L.

*_Brassica oleracea_ L. [FNA7, HC2]
Sp. Pl. 2: 667. 1753.
cabbage, wild cabbage

Brassica oleracea L. var. _oleracea_ [Stace 1997]

Reported from Olympic Peninsula (Buckingham et al. 1995). FNA7: "Brassica oleracea is widely cultivated worldwide as a vegetable crop, and its various forms are generally recognized as varieties instead of subspecies; these include var. acephala de Candolle (kale and collards), var. botrytis Linnaeus (cauliflower), var. capitata Linnaeus (cabbage), var. gemmifera Zenk (Brussels sprouts), var. gongylodes Linnaeus (kohlrabi), and var. italica Plenk (broccoli). It also occurs sporadically as a weedy escape from cultivation and seems unlikely to persist for long periods of time. It is reported to be naturalized on coastal cliffs (maritime slopes) in the northern Central Coastal Region and the central and southern North Coastal Region in California (Marin, San Francisco, San Mateo, Santa Barbara, and Ventura counties) (J. T. Howell et al. 1958; Howell 1970; H. G. Baker 1972; R. C. Rollins 1993b)."

*_Brassica rapa_ L. [FNA7, HC2]
Sp. Pl. 2: 666. 1753.
common mustard, field mustard, wild turnip

Brassica campestris L. [HC]
Brassica rapa L. ssp. _campestris_ (L.) Clapham [Stace 1997]

Brassica rapa L. var. *rapa* [KZ99]

**Cakile* [FNA7, HC, HC2]
Gard. Dict. Abr. ed. 4. vol. 1. 1754.
searocket

**Cakile edentula* (Bigelow) Hook. [FNA7, HC, HC2]
Fl. Bor.-Amer. 1: 59. 1830.
American sea-rocket

**var. edentula* [FNA7, HC2, KZ99]
Fl. Bor.-Amer. (Hooker) 1(2): 59. 1830.
American sea-rocket

Cakile edentula (Bigelow) Hook. var. *californica* (A. Heller) Fernald [Peck]

C. edentula, dispersed by the sea, moved 2000 miles, from its point of introduction in San Francisco, to Kodiak Island, Alaska, in 50 years (Barbour & Rodman 1970).

**Cakile maritima* Scop. [FNA7, HC, HC2]
Fl. Carniol. ed. 2. 2: 35. 1772.
European sea-rocket

Bunias cakile L.

Ours is the subspecies maritima. FNA7: "Subspecies maritima is naturalized in Pacific North America (M. G. Barbour and J. E. Rodman 1970); it is also reported on the eastern shores of Chesapeake Bay, Maryland."

**ssp. maritima* [FNA7, HC2]
Fl. Carniol. ed. 2. 2: 35. 1772.
European sea-rocket

**Camelina* [FNA7, HC, HC2]
Stirp. Austr. Fasc. 1: 17. 1762.
falseflax

**Camelina microcarpa* Andrz. ex DC. [FNA7, HC, HC2]
Syst. Nat. 2: 517. 1821.
hairy false flax, littlepod false flax

Camelina sativa (L.) Crantz ssp. *microcarpa* (Andrz. ex DC.) Em. Schmid

**Capsella* [FNA7, HC, HC2]
Pfl.-Gatt. 85. 1792.
[name conserved]
shepherd's-purse

**Capsella bursa-pastoris* (L.) Medik. [FNA7, HC, HC2]
Pfl.-Gatt. 85. 1792.
shepherd's-purse

Capsella rubella Reut.

FNA7: "According to M. Coquillat (1951), Capsella bursa-pastoris is the second most common weed on earth, after Polygonum aviculare."

Cardamine [FNA7, HC, HC2]
Sp. Pl. 2: 654. 1753; Gen. Pl. ed. 5, 295. 1754.
bittercress, toothwort

Cardamine angulata Hook. [FNA7, HC, HC2]
Fl. Bor.-Amer. 1: 44. 1829.
angled bittercress, seaside bittercress

Cardamine angulata Hook. var. *alba* Torr. & A. Gray
Cardamine angulata Hook. var. *hirsuta* O.E. Schulz

Cardamine angulata Hook. var. *pentaphylla* O.E. Schulz
Dentaria grandiflora Raf.

Cardamine bellidifolia L. [FNA7, HC, HC2]
Sp. Pl. 2: 654. 1753.
alpine bittercress

Cardamine bellidifolia L. var. *bellidifolia* [HC]
Cardamine bellidifolia L. var. *pachyphylla* Coville & Leiberg [HC]

Cardamine breweri S. Watson [FNA7, HC, HC2]
Proc. Amer. Acad. Arts. 10: 339. 1875.
Brewer's bittercress

Cardamine breweri S. Watson var. *breweri* [HC]
Cardamine breweri S. Watson var. *leibergii* (Holz.) C.L. Hitchc. [HC]
Cardamine breweri S. Watson var. *orbicularis* (Greene) Detling [HC]
Cardamine breweri S. Watson var. *oregana* (Piper) Detling
Cardamine callosicrenata Piper
Cardamine foliacea Greene
Cardamine oregana Piper

Cardamine cordifolia A. Gray [FNA7, HC, HC2]
Mem. Amer. Acad. Arts, n. s. 4: 8. 1849.
heart-leaved bittercress, large mountain bittercress, Lyall's bittercress

Cardamine cordifolia A. Gray var. *cordifolia* [HC]
Cardamine cordifolia A. Gray var. *lyallii* (S. Watson) A. Nelson & J.F. Macbr. [HC]
Cardamine lyallii S. Watson

FNA7: "Cardamine cordifolia is highly variable in leaf morphology, especially in leaf width, depth of the cordate base, and indumentum. This variation occurs throughout the species range and is rather weakly or not at all correlated with geography. In the absence of a detailed biosystematic study over the entire species range, we follow N. H. Holmgren (2005b) in not recognizing any infraspecific taxa, instead of accepting the three rather poorly defined varieties recognized by R. C. Rollins (1993)."

**Cardamine flexuosa* With. [FNA7, HC2]
Arr. Brit. Pl. ed. 3. 3: 578. 1796.
wavy bittercress

Cardamine flexuosa With. ssp. *debilis* O.E. Schulz
Cardamine flexuosa With. var. *debilis* (O.E. Schulz) T.Y. Cheo & R.C. Fang
Cardamine hirsuta L. ssp. *flexuosa* (With.) F.B. Forbes & Hemsl.
Cardamine scutata Thunb. ssp. *flexuosa* (With.) H. Hara

Easily mistaken for native C. pensylvanica. FNA7: "According to J. Lihová et al. (2006), the populations referred to Cardamine flexuosa in North America comprise two taxa of different polyploid origins and evolutionary histories: tetraploid C. flexuosa (2n = 32), native to Europe, and the octoploid taxon informally called "Asian C. flexuosa" (2n = 64), native to eastern Asia. For the latter, the name C. flexuosa subsp. debilis can be used. Nevertheless, these two taxa should be recognized at species level and the correct name for the Asian species should be sought. Based on available data, both taxa occupy the same habitats in North America, but the Asian taxon is much more widespread. The occurrence of European C. flexuosa was, until now, confirmed only for Washington, where both taxa have been recorded. More detailed studies of the North American distributions of both these weeds are needed."

**Cardamine hirsuta* L. [FNA7, HC2]
Sp. Pl. 2: 655. 1753.
hairy bittercress, shotweed

Common weed in lowland western Washington, easily mistaken for native C. oligosperma.

Cardamine nuttallii Greene [FNA7, HC2]
Bull. Calif. Acad. Sci. 2: 389. 1887.
beautiful bittercres, Nuttall's toothwort, slender toothwort

Cardamine nuttallii Greene var. *covilleana* (O.E. Schulz) Rollins

Cardamine nuttallii Greene var. *dissecta* (O.E. Schulz) Rollins
Cardamine nuttallii Greene var. *gemmata* (Greene) Rollins [KZ99]
Cardamine nuttallii Greene var. *nuttallii* [Rollins 1993a]
Cardamine pulcherrima Greene [HC]
Cardamine pulcherrima Greene var. *pulcherrima* [HC]
Cardamine pulcherrima Greene var. *tenella* (Pursh) C.L. Hitchc. [HC]
Cardamine quercetorum Howell
Dentaria tenella Pursh var. *pulcherrima* (Greene) Detling [Peck]

FNA7: "The infraspecific taxonomy of Cardamine nuttallii has been based almost entirely on the division and margin of rhizomal leaves. The treatments by O. E. Schulz (1903), L. E. Detling (1937), and R. C. Rollins (1993), though utilizing the same characters, varied considerably, especially in the application of names to varieties. The absence of rhizomal leaves on most specimens makes varietal determination an almost impossible task. Furthermore, leaf morphology is so highly variable that it is not useful for formally recognizing some of the other variants in the species. We therefore prefer to not subdivide the species."

Cardamine occidentalis (S. Watson) Howell [FNA7, HC, HC2]
Fl. N.W. Amer. 50. 1897.
western bittercress

Cardamine neglecta Greene
Cardamine pratensis L. ssp. *occidentalis* S. Watson

Washington reports and specimens (WTU) called Cardamine penduliflora appear to be Cardamine occidentalis. They lack the diagnostic long petals and prolonged fruit beak of C. penduliflora, a western Oregon endemic.

**Cardamine occulta* Hornem. [HC2]
wood bittercress

Cardamine debilis D. Don, misapplied

Recently established in landscaping in King County, WA. Also known from Vancouver, BC, and as a greenhouse weed in Corvallis, OR. Often confused with or synonymized under C. flexuousa, a polyploid native to western Asia derived from C. amara x C. hirsuta. By contrast, c. occulta is apparently a polyploid derived from C. amara x C. parviflora and a third unknown species. The name Cardamine debilis has been misapplied to C. occulta in North America.

Cardamine oligosperma Nutt. [FNA7, HC, HC2]
Fl. N. Amer. 1: 85. 1838.
few-seeded bittercress, little western bittercress
(see also *Cardamine umbellata*)

Cardamine oligosperma Nutt. var. *oligosperma* [HC]

Cardamine pensylvanica Muhl. ex Willd. [FNA7, HC, HC2]
Sp. Pl. 3: 486. 1801.
Pennsylvania bittercress, quaker bittercress

Cardamine flexuosa With. ssp. *pensylvanica* (Muhl. ex Willd.) O.E. Schulz
Cardamine hirsuta L. var. *pensylvanica* (Muhl. ex Willd.) P.W. Graff
Dracamine pensylvanica (Muhl. ex Willd.) Nieuwl.

**Cardamine pratensis* L. [FNA7, HC2]
Sp. Pl. 2: 656. 1753.
cuckooflower

Cardamine pratensis L. var. *pratensis* [Rollins 1993a]

FNA7: "The taxonomy of Cardamine pratensis in North America requires further detailed study. Most, if not all, populations of this species were introduced from Europe. Some specimens resemble the European C. dentata Schultes (high polyploid, characterized by all leaves, including distalmost, pinnate with petiolate and sometimes deciduous leaflets) and these populations might be native."

Cardamine umbellata Greene [FNA7, HC2]
Pittonia. 3: 154. 1897.
Siberian bittercress, umbellate bittercress

Cardamine oligosperma Nutt. var. *kamtschatica* (Regel) Detling [HC]

FNA7: "Recent molecular data (J. Lihová et al. 2006) indicate that Cardamine umbellata, often treated as a variety of C. oligosperma, represents a distinct lineage more closely related to taxa from New Zealand; this does not exclude C. oligosperma as one of the possible parents of this polyploid."

Caulanthus [FNA7, HC, HC2]
Botany (Fortieth Parallel). 27, plate 3. 1871.
wild cabbage, caulanthus

Caulanthus lasiophyllus (Hook. & Arn.) Payson [FNA7, HC2]
Ann. Missouri Bot. Gard. 9: 303. 1923.
wild cabbage, California mustard

Caulanthus lasiophyllus (Hook. & Arn.) Payson var. *lasiophyllus* [Rollins 1993a]
Guillenia lasiophylla (Hook. & Arn.) Greene [JPM]
Thelypodium lasiophyllum (Hook. & Arn.) Greene [HC]
Thelypodium lasiophyllum (Hook. & Arn.) Greene var. *inalienum* B.L. Rob. [Abrams]
Thelypodium lasiophyllum (Hook. & Arn.) Greene var. *utahense* (Rydb.) Jeps. [Abrams]

FNA7: "Caulanthus lasiophyllus is highly variable in flower size, leaf morphology, fruit morphology (length, width, curvature, presence or absence of indumentum) and orientation, number of ovules per ovary, and plant height. This species is badly in need of thorough studies at both populational and molecular levels, and it is very likely that some varieties recognized by E. B. Payson (1923), such as var. rigidus, may well represent distinct species or subspecies." Last collections made in Washington in the 1940s, are held at PSM, and need verification.

**Chorispora* [FNA7, HC, HC2]
Mém. Mus. Hist. Nat. 7: 237. 1821.
[name conserved]
chorispora, blue mustard

**Chorispora tenella* (Pall.) DC. [FNA7, HC, HC2]
Syst. Nat. 2: 435. 1821.
crossflower, blue mustard

Chorisporum tenellum (Pall.) R. Br.
Raphanus tenellus Pall.

Cochlearia [FNA7, HC, HC2]
Sp. Pl. 2: 647. 1753; Gen. Pl. ed. 5, 292. 1754.
scurvygrass, spoonwort

Cochlearia groenlandica L. [FNA7, HC2]
Sp. Pl. 2: 647. 1753 1753.
scurvy-grass, Danish scurvygrass, spoonwort

Cochlearia arctica Schltdl. ex DC.
Cochlearia fenestrata R. Br.
Cochlearia officinalis L. [HC], misapplied
Cochlearia officinalis L. ssp. *oblongifolia* (DC.) Hultén [VPPNW2]
Cochlearia officinalis L. var. *arctica* (D.F.K. Schltdl. ex DC.) Gelert

FNA7: "R. C. Rollins (1993) treated the North American plants with 2n = 14 as members of Cochlearia officinalis. That species is a strictly European tetraploid with 2n = 24. In our opinion, plants of the arctic and subarctic C. groenlandica complex represent an evolutionary lineage with x = 7, which is entirely distinct from that including the European C. officinalis and its relatives with x = 6. The systematic relationships of the x = 7 group to the 2n = 14 Icelandic plants of the C. pyrenaica complex are still unresolved. The North American plants are extremely variable in flower size, petal shape, and fruit shape and size. They are much in need of detailed cytological, morphological, and molecular studies. Cochlearia groenlandica is known in California from nesting areas on off-shore rocks in Del Norte County; in Oregon it occurs on ocean bluffs in Coos and Curry counties (A. Liston, pers. comm.). It appears to be naturally occurring in both states."

*Conringia [FNA7, HC, HC2]
Enum. 160. 1759.
hare's-ear mustard

*Conringia orientalis (L.) Dumort. [FNA7, HC, HC2]
Fl. Belg. 123. 1827.
hare's-ear mustard, treacle mustard

Cusickiella [FNA7, HC2]
J. Jap. Bot. 63: 68. 1988.
cusickiella

Cusickiella douglasii (A. Gray) Rollins [FNA7, HC2]
J. Jap. Bot. 63: 69. 1988.
alkali false whitlow-grass, Douglas' whitlow-grass

Draba douglasii A. Gray [HC]

Descurainia [FNA7, HC, HC2]
Hist. Nat. Îsles Canaries. 3(2,3): 72. 1836.
[name conserved]
tansymustard

Descurainia incana (Bernh. ex Fisch. & C.A. Mey.) Dorn [FNA7, HC2, JPM]
Vasc. Pl. Wyoming. 296. 1988.
mountain tansymustard

Descurainia richardsonii O.E. Schulz [HC]
Descurainia richardsonii O.E. Schulz var. *macrosperma* O.E. Schulz [HC]
Descurainia richardsonii O.E. Schulz var. *richardsonii* [HC]

Descurainia incisa (Engelm. ex A. Gray) Britton [FNA7, HC2]
Mem. Torrey Bot. Club. 5: 173. 1894.
cut-leaved tansymustard

ssp. *incisa* [FNA7, HC2]
Mem. Torrey Bot. Club. 5: 173 1894.
cut-leaved tansymustard

Descurainia incana (Bernh. ex Fisch. & C.A. Mey.) Dorn ssp. *incisa* (Engelm. ex A. Gray) Kartesz & Gandhi [KZ99]
Descurainia incana (Bernh. ex Fisch. & C.A. Mey.) Dorn ssp. *viscosa* (Rydb.) Kartesz & Gandhi [KZ99]
Descurainia incisa (Engelm. ex A. Gray) Britton ssp. *viscosa* (Rydb.) Rollins
Descurainia richardsonii O.E. Schulz ssp. *incisa* (Engelm. ex A. Gray) Detling [Abrams]
Descurainia richardsonii O.E. Schulz ssp. *viscosa* (Rydb.) Detling [Peck]
Descurainia richardsonii O.E. Schulz var. *sonnei* (B.L. Rob.) C.L. Hitchc. [HC]
Descurainia richardsonii O.E. Schulz var. *viscosa* (Rydb.) M. Peck [HC]

Here we follow the treatment in FNA that recognizes two subspecies - incisa and paysonii, the latter of which is out of our area. FNA authors describe D. incisa as being highly variable in almost all features, likely the result of hybridization with other members of the genus with which it shares a common range.

Descurainia longepedicellata (E. Fourn.) O.E. Schulz [FNA7, HC2]
Pflanzenr. 86[IV,105]: 324. (as longipedicellata). 1924.
mountain tansymustard, narrow tansymustard, sticky tansymustard

Descurainia incisa (Engelm. ex A. Gray) Britton ssp. *filipes* (A. Gray) Rollins [Rollins 1993a]
Descurainia pinnata (Walter) Britton ssp. *filipes* (A. Gray) Detling [KZ99]
Descurainia pinnata Britton var. *filipes* (A. Gray) M. Peck [HC]

FNA7: " L. E. Detling (1939) treated Descurainia longepedicellata as subsp. filipes of D. pinnata, whereas R. C. Rollins (1993) and N. H. Holmgren (2005b) treated it as a subspecies and variety, respectively, of D. incisa. Molecular data, both nuclear and plastidic (B. E. Goodson 2007), place the three taxa in different, well-supported clades. R. C. Rollins (1993) and N. H. Holmgren (2005b) reported 2n = 28 and 42 for

Descurainia longepedicellata (as D. pinnata var. filipes), but these counts are not vouchered. Rollins indicated that the taxon range extends into California and New Mexico; we have not seen material from those states. Descurainia longepedicellata resembles D. incisa subsp. paysonii in having long fruiting pedicels and linear leaf lobes with entire margins. The latter is easily distinguished by being canescent (versus not canescent) and having fruits strongly curved inward (versus straight). Because the two taxa are not closely related (B. E. Goodson 2007), the similarities in fruiting pedicels and distalmost leaf segments represent convergence."

Descurainia nelsonii (Rydb.) Al-Shehbaz & Goodson [FNA7, HC2]
Harvard Pap. Bot. 12: 422. 2007.
Nelson's tansymustard, sagebrush tansymustard

Descurainia pinnata (Walter) Britton ssp. *nelsonii* (Rydb.) Detling [Rollins 1993a]
Descurainia pinnata Britton var. *nelsonii* (Rydb.) M. Peck [HC]

FNA7: " Descurainia nelsonii was treated by L. E. Detling (1939) and R. C. Rollins (1993) as a subspecies of D. pinnata, but the latter in the sense of these authors is not monophyletic, comprising instead either four or two unrelated species, respectively. ITS molecular data (B. E. Goodson 2007) suggest that D. nelsonii is most closely related to D. longepedicellata and D. paradisa. It can be distinguished from the latter species by its linear fruits with cuneate tips; D. paradisa has obovoid fruits with rounded tips. Descurainia nelsonii resembles D. pinnata subsp. brachycarpa in the orientation of fruiting pedicels and in having short styles (to 0.3 mm) and small seeds (to 1 × 0.5 mm). It differs in being branched (versus simple) at base and in having smaller flowers (petals 0.7-1 versus 1.5-2.6 mm), fewer ovules (6-12 versus 16-40) per ovary, linear (versus subclavate) fruits, and uniseriate (versus biseriate) seeds."

Descurainia pinnata (Walter) Britton [FNA7, HC, HC2]
Mem. Torrey Bot. Club. 5: 173. 1894.
western tansymustard
(see also *Descurainia longepedicellata*, *Descurainia nelsonii*)

ssp. *brachycarpa* (Richardson) Detling [FNA7, HC2]
Amer. Midl. Naturalist. 22: 509. 1939.
shortpod tansymustard, western tansymustard

Descurainia brachycarpa (Richardson) O.E. Schulz
Descurainia pinnata Britton var. *brachycarpa* (Richardson) Fernald [HC]
Descurainia pinnata Britton var. *intermedia* (Rydb.) C.L. Hitchc. [HC]

**Descurainia sophia* (L.) Webb ex Prantl [FNA7, HC, HC2]
Nat. Pflanzenfam. 55(III,2): 192. 1891.
flixweed

**Diplotaxis* [FNA7, HC, HC2]
Mém. Mus. Hist. Nat. 7: 243. 1821.
wall rocket

**Diplotaxis tenuifolia* (L.) DC. [FNA7, HC2]
Syst. Nat. 2: 632. 1821.
slimleaf wall rocket

Draba [FNA7, HC, HC2]
Sp. Pl. 2: 642. 1753; Gen. Pl. ed. 5, 291. 1754.
draba, whitlow-grass, whitlow-wort
(see also *Cusickiella*)

Draba albertina Greene [FNA7, HC2]
Pittonia. 4: 312. 1901.
Alaska draba, slender whitlow-grass

Draba crassifolia Graham var. *albertina* (Greene) O.E. Schulz
Draba crassifolia Graham var. *nevadensis* C.L. Hitchc.
Draba stenoloba Ledeb. var. *nana* (O.E. Schulz) C.L. Hitchc. [HC]

Draba aurea Vahl ex Hornem. [FNA7, HC, HC2]

Fors. Oecon. Plantel. ed. 2. 599. 1806.
golden draba, golden whitlow-grass

Draba aurea Vahl ex Hornem. var. *aurea* [VPPNW2]
Draba aurea Vahl ex Hornem. var. *aureiformis* (Rydb.) O.E. Schulz
Draba aurea Vahl ex Hornem. var. *leiocarpa* (Payson & H. St. John) C.L. Hitchc. [VPPNW2]

FNA7: "Draba aurea is extremely variable in plant size, number of cauline leaves, number of bracteate flowers, style length, and fruit size, shape, orientation, twisting, and indumentum. Much of the variation in the number of bracts, style length, fruit twisting, and growth habit occurs in Greenland, where the type specimen was collected and where the species is found near sea level. The highly deviant chromosome counts (e.g., 2n = 40 + 1, 64, 82) listed by R. C. Rollins (1993) and S. I. Warwick and I. A. Al-Shehbaz (2006) are mostly unvouchered and have to be disregarded; counts of 2n = ca. 80 have been re-assigned to Draba glabella. Published (G. A. Mulligan 2002) and unpublished counts made by Mulligan and M. D. Windham from Alaska, British Columbia, Colorado, Quebec, Utah, and Yukon indicate that the most common chromosome number of D. aurea is 2n = 74 (or 72). This suggests that the species is an allopolyploid (hexaploid or higher), incorporating genomes from both euploid and aneuploid lineages (M. A. Beilstein and Windham 2003). Detailed cytological and molecular studies are much needed to fully understand this widely distributed and highly variable species."

Draba aureola S. Watson [FNA7, HC, HC2]
Bot. California. 2: 430. 1880.
alpine whitlow-grass, great alpine whitlow-grass, Mt. Lassen whitlow-grass

Draba aureola S. Watson var. *paniculata* L.F. Hend.

Draba cana Rydb. [FNA7, HC2]
Bull. Torrey Bot. Club. 29: 241. 1902.
lance-leaved draba

Draba breweri S. Watson var. *cana* (Rydb.) Rollins
Draba lanceolata Royle [HC], misapplied

Listed in FNA7 as occurring in WA but no specimens from WA currently known. FNA7: "The limits of Draba cana have long been confused, and the species was treated as a synonym of the Himalayan D. lanceolata Royle (M. L. Fernald 1934; C. L. Hitchcock 1941) or as a variety of the western North American D. breweri (R. C. Rollins 1993). However, G. A. Mulligan (1971) clearly demonstrated that all three are distinct and should be maintained."

Draba crassifolia Graham [FNA7, HC, HC2]
Edinburgh New Philos. J. 7: 182. 1829.
Rocky Mountain draba, thick-leaved draba, snowbed whitlow-grass

Draba crassifolia Graham var. *parryi* (Rydb.) O.E. Schulz
Draba parryi Rydb.

FNA7: "M. D. Windham (2004) presented morphological and chromosomal data suggesting that Draba crassifolia is an allopolyploid produced by hybridization between D. albertina and D. fladnizensis. Although the species is distinctive in large part, some individuals can be difficult to place and there is evidence of rare backcrossing (Windham, unpubl.)."

Draba densifolia Nutt. [FNA7, HC, HC2]
Fl. N. Amer. 1: 104. 1838.
Nuttall's draba, dense-leaf whitlow-grass

Draba caeruleomontana Payson & H. St. John [Abrams]
Draba caeruleomontana Payson & H. St. John var. *piperi* Payson & H. St. John
Draba nelsonii J.F. Macbr. & Payson [Abrams]
Draba pectinata (S. Watson) Rydb.
Draba sphaerula J.F. Macbr. & Payson [Abrams]

Draba incerta Payson [FNA7, HC, HC2]
Amer. J. Bot. 4: 261. 1917.
whitlow-wort, Yellowstone draba whitlow-wort

Draba exalata E. Ekman

Draba incerta Payson var. *incerta* [Rollins 1993a]
Draba incerta Payson var. *laevicapsula* (Payson) Payson & H. St. John
Draba incerta Payson var. *peasei* (Fernald) Rollins
Draba laevicapsula Payson
Draba peasei Fernald

Draba lonchocarpa Rydb. [FNA7, HC, HC2]
Mem. New York Bot. Gard. 1: 181. 1900.
lancefruit draba, whitlow-wort

Draba lonchocarpa Rydb. var. *denudata* O.E. Schulz
Draba lonchocarpa Rydb. var. *exigua* O.E. Schulz [HC]
Draba lonchocarpa Rydb. var. *lonchocarpa* [HC, Rollins 1993a]
Draba lonchocarpa Rydb. var. *semitonsa* Payson & H. St. John
Draba lonchocarpa Rydb. var. *vestita* O.E. Schulz
Draba nivalis Lilj. ssp. *lonchocarpa* (Rydb.) Hultén
Draba nivalis Lilj. var. *denudata* (O.E. Schulz) C.L. Hitchc.
Draba nivalis Lilj. var. *elongata* S. Watson [Peck]
Draba nivalis Lilj. var. *exigua* (O.E. Schulz) C.L. Hitchc.

FNA7: "Draba lonchocarpa is a highly variable species within which O. E. Schulz (1927), G. A. Mulligan (1974), and R. C. Rollins (1993) recognized three to five varieties. By contrast, C. L. Hitchcock (1941) united it with D. nivalis and recognized six varieties (see 68. D. nivalis for differences). Some of the infraspecific taxa of D. lonchocarpa are based on trivial characteristics and are listed in the synonymy above without further comment. The most problematic are briefly discussed below. Authors recognizing var. vestita claim that it differs from var. lonchocarpa by having pubescent (versus glabrous) stems and pedicels, 1- or 2-leaved (versus 0 or 1-leaved) scapes, and fruits appressed (versus not appressed) to the rachises. These characteristics do not appear to be strongly correlated. A case in point is the holotype sheet of var. semitonsa, which includes plants with puberulent or glabrous fruits, as well as with pubescent and glabrous stems that are 0-4-leaved. Leafless and densely pubescent scapes are found in Trelease 3913 (MO), whereas completely glabrous, 0-2-leaved stems, and fully appressed fruits are found in Calder 5617a (DAO). Other exceptions can be cited, though the vast majority of the plants examined have leafless, glabrous scapes. An examination of the type collections of var. thompsonii, Thompson 9512 (holotype, UC; isotypes, DS, GH, MO, NY, RSA, US), clearly shows that the taxon usually has oblong to lanceolate fruits 2-3.2 mm wide, as opposed to linear fruits less than 2 mm wide in var. lonchocarpa. Indeed, a casual observation would immediately justify the recognition of var. thompsonii. Both fruit types can be found in plants of the same population (e.g., the RSA isotype) or even on the same plant (e.g., Thompson 10816, MO). Furthermore, fruits to 2.5 mm wide occur sporadically in various parts of the species range. For these reasons, and in the absence of a comprehensive study of the species, we choose to not recognize var. thompsonii at present."

**Draba nemorosa* L. [FNA7, HC, HC2]
Sp. Pl. 2: 643. 1753.
woods draba, woodland whitlow-grass

Draba dictyota Greene
Draba nemoralis Ehrh.
Draba nemorosa L. var. *leiocarpa* Lindblom
Tomostima nemorosa (L.) Lunell

Draba novolympica Payson & H. St. John [FNA7, HC2]
Proc. Biol. Soc. Wash. 43: 113. 1930.
Payson's draba, Payson's whitlow-grass

Draba paysonii J.F. Macbr. var. *treleasii* (O.E. Schulz) C.L. Hitchc. [HC]

FNA7: "Draba novolympica is the same taxon that C. L. Hitchcock (1941) and R. C. Rollins (1993) called D. paysonii var. treleasei, and G. A. Mulligan (2002) called D. paysonii. The two are amply distinct and should be recognized as separate species. Draba novolympica is easily distinguished from D. paysonii by having fruit valves pubescent with 2-6-rayed (occasionally some simple) trichomes 0.05-0.4 mm, sepals 1.5-2.5 mm, petals 2-3.5(-4) × 1.5-2 mm, fruits (2.5-)3-4(-5) × 1.5-3.5 mm, styles 0.2-0.6(-0.8) mm, and ovules 1.2-1.8 × 0.8-1.1 mm. By contrast, D. paysonii has fruit valves pubescent with simple and 2-rayed (some 4- or 5-rayed) trichomes (0.2-)0.4-1 mm, sepals 2.8-3.5 mm, petals (4-)5-6 × (1.5-)2-3 mm, fruits

(5-)6-9 × (3-)3.5-5 mm, styles (0.6-)0.8-1.2 mm, and ovules 1.7-2.2 × 1-1.4 mm. Both R. C. Rollins (1993) and N. H. Holmgren (2005b) indicated that Draba novolympica (as D. paysonii var. treleasei) occurs in Alaska and Yukon, but we have not seen any material from there, and it is likely that their records were based on misidentified plants. Previous reports of D. paysonii from Canada (e.g., G. A. Mulligan 1971b) pertain instead to D. novolympica."

Draba oligosperma Hook. [FNA7, HC, HC2]
Fl. Bor.-Amer. 1: 51. 1830.
few-seeded draba, few-seeded whitlow-grass

Draba oligosperma Hook. var. *andina* Nutt.
Draba oligosperma Hook. var. *microcarpa* Blank.
Draba oligosperma Hook. var. *oligosperma* [HC]
Draba subsessilis S. Watson [Abrams]

Rollins (1993): This species reproduces by agamospermy, which largely explains morphological variation among populations. Historically such variation received sub-specific ranking, but it seems best to leave the deviants undesignated taxonomically. FNA7: "Draba oligosperma is a highly variable and widespread species that has been shown to be apomictic (G. A. Mulligan and J. N. Findlay 1970; Mulligan 1972). It has been divided into species and infraspecific taxa by previous authors; the variation is continuous in every character; there are no clear geographical and morphological patterns that support its division. For characteristics separating D. oligosperma from the closely related D. pectinipila, see 80. D. pectinipila. Draba andina (Nuttall) A. Nelson (1899), not Philippi (1858) is an illegitimate name, sometimes found in synonymy under D. oligosperma."

Draba platycarpa Torr. & A. Gray [FNA7, HC2]
Fl. N. Amer. 1: 108. 1838.
broad-pod whitlow-grass

Draba cuneifolia Nutt. ex Torr. & A. Gray var. *platycarpa* (Torr. & A. Gray) S. Watson [HC]
Draba viperensis H. St. John

FNA7: "Draba platycarpa is occasionally treated as a variety of D. cuneifolia, but is amply distinct from that species (R. L. Hartman et al. 1975)."

Draba praealta Greene [FNA7, HC, HC2]
Pittonia. 3: 306. 1898.
tall whitlow-grass

Draba cascadensis Payson & H. St. John [Abrams]
Draba columbiana Rydb.
Draba dolichopoda O.E. Schulz
Draba lonchocarpa Rydb. var. *daseycarpa* O.E. Schulz
Draba yellowstonensis A. Nelson

Draba reptans (Lam.) Fernald [FNA7, HC, HC2]
Rhodora. 36: 368. 1934.
Carolina whitlow-grass

Arabis reptans Lam.
Draba reptans (Lam.) Fernald ssp. *stellifera* (O.E. Schulz) Abrams [Abrams]
Draba reptans (Lam.) Fernald var. *micrantha* (Nutt.) Fernald [Abrams]
Draba reptans (Lam.) Fernald var. *reptans* [HC]
Draba reptans (Lam.) Fernald var. *stellifera* (O.E. Schulz) C.L. Hitchc. [HC]
Tomostima caroliniana (Walter) Raf.

FNA7: "Draba reptans is often confused with D. cuneifolia, but the two are easily separated. The rachises and pedicels of D. reptans are usually glabrous (rarely with a few isolated trichomes); those of D. cuneifolia are always densely pubescent. Interestingly, both species show parallel variations in chromosome number; it is currently unclear whether this variation is real or the result of misidentified specimens and/or erroneous counts."

Draba ruaxes Payson & H. St. John [FNA7, HC2]
Proc. Biol. Soc. Wash. 43: 117. 1930.
coast mountain draba, coast mountain whitlow-grass

Draba ventosa A. Gray var. *ruaxes* (Payson & H. St. John) C.L. Hitchc. [HC]

FNA7: "C. L. Hitchcock (1941) treated Draba ruaxes as a variety of D. ventosa; as demonstrated by G. A. Mulligan (1971b), the two are quite distinct. Draba ruaxes is an outcrossing hexaploid with well-formed anthers and pollen, and abundant, simple trichomes on leaves, stems, sepals, and fruits. By contrast, D. ventosa is an apomictic triploid with abortive anthers and/or pollen, and no simple trichomes anywhere on the plant."

Draba stenoloba Ledeb. [FNA7, HC, HC2]
Fl. Ross. 1: 154. 1841.
Alaska whitlow-grass
(see also *Draba albertina*)

Draba acinacis H. St. John
Draba hirta L. var. *siliquosa* Cham. & Schltdl.
Draba nemorosa L. var. *stenoloba* (Ledeb.) M.E. Jones [HC]
Draba stenoloba Ledeb. var. *oligantha* (Greene) O.E. Schulz
Draba stenoloba Ledeb. var. *stenoloba* [HC, Rollins 1993a]

FNA7: "Draba stenoloba is occasionally confused with D. albertina, but is easily recognized by having exclusively 2-4-rayed (versus mostly simple) trichomes on stems proximally. It is rarely encountered and apparently confined to the Pacific Northwest. In contrast, D. albertina is common and widespread in the mountains of western North America."

Draba taylorii G.A.Mulligan & Al-Shehbaz [HC2]
Harvard Pap. Bot. 18(2): 114, fig. 8. 2013.

Draba thompsonii (C.L. Hitchc.) G.A. Mulligan & Al-Shehbaz [HC2]
Harvard Pap. Bot. 18(2): 117. 2013.
Thompson's draba

Draba lonchocarpa Rydb. var. *thompsonii* (C.L. Hitchc.) Rollins [HC]
Draba nivalis Lilj. var. *thompsonii* C.L. Hitchc.

**Draba verna* L. [FNA7, HC, HC2]
Sp. Pl. 2: 642. 1753.
spring whitlow-grass

Draba verna L. var. *aestivalis* Lej. [Peck]
Draba verna L. var. *boerhaavii* H.C. Hall [HC]
Draba verna L. var. *verna* [HC]
Erophila verna (L.) DC. ssp. *spathulata* Walters
Erophila verna (L.) DC. var. *praecox* (Steven) Diklic [Stace 1997]
Erophila verna (L.) DC. var. *verna* [Stace 1997]

Autogamy and aneuploidy lead to establishment of many uniform and slightly differing populations, which Rollins (1993b) does not recognize taxonomically. FNA7: "Draba verna represents a highly variable and taxonomically difficult complex within which species, subspecies, varieties, and forms have been named (O. E. Schulz 1927); only those synonyms pertaining to North America are listed above. Most of the taxonomic difficulties are the results of disploidy, autogamy, and hybridization. The morphological extremes are connected by intermediate forms in every conceivable character. Furthermore, there appears to be no correlation between morphology, cytology, geography, and ecology to support the division of this complex into meaningful taxa. A complex cytological picture was presented by Ø. Winge (1940), including the highest count of 2n = 94, which has not been confirmed by subsequent botanists. Erophila vulgaris de Candolle is an illegitimate name for Draba verna."

**Eruca* [FNA7, HC, HC2]
Gard. Dict. Abr., ed. 4. vol. 1. 1754.
garden-rocket, rocket-salad

**Eruca vesicaria* (L.) Cav. [FNA7, HC2]
Descr. Pl. 426. 1802.
arugula

*ssp. *sativa* (Mill.) Thell. [FNA7, HC2]

Ill. Fl. Mitt.-Eur. 4: 201. 1918.
garden rocket

Brassica eruca L.
Eruca sativa Mill. [HC]

P. Miller coined E. sativa in 1754, preceeding Garsault\\'s E. sativa in 1767. FNA7: "Subspecies sativa, widely naturalized and cultivated, was first introduced as a weed in North America in Flathead County, Montana, in 1898, with additional reports from 1900 to the 1920s as a seed contaminant of alfalfa fields in the United States. Subspecies vesicaria and pinnatifida (Desfontaines) Emberger & Maire are endemic to Spain and North Africa and have escaped from cultivation in Europe; they seem not to have become adventive in North America (R. C. Rollins 1993). Recent molecular studies by S. I. Warwick and L. D. Black (1993) support the treatment of subsp. vesicaria and its presumed derivative subsp. sativa as a single species; subsp. pinnatifida is maintained as Eruca pinnatifida (Desfontaines) Pomel. The earliest cultivation of subsp. sativa dates back to the ancient Romans and Greeks. It is currently grown in Europe and North America as a salad plant and in Asia for cooking oil and as food for animals. The oil is also used as an industrial lubricant and for cosmetic and medicinal purposes (I. A. Al-Shehbaz 1985). The seed cake and the entire plant are used as fodder for domestic animals. The oil is high in erucic acid and glucosinolates and is known to cause various skin allergies."

**Erucastrum* [FNA7, HC, HC2]
Fl. Sicul. 92. 1826.
dog mustard

**Erucastrum gallicum* (Willd.) O.E. Schulz [FNA7, HC, HC2]
Bot. Jahrb. Syst. 54(Beibl. 119): 56. 1916.
dog mustard, hairy rocket

Erucastrum pollichii Schimp. & Spenner
Sisymbrium gallicum Willd.

FNA7: "A European native, Erucastrum gallicum was first recorded for North America from Massachusetts and Wisconsin (see J. O. Luken et al. 1993 for history of introduction and spread). It is naturalized in all the provinces of Canada and in parts of the United States, particularly the Midwest. It is an allopolyploid, with the n = 7 component from Diplotaxis erucoides/ D. cossoniana and n = 8 from the E. nasturtiifolium complex (S. I. Warwick and L. D. Black 1993). I have not seen specimens from Maryland."

Erysimum [FNA7, HC, HC2]
Sp. Pl. 2: 660. 1753; Gen. Pl. ed. 5, 296. 1754.
wallflower

Erysimum arenicola S. Watson [FNA7, HC, HC2]
Proc. Amer. Acad. Arts. 26: 124. 1891.
sand-dwelling wallflower

Cheiranthus arenicola (S. Watson) Greene
Erysimum arenicola S. Watson var. *arenicola* [HC]
Erysimum arenicola S. Watson var. *torulosum* (Piper) C.L. Hitchc. [HC]
Erysimum torulosum Piper

FNA7: "Erysimum arenicola is distributed at the higher elevations of northern Oregon northward into the Olympic and Cascade mountains in Washington and Vancouver Island. Both G. B. Rossbach (1958) and R. C. Rollins (1993) recognized Erysimum arenicola as a distinct species. It is closely related to E. perenne and both can be easily distinguished from E. capitatum, with which they hybridize where their ranges meet, by the strongly torulose (versus not torulose) fruits and the longer styles 1.5-5.5 versus 0.2-2.5(-3) mm."

Erysimum capitatum (Douglas ex Hook.) Greene [FNA7, HC2, Peck]
Fl. Francisc. 269. 1891.
sand dune wallflower

Erysimum asperum (Nutt.) DC. [FNA7, HC, HC2], misapplied

var. *capitatum* [FNA7, HC2]
Fl. Francisc. 2: 269-270. 1891.

prairie rocket, rough wallflower

Cheiranthus angustatus Greene
Erysimum asperum (Nutt.) DC. var. *capitatum* (Douglas ex Hook.) B. Boivin
Erysimum asperum (Nutt.) DC. var. *elatum* (Nutt.) Torr.

FNA7: "Although its overall distribution is extensive, var. capitatum has been collected only sporadically outside the main range in western Idaho, western Nevada, and the Pacific states. There is some local differentiation in California that has been recognized formally. For example, some populations in the Mohave desert in Kern, Los Angeles, and San Bernardino counties, as well as disjunct ones in eastern San Luis Obispo County, differ from typical var. capitatum by having yellow petals, fruits to 3.3 mm wide, and seeds to 4 × 2 mm; these were recognized by G. B. Rossbach (1958) and R. C. Rollins (1993) as var. bealianum. Variety angustatum, which is highly localized in Contra Costa County and was recognized by both Rossbach and Rollins, differs from typical var. capitatum by having elongated (versus not elongated) woody caudices, 4-angled (versus latiseptate) fruits, and much-branched (versus moderately-branched or simple) fruiting racemes."

**Erysimum cheiranthoides* L. [FNA7, HC, HC2]
Sp. Pl. 2: 661. 1753.
treacle mustard, wormseed wallflower

Cheiranthus cheiranthoides (L.) A. Heller
Cheirnia cheiranthoides (L.) Link

**Erysimum cheiri* (L.) Crantz [FNA7, HC2]
Cl. Crucif. Emend. 116. 1769.
Aegean wallflower

Cheiranthus cheiri L. [Flora Europaea]

Erysimum occidentale (S. Watson) B.L. Rob. [FNA7, HC, HC2]
Syn. Fl. N. Amer. 1(1,1): 144. 1895.
pale wallflower, western wallflower

Cheiranthus occidentalis S. Watson
Cheirinia occidentalis (S. Watson) Tidestr.

FNA7: "Erysimum occidentale is restricted to sand deposits along or near the Columbia River and its tributaries. It is distributed in Gilliam, Hood River, Morrow, Sherman, and Umatilla counties in Oregon, and in Franklin, Grant, Kittitas, Klickitat, Lincoln, Walla Walla, and Yakima counties in Washington."

**Erysimum repandum* L. [FNA7, HC, HC2]
Demonstr. Pl. 17. 1753.
spreading wallflower

Cheirinia repanda (L.) Link

**Euclidium* [FNA7, HC, HC2]
Hortus Kew. 4: 74. 1812.
[name conserved]
euclidium

**Euclidium syriacum* (L.) W.T. Aiton [FNA7, HC, HC2]
Hortus Kew. 4: 74. 1812.
euclidium, Syrian mustard

Anastatica syriaca L.
Bunias syriaca (L.) M. Bieb.

**Hesperis* [FNA7, HC, HC2]
Sp. Pl. 2: 663. 1753; Gen. Pl. ed. 5, 297. 1754.
rocket

**Hesperis matronalis* L. [FNA7, HC, HC2]
Sp. Pl. 2: 663. 1753.
mother-of-the-evening, dame's rocket

*_Hirschfeldia_ [FNA7, HC2]
Methodus. 264. 1794.
shortpod mustard

*_Hirschfeldia incana_ (L.) Lagr.-Foss. [FNA7, HC2]
Fl. Tarn Garonne. 19. 1847.
Mediterranean hoary mustard, short-podded mustard, summer mustard

Sinapis incana L.

Hornungia [FNA7, HC2]
Deutschl. Fl. 1: 33. 1837.

Hutchinsia [HC]

*_Hornungia procumbens_ (L.) Hayek [FNA7, HC2]
Repert. Spec. Nov. Regni Veg. Beih. 30: 480. 1925.
hutchinsia, prostrate hutchinsia, ovalpurse

Bursa procumbens (L.) Kuntze
Capsella procumbens (L.) Fr.
Hutchinsia procumbens (L.) Desv. [HC, Rollins 1993a]
Hymenolobus procumbens (L.) Nutt. ex Torr. & A. Gray
Lepidium procumbens L.
Noccaea procumbens (L.) Rchb.
Thlaspi procumbens (L.) Wallr.

FNA7: "Hornungia procumbens is highly variable, especially in fruit size and shape, number of seeds per fruit, indumentum, plant size, and shape and number of leaf divisions. Many of its morphological extremes were recognized at specific and infraspecific ranks, and more than 40 synonyms exist."

Idahoa [FNA7, HC, HC2]
Bot. Gaz. 56: 474. 1913.
scalepod

Idahoa scapigera (Hook.) A. Nelson & J.F. Macbr. [FNA7, HC, HC2]
Bot. Gaz. 56: 474. 1913.
flatpod, scalepod

Platyspermum scapigerum Hook.

*_Isatis_ [FNA7, HC, HC2]
Sp. Pl. 2: 670. 1753; Gen. Pl. ed. 5, 301. 1754.
woad

Lepidium [FNA7, HC, HC2]
Sp. Pl. 2: 643. 1753; Gen. Pl. ed. 5, 291. 1754.
hoarycress, peppergrass, pepperweed

Cardaria [HC]
Coronopus [HC]

*_Lepidium appelianum_ Al-Shehbaz [FNA7, HC2]
Novon. 12: 7. 2002.
globepodded hoarycress, whitetop

Cardaria pubescens (C.A. Mey.) Jarm. [HC]
Cardaria pubescens (C.A. Mey.) Jarm. var. _elongata_ Rollins [Peck]
Hymenophysa pubescens C.A. Mey.

FNA7: "Lepidium appelianum has become a noxious weed in most of its range in North America."

*_Lepidium campestre_ (L.) W.T. Aiton [FNA7, HC, HC2]
Hortus Kew. 4: 88. 1812.
field cress, field peppergrass, pepperwort

Neolepia campestre (L.) W.A. Weber
Thlaspi campestre L.

**Lepidium chalepense* L. [FNA7, HC2]
Cent. Pl. II. 23. 1756.
chalapa hoarycress, lens-podded hoarycress, Asian white-top

Cardaria chalapensis (L.) Hand.-Maz. [HC], orthographic variant
Cardaria chalepensis (L.) Hand.-Mazz.
Cardaria draba (L.) Desv. ssp. *chalapensis* (L.) O.E. Schulz [ILBC2], orthographic variant
Cardaria draba (L.) Desv. var. *repens* (Schrenk) O.E. Schulz [VPPNW2]
Lepidium draba L. ssp. *chalapensis* (L.) Thell. [Stace 1997]
Lepidium repens (Schrenk) Boiss. [Abrams]

FNA7: "From the synonymy above, it is evident that the disposition of Lepidium chalepense has varied: more than one species (e.g., R. C. Rollins 1940; G. A. Mulligan and C. Frankton 1962), one species (e.g., Rollins 1993), a variety of Lepidium (Cardaria) draba (N. H. Holmgren 2005b), or a synonym of the latter species (C. L. Hitchcock 1936). In our opinion, the differences in fruit morphology and chromosome number justify its recognition as a distinct species."

Lepidium densiflorum Schrad. [FNA7, HC, HC2]
Index Seminum (Göttingen). 1832: 4. 1832.
common peppergrass, elongate peppergrass, hairy-fruited peppergrass, large-fruited peppergrass, prairie peppergrass

Lepidium densiflorum Schrad. var. *densiflorum* [HC, Rollins 1993a]
Lepidium densiflorum Schrad. var. *elongatum* (Rydb.) Thell. [HC, Rollins 1993a]
Lepidium densiflorum Schrad. var. *macrocarpum* G.A. Mulligan [HC, Rollins 1993a]
Lepidium densiflorum Schrad. var. *pubicarpum* (A. Nelson) Thell. [HC, Rollins 1993a]
Lepidium elongatum Rydb.
Lepidium neglectum Thell.
Lepidium pubicarpum A. Nelson

FNA: "North American records of Lepidium apetalum Willdenow mostly represent misidentifications of L. densiflorum. The latter has obovate fruits widest beyond the middle, whereas L. apetalum has elliptic fruits widest at the middle. The number and limits of the varieties recognized in Lepidium densiflorum, as well as the characters used to delimit them, vary among authors (A. Thellung 1906; C. L. Hitchcock 1936; G. A. Mulligan 1961; R. C. Rollins 1993; N. H. Holmgren 2005b). The variation almost always does not correlate with geography, and the recognition of varieties in this species is neither practical nor very useful. All of those authors admitted that these varieties are "very weak at best" (Rollins, p. 554). Of them, perhaps var. pubicarpum (including var. elongatum) might merit recognition. It is distributed in almost all of the Mountain and Pacific states and is distinguished from the other varieties solely by the presence of trichomes or minute papillae on the fruit valves. The density of these trichomes ranges from moderate and covering the entire valve surface to very sparse and represented by individual papillate trichomes restricted to the valve margin. Furthermore, the length of these trichomes may vary from ca. 0.01 to 0.3 mm. In some species (e.g., L. dictyotum) both glabrous- and pubescent-fruited forms occur, yet none of the above authors gave formal recognition to both forms. It is not known if both glabrous and puberulent fruits occur within the same population in L. densiflorum. The species is autogamous, but nothing is known about the rates of gene flow between and within populations." Rollins, 1993: "The original area of L. densiflorum sens. lat. is impossible to know because of its weedy tendencies. Many of the localities where it now occurs are probably outside of its native range." The varieties of L. densiflorum are poorly defined and may not be taxonomically distinct.

Lepidium dictyotum A. Gray [FNA7, HC, HC2]
Proc. Amer. Acad. Arts. 7: 329. 1868.
alkali peppergrass, veiny peppergrass

Lepidium dictyotum A. Gray var. *dictyotum* [HC, Rollins 1993a]

**Lepidium didymum* L. [FNA7, HC2]
Syst. Nat. ed. 12. 2: 433. 1767; Mant Pl. 1: 92. 1767.
lesser swinecress, lesser wartcress

Coronopus didymus (L.) Sm. [HC]

*_Lepidium draba_ L. [FNA7, HC2]
Sp. Pl. 2: 645. 1753.
heart-podded hoarycress, hoary pepperwort

Cardaria draba (L.) Desv. [HC]
Cardaria draba (L.) Desv. ssp. _draba_ [ILBC2]
Lepidium draba L. ssp. _draba_ [Stace 1997]

*_Lepidium heterophyllum_ Benth. [FNA7, HC, HC2]
Cat. Pl. Pyrénées. 95. 1826.
purple-anther pepperweed, Smith's pepperweed

*_Lepidium latifolium_ L. [FNA7, HC, HC2]
Sp. Pl. 2: 644. 1753.
dittander, broad-leaved peppergrass, broad-leaved pepperwort

Cardaria latifolia (L.) Spach

Lepidium nitidum Nutt. [FNA7, HC, HC2]
Fl. N. Amer. 1: 116. 1838.
shining peppergrass

Lepidium leiocarpum Hook. & Arn.
Lepidium nitidum Nutt. var. _howellii_ C.L. Hitchc.
Lepidium nitidum Nutt. var. _nitidum_ [Rollins 1993a]
Lepidium nitidum Nutt. var. _oreganum_ (Howell ex Greene) C.L. Hitchc.

*_Lepidium oblongum_ Small [FNA7, HC2]
Fl. S.E. U.S. 468, 1331. 1903.

Lepidium oxycarpum Torr. & A. Gray [FNA7, HC, HC2]
Fl. N. Amer. 1: 116. 1838.
forked pepperwort, sharpfruited pepperwort

Nasturtium oxycarpum (Torr. & A. Gray) Kuntze

FNA7: "Lepidium oxycarpum apparently did not persist in British Columbia following its introduction there over 110 years ago (G. A. Mulligan 2002b). That record is based on Macoun s.n. (GH, MO, NY, US), which was collected on 31 May 1893 from the vicinity of Victoria, Vancouver Island." Rollins, 1993: "Apparently introduced to southern Vancouver Island. It was collected in the vicinity of Victoria, British Columbia in 1893, but we have not seen any recent collections".

*_Lepidium perfoliatum_ L. [FNA7, HC, HC2]
Sp. Pl. 2: 643. 1753.
clasping-leaved peppergrass, round-leaved peppergrass, yellow-flowered peppergrass

Nasturtium perfoliatum (L.) Besser

Lepidium ramosissimum A. Nelson [FNA7, HC, HC2]
Bull. Torrey Bot. Club. 26: 124. 1899.
branched peppergrass

Lepidium ramosissimum A. Nelson var. _bourgeauanum_ (Thell.) Rollins
Lepidium ramosissimum A. Nelson var. _ramosissimum_

FNA7: "As noted by R. C. Rollins (1993, p. 581), the varieties of Lepidium ramosissimum are "weak at best." They are based largely on the branching habit and, most importantly, on the presence versus absence of trichomes on the fruit valve. In some collections (e.g., Scoggan 4233, GH; Boivin et al., 13221, GH), both puberulent- and glabrous-fruited forms occur. It is almost certain that the same situation exists not only in other populations of this species, but in other North American Lepidium. It is also clear that some populations might consist entirely of one of the two forms, but it is highly unlikely that this variation has any geographical basis. Therefore, we believe that the separation of varieties solely on the basis of presence or absence of the fruit trichomes is taxonomically meaningless."

*_Lepidium strictum_ (S. Watson) Rattan [FNA7, HC, HC2]
Syn. Fl. N. Amer. 1(1,1): 129. 1895.
upright peppergrass

Recently collected (May 2016) at Port Townsend, Jefferson County, Washington. Also known as an historical waif near Portland, Oregon. More common in California.

Lepidium virginicum L. [FNA7, HC, HC2]
Sp. Pl. 2: 645. 1753.
tall pepperweed

ssp. *menziesii* (DC.) Thell. [FNA7, HC2]
Mitt. Bot. Mus. Univ. Zürich. 28: 230. 1906.
coastal peppergrass, hairy peppergrass

Lepidium bernardinum Abrams
Lepidium hirsutum Rydb.
Lepidium idahoense A. Heller [Abrams]
Lepidium menziesii DC. [Abrams]
Lepidium virginicum L. var. *medium* (Greene) C.L. Hitchc. [HC]
Lepidium virginicum L. var. *menziesii* (DC.) C.L. Hitchc. [HC]
Lepidium virginicum L. var. *pubescens* (Greene) Thell. [HC]
Lepidium virginicum L. var. *robinsonii* (Thell.) C.L. Hitchc.

ssp. *virginicum* [FNA7, HC2]
Sp. Pl. 2: 645. 1753.
tall peppergrass

Lepidium virginicum L. var. *linearifolium* Farw.
Lepidium virginicum L. var. *virginicum* [HC]

**Lobularia* [FNA7, HC, HC2]
J. Bot. Agric. 3: 162. 1815.
[name conserved]
sweet alyssum

**Lobularia maritima* (L.) Desv. [FNA7, HC, HC2]
J. Bot. Agric. 3: 162. 1815.
sweet alyssum

Alyssum maritimum (L.) Lam.
Clypeola maritima L.
Koniga maritima (L.) R. Br. [Abrams]

**Lunaria* [FNA7, HC, HC2]
Sp. Pl. 2: 653. 1753; Gen. Pl. ed. 5, 294. 1754.
honesty

**Lunaria annua* L. [FNA7, HC, HC2]
Sp. Pl. 2: 653. 1753.
honesty, money plant

Lunaria biennis Moench
Lunaria inodora Lam.

FNA7: "Lunaria annua is cultivated for its attractive flowers but especially for the infructescences, which are used in dry bouquets after removal of the fruit valves and seeds."

**Matthiola* [FNA7, HC2]
Hortus Kew. 4: 119. 1812. (as Mathiola), name and orthography conserved.

**Matthiola incana* (L.) W.T. Aiton [FNA7, HC2]
Hortus Kew. 4: 119. (as Mathiola). 1812.
hoary stock

**Matthiola longipetala* (Vent.) DC. [FNA7, HC2]
Syst. Nat. 2: 174. 1821.

**Mutarda*

Syst. Verz. (Bernhardi) 184. 1800.

**Nasturtium* [FNA7, HC2]
Hortus Kew. 4: 110. 1812.
watercress

**Nasturtium microphyllum* Boenn. ex Rchb. [FNA7, HC2]
Fl. Germ. Excurs. 683. 1832.
onerow watercress

Recently collected in Klickitat County (2012).

**Nasturtium officinale* W.T. Aiton [FNA7, HC2]
Hortus Kew. 4: 110. 1812.
watercress

Rorippa nasturtium-aquaticum (L.) Hayek [HC]
Sisymbrium nasturtium-aquaticum L.

**Neslia* [FNA7, HC, HC2]
J. Bot. Agric. 3: 162. 1815.
[name conserved]

**Neslia paniculata* (L.) Desv. [FNA7, HC, HC2]
J. Bot. Agric. 3: 162. 1815.
ball mustard

Myagrum paniculatum L.

Noccaea [FNA7, HC2]
Suppl. Meth. 89. 1802.
claspleaf pennycress, perfoliate pennycress

Microthlaspi [FNA7, HC2]

Noccaea fendleri (A. Gray) Holub [FNA7, HC2]
Preslia. 70: 108. 1998.
wild candytuft, Fendler's pennycress

Thlaspi alpestre L., misapplied
Thlaspi fendleri A. Gray [HC]

ssp. *glauca* (A. Nelson) Al-Shehbaz & M. Koch [FNA7, HC2]
Syst. Bot. 29: 382. 2004.
wild candytuft

Thlaspi cochleariforme DC. [VPPNW2]
Thlaspi fendleri A. Gray var. *glaucum* (A. Nelson) C.L. Hitchc. [HC]
Thlaspi fendleri A. Gray var. *hesperium* (Payson) C.L. Hitchc. [VPPNW2]
Thlaspi glaucum (A. Nelson) A. Nelson [Abrams]
Thlaspi montanum L. var. *montanum* [Rollins 1993a]

FNA7: "Subspecies glauca, which is the most morphologically variable and most widespread North American taxon in Noccaea, corresponds to Thlaspi montanum var. montanum in the sense of P. K. Holmgren (1971) and R. C. Rollins (1993). As indicated above, that variety is a strictly European taxon."

**Noccaea perfoliata* (L.) Al-Shehbaz [WTU]
Harvard Pap. Bot. 19(1): 44. 2014.

Microthlaspi perfoliatum (L.) F.K. Mey.
Thlaspi perfoliatum L.

Phoenicaulis [FNA7, HC, HC2]
Fl. N. Amer. 1: 89. 1838.
daggerpod

Phoenicaulis cheiranthoides Nutt. [FNA7, HC, HC2]
Fl. N. Amer. 1: 89. 1838.
daggerpod

Arabis pedicellata A. Nelson
Parrya cheiranthoides (Nutt.) Jeps.
Phoenicaulis cheiranthoides Nutt. ssp. *glabra* (Jeps.) Abrams [Abrams]
Phoenicaulis cheiranthoides Nutt. ssp. *heiranthoides* [Abrams]
Phoenicaulis cheiranthoides Nutt. ssp. *lanuginosa* (S. Watson) Abrams [Abrams]
Phoenicaulis cheiranthoides Nutt. var. *cheiranthoides* [VPPNW2]
Phoenicaulis cheiranthoides Nutt. var. *lanuginosa* (S. Watson) Rollins [VPPNW2]
Phoenicaulis pedicellata (A. Nelson) A. Heller

Physaria [FNA7, HC, HC2]
Gen. Amer. Bor. 1: 162. 1848.
bladderpod, double bladderpod, twinpod

Lesquerella [HC]

Physaria alpestris Suksd. [FNA7, HC, HC2]
W. Amer. Sci. 15: 58. 1906.
alpine twinpod, Washington twinpod

Lesquerella alpestris (Suksd.) G.A. Mulligan

Physaria didymocarpa (Hook.) A. Gray [FNA7, HC, HC2]
Gen. Amer. Bor. 1: 162. 1848.
common twinpod

ssp. *didymocarpa* [FNA7, HC2]
Gen. Amer. Bor. 1: 162. 1848.
common twinpod

Physaria didymocarpa (Hook.) A. Gray var. *didymocarpa* [HC]

Physaria douglasii (S. Watson) O?Kane & Al-Shehbaz [FNA7, HC2]
Novon. 12: 322. 2002.
Columbia bladderpod, Douglas' bladderpod

Lesquerella douglasii S. Watson [HC]

ssp. *douglasii* [FNA7, HC2]
Novon. 12: 322. 2002.
Douglas's bladderpod

ssp. *tuplashensis* (Rollins, K.A. Beck & Caplow) O?Kane & Al-Shehbaz [FNA7, HC2]
Novon. 12: 322. 2002.
White Bluffs bladderpod

Lesquerella tuplashensis Rollins, K. A. Beck & Caplow

FNA7: "It is possible that subsp. tuplashensis is simply an ecotype, or that its phenotype is in response to its severe habitat on the White Bluffs of the Columbia River."

Physaria geyeri (Hook.) A. Gray [FNA7, HC, HC2]
Gen. Amer. Bor. 1: 162. 1848.
Geyer's twinpod

Coulterina geyeri (Hook.) Kuntze
Lesquerella geyeri (Hook.) G.A. Mulligan
Vesicaria geyeri Hook.

ssp. *geyeri* [FNA7, HC2]
Gen. Amer. Bor. 1: 162. 1848.
double bladderpod, Geyer's twinpod bladderpod, Geyer's twinpod

Physaria geyeri (Hook.) A. Gray var. *geyeri* [HC]

Physaria occidentalis (S. Watson) O?Kane & Al-Shehbaz [FNA7, HC2]
Novon. 12: 326. 2002.
western bladderpod

Lesquerella occidentalis (S. Watson) S. Watson [HC]

ssp. *occidentalis* [FNA7, HC2]
Novon. 12: 326. 2002.
western bladderpod

Lesquerella cusickii M.E. Jones [Abrams]
Lesquerella occidentalis (S. Watson) S. Watson ssp. *cusickii* (M.E. Jones) Maguire & A.H. Holmgren
Lesquerella occidentalis (S. Watson) S. Watson ssp. *occidentalis*
Lesquerella occidentalis (S. Watson) S. Watson var. *cusickii* (M.E. Jones) C.L. Hitchc. [HC]
Lesquerella occidentalis (S. Watson) S. Watson var. *occidentalis* [HC]

Physaria oregona S. Watson [FNA7, HC2]
Proc. Amer. Acad. Arts. 17: 363. 1882.
Oregon twinpod

Coulterina oregona (S. Watson) Kuntze
Lesquerella oregona (S. Watson) G.A. Mulligan
Physaria oregana S. Watson [HC], orthographic variant

Polyctenium [FNA7, HC, HC2]
Leafl. Bot. Observ. Crit. 2: 219. 1912.
combleaf

Polyctenium fremontii (S. Watson) Greene [FNA7, HC, HC2]
Leafl. Bot. Observ. Crit. 2: 219. 1912.
combleaf

Smelowskia fremontii S. Watson

FNA7: "Polyctenium fremontii is highly variable in fruit size and the compactness of the fruiting raceme, but in habit, flower size and color, leaf morphology, indumentum, fruiting pedicel length and orientation, number of ovules per ovary, and basically every other aspect of the plants, it is quite constant. If one examines only the types of those two taxa and that of P. fremontii, it seems that perhaps two or three taxa might be recognized. Upon careful study of extensive material, one realizes that only one taxon, instead of three or more, is represented. The alleged differences between P. fremontii and P. williamsiae in characters other than fruit morphology do not hold. As for fruit size, it was said to be 2-4 × 2-2.5 mm in P. williamsiae and (4-)6-13(-20) × 1-2 mm in P. fremontii. Fruit lengths in material annotated by Rollins as P. fremontii are 2-7 mm in Tiehm 8108 and 3.5-11 mm in Ertter 5726, both at GH. Furthermore, the compactness of the infructescence can be equally variable, and in the holotype of var. confertum there are 12-15 pedicels along 1 cm in the middle of the rachis, whereas in Ertter 5726 (GH) there are 6-12. On one sheet, Schoolcraft 1287 (GH), compact and lax racemes and relatively short (3 mm) and longer (7 mm) fruits are represented. The variation in fruit length and width depends largely upon the number of ovules maturing into seeds, and in plants with very short fruits, including the type collection of P. williamsiae, none of the ovules matured into seeds, whereas in those with longest and narrowest fruits almost all ovules matured into seeds. Regardless of how long the fruit is or how many ovules mature into seeds, the ovule number is fairly constant throughout the range of the species. In my opinion, except for the type species of Polyctenium, all of the other taxa recognized in this genus do not represent biologically distinct entities. To my knowledge, Polyctenium fremontii is known from counties in California (Lassen, Modoc, Mono, Siskiyou), Idaho (Gooding), Nevada (Churchill, Douglas, Humboldt, Lyon, Mineral, Washoe), and Oregon (Crook, Deschutes, Harney, Klamath, Lake, Malheur)."

**Raphanus* [FNA7, HC, HC2]
Sp. Pl. 2: 669. 1753; Gen. Pl. ed. 5, 300. 1754.
radish

**Raphanus raphanistrum* L. [FNA7, HC, HC2]
Sp. Pl. 1: 669. 1753.
jointed charlock, wild radish

FNA7: "North American representatives of Raphanus raphanistrum are referable to subsp. raphanistrum. Four other subspecies are restricted to Europe."

**Raphanus sativus* L. [FNA7, HC, HC2]
Sp. Pl. 2: 669. 1753.
garden radish

FNA7: "Raphanus sativus is an important crop plant that is cultivated and/or weedy in most temperate regions worldwide. It is unknown as a wild plant, but suggested to be derived from R. raphanistrum subsp. landra, which is endemic to the Mediterranean region (L. J. Lewis-Jones et al. 1982)."

Rorippa [FNA7, HC, HC2]
Fl. Carniol. 520. 1760.
yellowcress
(see also *Armoracia*, *Nasturtium*)

**Rorippa austriaca* (Crantz) Besser [FNA7, HC2]
Enum. Pl. 103. 1821. (as Roripa). 1821.
Austrian yellowcress field-cress

Camelina austriacum (Crantz) Pers.
Cochlearia austriaca (Crantz) Ledeb.
Myagrum austriacum (Crantz) Jacq.
Nasturtium austriacum Crantz

We use the earlier combination by Besser (1822), not that of Spach (1838) found in Abrams. This species is classified as a noxious weed in WA, however few supporting specimens have been seen. Some reports (KZ99; a R. Old pers. comm.) may be based on Rorippa × armoracoides (Tausch) Fuss, the hybrid between R. austriaca and R. sylvestris (L.) Besser, which has been called Rorippa prostrata (Bergeret) Schinz & Thell. in the North American literature.

Rorippa columbiae (S. Watson) Howell [FNA7, HC2]
Fl. N.W. Amer. 40. 1897. (as Roripa). 1897.
Columbia yellowcress cress

Nasturtium columbiae (S. Watson) Suksd.
Nasturtium sinuatum Nutt. var. *columbiae* S. Watson
Radicula columbiae (S. Watson) Greene
Rorippa calycina (Engelm.) Rydb. var. *columbiae* (S. Watson) Rollins [HC]
Rorippa sinuata (Nutt.) Hitchc. var. *columbiae* (S. Watson) Howell

Rorippa curvipes Greene [FNA7, HC2]
Pittonia. 3: 97. 1896. (as Roripa). 1896.
blunt-leaved yellowcress, truncate yellowcress

Rorippa curvipes Greene var. *curvipes*
Rorippa curvipes Greene var. *truncata* (Jeps.) Rollins
Rorippa obtusa (Nutt.) Britton [HC], misapplied
Rorippa teres (Michx.) Stuckey [FNA7], misapplied

Reported in WA by Stuckey (1972)

Rorippa curvisiliqua (Hook.) Bessey ex Britton [FNA7, HC, HC2]
Mem. Torrey Bot. Club. 5: 169. 1894.
western yellowcress

Nasturtium curvisiliqua (Hook.) Nutt.
Rorippa curvisiliqua (Hook.) Bessey ex Britton var. *curvisiliqua* [HC]
Rorippa curvisiliqua (Hook.) Bessey ex Britton var. *lyrata* (Nutt.) C.L. Hitchc. [HC]
Rorippa curvisiliqua (Hook.) Bessey ex Britton var. *nuttallii* (S. Watson) Stuckey [KZ99]
Rorippa curvisiliqua (Hook.) Bessey ex Britton var. *orientalis* Stuckey [KZ99]
Rorippa curvisiliqua (Hook.) Bessey ex Britton var. *procumbens* Stuckey [KZ99]
Sisymbrium curvisiliqua Hook.

FNA7: "Rorippa curvisiliqua is a highly variable species divided artificially by R. L. Stuckey (1972) into seven varieties. They were only reluctantly recognized by R. C. Rollins (1993) and N. H. Holmgren

(2005b), though these authors felt, and I concur, that it is impossible to determine any of them reliably. A collection from New Brunswick, Blaney s.n. (DAO, MO, NBM, UNB), Northumberland County, 2 Sep 2004, was most likely introduced by migratory birds."

Rorippa palustris (L.) Besser [FNA7, HC2]
Enum. Pl. 27. 1821. (as Roripa).
hispid yellowcress, marsh yellowcress

Rorippa islandica (Oeder ex Murray) Borbás [HC], misapplied
Rorippa islandica (Oeder ex Murray) Borbás var. *fernaldii* Butters & Abbe [Peck]
Rorippa palustris (L.) Besser var. *palustris* [Rollins 1993a]

Currently we do not recognize the poorly defined varieties of Rorippa palustris.

ssp. *hispida* (Desv.) Jonsell [FNA7, HC2, KZ99]
Symb. Bot. Upsal. 19(2): 159. 1968.

Rorippa islandica (Oeder ex Murray) Borbás var. *hispida* (Desv.) Butters & Abbe [HC]
Rorippa palustris (L.) Besser var. *hispida* (Desv.) Rydb. [JPM]

ssp. *palustris* [FNA7, HC2]

Rorippa islandica (Oeder ex Murray) Borbás var. *glabrata* (Lunell) Butters & Abbe [HC]
Rorippa islandica (Oeder ex Murray) Borbás var. *islandica* [HC], misapplied
Rorippa islandica (Oeder ex Murray) Borbás var. *occidentale* (Wats.) Butters & Abbe [HC], orthographic variant
Rorippa islandica (Oeder ex Murray) Borbás var. *occidentalis* (S. Watson) Butters & Abbe
Rorippa palustris (L.) Besser ssp. *fernaldiana* (Butters & Abbe) Jonsell [KZ99]
Rorippa palustris (L.) Besser ssp. *occidentalis* (S. Watson) Abrams [KZ99]
Rorippa palustris (L.) Besser var. *fernaldiana* (Butters & Abbe) Stuckey [Rollins 1993a]
Rorippa palustris (L.) Besser var. *occidentalis* (S. Watson) Rollins [JPM]

Rorippa sinuata (Nutt.) Hitchc. [FNA7, HC, HC2]
Key Spring Fl. Manhattan. 18. 1894. (as Roripa). 1894.
spreading yellowcress

Rorippa sphaerocarpa (A. Gray) Britton [HC2, FNA7]
Mem. Torrey Bot. Club. 5: 170. 1894.
roundfruit yellowcress

Recently (2018) collected along the Columbia River in Skamania County.

**Rorippa sylvestris* (L.) Besser [FNA7, HC, HC2]
Enum. Pl. 27. 1821. (as Roripa). 1821.
creeping yellowcress

Rorippa tenerrima Greene [FNA7, HC2]
Erythea. 3: 46. 1895. (as Roripa). 1895.
Modoc yellowcress
(see also *Rorippa curvipes*)

Sandbergia [FNA7, HC2]
Leafl. Bot. Observ. Crit. 2: 136. 1911.

Sandbergia perplexa (L.F. Hend.) Al-Shehbaz [FNA7, HC2]
Harvard Pap. Bot. 12: 426. 2007.
puzzling halimolobos

Halimolobos perplexa (L.F. Hend.) Rollins [HC], orthographic variant
Halimolobos perplexa (L.F. Hend.) Rollins var. *lemhiensis* C.L. Hitchc. [HC], orthographic variant
Halimolobos perplexa (L.F. Hend.) Rollins var. *perplexa* [HC, Rollins 1993a], orthographic variant
Sisymbrium perplexum L.F. Hend.
Sophia perplexa (L.F. Hend.) Rydb.

FNA7: "I have seen limited material of var. lemhiensis, and all the differences given by R. C. Rollins (1993) to separate it from var. perplexa (e.g., style and pedicel length, density of indumentum) are quantitative characters that show continuous, uncorrelated variation. Sandbergia perplexa is known from counties in

Idaho (Adams, Butte, Custer, Idaho, Lemhi, Valley), Montana (Beaverhead), and Washington (Douglas)."

Sandbergia whitedii (Piper) Greene [FNA7, HC2]
Leafl. Bot. Observ. Crit. 2: 137. 1911.
fissurewort, whited's halimolobos fissurewort

Arabis whitedii Piper
Halimolobos whitedii (Piper) Rollins [HC, Rollins 1993a]

FNA7: "In Washington state, Sandbergia whitedii appears to be restricted to Chelan, Douglas, Grant, Kittitas, Lincoln, and Okanogan counties."

**Sinapis* [FNA7, HC2]
Sp. Pl. 2: 668. 1753; Gen. Pl. ed. 5, 299. 1754.

Rhamphospermum

**Sinapis arvensis* L. [WTU]
Sp. Pl. 2: 668. 1753.
charlock, corn mustard, wild mustard

Brassica arvensis Rabenh., homonym (illegitimate)
Brassica kaber (DC.) L.C. Wheeler [HC]
Brassica kaber (DC.) L.C. Wheeler var. *pinnatifida* (Stokes) L.C. Wheeler [Peck]
Brassica sinapistrum Boiss.
Mutarda arvensis (L.) D.A.German
Sinapis kaber DC.

Sisymbrium [FNA7, HC, HC2]
Sp. Pl. 2: 657. 1753; Gen. Pl. ed. 5, 296. 1754.
hedgemustard, tumblemustard

Schoenocrambe [HC]

**Sisymbrium altissimum* L. [FNA7, HC, HC2]
Sp. Pl. 2: 659. 1753.
Jim Hill mustard, tumble mustard, tall rocket

Sisymbrium linifolium (Nutt.) Nutt. [FNA7, HC2]
Fl. N. Amer. 1: 91. 1838.
lava cress, rush mustard, flax-leaved plainsmustard, Salmon River plainsmustard

Erysimum glaberrimum Hook. & Arn.
Nasturtium linifolium Nutt.
Schoenocrambe linifolia (Nutt.) Greene [HC]

FNA7: "N. H. Holmgren (2005b) recognized Sisymbrium linifolium and others (see 86. Hesperidanthus) in Schoenocrambe even though the molecular evidence (S. I. Warwick et al. 2002) overwhelmingly shows that the latter is nested within Sisymbrium, whereas the species of Hesperidanthus are not closely related. Indeed, I. A. Al-Shehbaz et al. (2006) placed Hesperidanthus and Sisymbrium in different tribes. This is an example where the superficial resemblances in fruit morphology are the result of convergence and can easily mislead to erroneous taxonomy."

**Sisymbrium loeselii* L. [FNA7, HC, HC2]
Cent. Pl. I. 18. 1755.
false london rocket, Loesel's tumblemustard

**Sisymbrium officinale* (L.) Scop. [FNA7, HC, HC2]
Fl. Carniol. ed. 2. 2: 26. 1772.
hedge mustard

Erysimum officinale L.
Sisymbrium officinale (L.) Scop. var. *leiocarpum* DC. [VPPNW2]
Sisymbrium officinale (L.) Scop. var. *officinale* [VPPNW2]

Smelowskia [FNA7, HC, HC2]

Icon. Pl. 2: 17, plate 151. 1830.
[name conserved]
smelowskia

Smelowskia americana Rydb. [FNA7, HC2]
Bull. Torrey Bot. Club. 29: 239. 1902.
alpine smelowskia, Siberian smelowskia

Smelowskia calycina (Stephan) C.A. Mey. [HC, Peck], misapplied
S. calycina is restricted to Asia.
Smelowskia calycina (Stephan) C.A. Mey. var. *americana* (Regel & Herder) W.H. Drury & Rollins [HC]

FNA7: " Both R. C. Rollins (1993) and N. H. Holmgren (2005b) listed 2n = 44 for Smelowskia americana (as S. calycina var. americana), but no such number is known for any species of the genus (S. I. Warwick and I. A. Al-Shehbaz 2006). It is most likely that the first two authors erred in reporting 2n = 22 for the species. The latter count is likely to represent a dysploid reduction of tetraploid populations based on x = 6. Previous North American authors (e.g., W. H. Drury Jr. and R. C. Rollins 1952; Rollins 1993; N. H. Holmgren 2005b) believed that the central Asian Smelowskia calycina and the North American plants also attributed to it are conspecific. S. I. Warwick et al. (2004b) clearly demonstrated that they are different species. The North American plants, S. americana, are easily distinguished from S. calycina by having readily caducous instead of persistent calyces. As recognized by Rollins (1993), the North American S. calycina represented three distinct taxa (S. americana, S. media, S. porsildii) none of which belongs to that species."

Smelowskia ovalis M.E. Jones [FNA7, HC, HC2]
Proc. Calif. Acad. Sci. ser. 2. 5: 624. 1895.
short-fruited smelowskia

Smelowskia ovalis M.E. Jones var. *ovalis*

FNA7: "Smelowskia ovalis appears to be rare in Oregon, common at Mt. Lassen (Shasta County, California), and widespread at high elevations in Washington."

Streptanthella [FNA7, HC, HC2]
Fl. Rocky Mts. 364, 1062. 1917.
streptanthella

Streptanthella longirostris (S. Watson) Rydb. [FNA7, HC, HC2]
Fl. Rocky Mts. 364. 1917.
long-beaked fiddle mustard, streptanthella

Streptanthella longirostris (S. Watson) Rydb. var. *derelicta* J.T. Howell [Abrams]

FNA7: "Streptanthella longirostris is most widely distributed in southern California, Nevada, and southern and central Utah, and appears to be restricted elsewhere: Colorado (Mesa, Montezuma, Montrose, San Miguel), Idaho (Butte), Montana (Carbon), New Mexico (San Juan), Washington (Franklin, Grant), and Wyoming (Fremont, Natrona, Sweetwater, Uinta)."

**Strigosella* [FNA7, HC2]
Diagn. Pl. Orient. 3(1): 22. 1854.

Subularia [FNA7, HC, HC2]
Sp. Pl. 2: 642. 1753; Gen. Pl. ed. 5, 290. 1754.
awlwort

Subularia aquatica L. [FNA7, HC, HC2]
Sp. Pl. 2: 642. 1753.

ssp. *americana* G.A. Mulligan & Calder [FNA7, HC2]
Rhodora. 66: 132, plate 1295, fig. 1. 1964.
awlwort

Subularia aquatica L. var. *americana* (G.A. Mulligan & Calder) B. Boivin [KZ99]

FNA7: "Subspecies americana appears to be the sole representative of Subularia in North America. It differs from subsp. aquatica, which is restricted to northern Europe and Russia, by having persistent

(versus caducous) sepals, fruiting pedicels ascending at 30-50Âº (versus 50-90Âº) angles, and broadly ellipsoid to broadly obovoid (versus ellipsoid) fruits. G. A. Mulligan and J. A. Calder (1964) indicated that plants slightly intermediate between the two subspecies grow sporad-ically in North America, and it is not known whether they represent hybrids."

**Teesdalia* [FNA7, HC, HC2]
Hortus Kew. 4: 83. 1812.
shepherd's cress

**Teesdalia nudicaulis* (L.) W.T. Aiton [FNA7, HC, HC2]
Hortus Kew. 4: 83. 1812.
shepherd's cress

Iberis nudicaulis L.

Thelypodium [FNA7, HC, HC2]
Gen. Pl. 11: 876. 1839.
thelypody
(see also *Caulanthus*)

Thelypodium howellii S. Watson [FNA7, HC, HC2]
Proc. Amer. Acad. Arts. 21: 445. 1886.
Howell's thelypody

ssp. *howellii* [FNA7, HC2]
Proc. Amer. Acad. Arts. 21: 445. 1886.
Howell's thelypody

Thelypodium integrifolium (Nutt.) Endl. [FNA7, HC, HC2]
Repert. Bot. Syst. 1: 172. 1842.
entire-leaved thelypody

ssp. *integrifolium* [FNA7, HC2]
entire-leaved thelypody

Pleurophragma lilacinum (Greene) Rydb.
Thelypodium lilacinum Greene
Thelypodium lilacinum Greene var. *subumbellatum* Payson

Thelypodium laciniatum (Hook.) Endl. [FNA7, HC, HC2]
Repert. Bot. Syst. 1: 172. 1842.
cut-leaf thelypody, thick-leaved thelypody
(see also *Thelypodium milleflorum*)

Thelypodium laciniatum (Hook.) Endl. var. *laciniatum* [HC]
Thelypodium laciniatum (Hook.) Endl. var. *streptanthoides* (Leiberg ex Piper) Payson [HC]

Thelypodium milleflorum A. Nelson [FNA7, HC2]
Bot. Gaz. 52: 263. 1911.
many flowered thelypody

Thelypodium laciniatum (Hook.) Endl. var. *milleflorum* (A. Nelson) Payson [HC]

Thelypodium sagittatum (Nutt.) Endl. [FNA7, HC, HC2]
Repert. Bot. Syst. 1: 172. 1842.
slender thelypody

ssp. *sagittatum* [FNA7, HC2]
In W. G. Walpers, Repert. Bot. Syst. 1: 172. 1842.
sagittate thelypody, slender thelypody

**Thlaspi* [FNA7, HC, HC2]
Sp. Pl. 2: 645. 1753; Gen. Pl. ed. 5, 292. 1754.
pennycress
(see also *Microthlaspi*, *Noccaea*)

*_Thlaspi arvense_ L. [FNA7, HC, HC2]
Sp. Pl. 2: 646. 1753.
fanweed, field pennycress

Teruncius arvensis (L.) Lunell

FNA7: "Thlaspi arvense is a cosmopolitan weed of Eurasian origin."

Thysanocarpus [FNA7, HC, HC2]
Fl. Bor.-Amer. 1: 69, plate 18, fig. A. 1830.
fringepod, lacepod

Thysanocarpus curvipes Hook. [FNA7, HC, HC2]
Fl. Bor.-Amer. 1: 69, plate 18, fig. A. 1830.
sand fringepod, lacepod

Thysanocarpus curvipes Hook. var. _elegans_ (Fisch. & C.A. Mey.) B.L. Rob. [Peck]
Thysanocarpus curvipes Hook. var. _longistylus_ Jeps. [Abrams]

FNA7: "Thysanocarpus curvipes is the most widespread and variable species in the genus. Variants have been named as varieties or species, but they grade into each other imperceptibly. Notable among these are var. elegans, a form with incised or perforate fruit wings, and var. eradiatus, a form with rayless, entire wings. Some of these may be the result of hybridization with other taxa. For instance, var. elegans has large fruits and occurs in the vicinity of T. radians, the largest-fruited member of the genus. Furthermore, fruits of var. elegans often have pointed hairs like those usually found on fruits of T. radians; such hairs are not found on fruits of any other members of the genus. Thysanocarpus curvipes includes both diploid and tetraploid populations (M. D. Windham, unpubl.), but these do not appear to segregate into recognizable groups. Although the variation in T. curvipes is considerable, its great complexity prevents recognition of infraspecific taxa at this time."

Turritis [FNA7, HC2]
Sp. Pl. 2: 666. 1753; Gen. Pl. ed. 5, 298. 1754.
towermustard

Turritis glabra L. [FNA7, HC2]
Sp. Pl. 2: 666. 1753.
tower mustard

Arabis glabra (L.) Bernh. [HC]
Arabis glabra (L.) Bernh. var. _furcatipilis_ M. Hopkins
Arabis glabra (L.) Bernh. var. _glabra_ [ILBC2]

Buddlejaceae: see Scrophulariaceae

Cabombaceae [FNA3, HC2] Watershield Family
H&C includes Brasenia in Nymphaeaceae

Brasenia [FNA3, HC, HC2]
Gen. Pl. 1: 372. 1789 - Water-shield [for Christoph Brasen,. 1738.
water-shield, water-target

Brasenia schreberi J.F. Gmel. [FNA3, HC, HC2]
Syst. Nat. 1: 853. 1791.
watershield

*_Cabomba_ [FNA3, HC2]

Hist. Pl. Guiane. 321. 1775.

**Cabomba caroliniana* A. Gray [FNA3, HC2]
Ann. Lyceum Nat. Hist. New York. 4: 47. 1837.
fanwort

Cabomba caroliniana A. Gray var. *caroliniana* [KZ99]
Cabomba caroliniana A. Gray var. *pulcherrima* R.M. Harper

Cactaceae [FNA4, HC, HC2] Cactus Family

Opuntia [FNA4, HC, HC2]
Gard. Dict. Abr., ed. 4. vol. 2. 1754.
pricklypear cactus

Opuntia columbiana Griffiths [FNA4, HC2]
Bull. Torrey Bot. Club. 43: 523. (as species). 1916.
Columbia prickly-pear

Opuntia erinacea Engelm. & J.M. Bigelow var. *columbiana* (Griffiths) L.D. Benson [KZ99]
Opuntia polyacantha Haw. [FNA4, HC, HC2], misapplied
Opuntia polyacantha Haw. var. *polyacantha* [FNA4, HC2], misapplied

Opuntia fragilis (Nutt.) Haw. [FNA4, HC, HC2]
Suppl. Pl. Succ. 82. 1819.
brittle prickly-pear, little prickly-pear

Opuntia fragilis (Nutt.) Haw. var. *brachyarthra* (Engelm. & J.M. Bigelow) J.M. Coult. [KZ99]
Opuntia fragilis (Nutt.) Haw. var. *fragilis* [KZ99]

Pediocactus [FNA4, HC, HC2]
Ill. Fl. N. U.S. ed. 2. 2: 569, fig. 2983. 1913.
ball cactus

Pediocactus nigrispinus (Hochstätter) Hochstätter [FNA4, HC2]
Succulenta (Netherlands). 71: 99. 1992.
dark-spine ball cactus, snowball cactus

Pediocactus simpsonii (Engelm.) Britton & Rose [FNA4, HC, HC2], misapplied

The name P. simpsonii var. robustior is considered misapplied to plants in Washington.

ssp. *nigrispinus* [HC2]
dark-spine ball cactus

Pediocactus simpsonii (Englemann) Britton & Rose var. *nigrispinus* Hochstätter

Callitrichaceae: see Plantaginaceae

Campanulaceae [HC, HC2] Bellflower Family

Campanula [HC, HC2]

Melanocalyx [FNA]

*_Campanula glomerata_ L. [HC2]
Sp. Pl. 1: 166. 1753.
clustered bellflower

Campanula lasiocarpa Cham. [HC, HC2]
Linnaea 4: 39. 1829.
Alaska bellflower, Alaska harebell

Campanula lasiocarpa Cham. ssp. _latisepala_ (Hultén) Hultén

*_Campanula medium_ L. [HC, HC2]
Canterbury bells

Campanula parryi A. Gray [HC, HC2]
Syn. Fl. N. Amer., ed. 2. 2(1): 395. 1886.
Parry's bellflower, Parry's harebell

var. *idahoensis* McVaugh [HC, HC2]
Bull. Torrey Bot. Club 69(3): 241-243. 1942.
Parry's harebell

*_Campanula persicifolia_ L. [HC, HC2]
Sp. Pl. 1: 164. 1753.
peach-leaf bellflower

Campanula persicifolia L. var. _alba_ hort.

Campanula piperi Howell [HC, HC2]
Fl. N.W. Amer. 4: 409. 1901.
Olympic bellflower

*_Campanula rapunculoides_ L. [HC, HC2]
Sp. Pl. 1: 165. 1753.
creeping bellflower, rover harebell

Campanula rotundifolia L. [HC, HC2]
Sp. Pl. 1: 163. 1753.
bluebell-of-scotland

Historically, a vast array of infraspecific taxa have been published for C. rotundifolia, too many to list here. Recognition of these infraspecific taxa has largely been abandoned in North America.

Campanula scabrella Engelm. [HC, HC2]
Bot. Gaz. 6(7): 237-238. 1881.
rough bellflower, rough harebell

Campanula scouleri Hook. ex A. DC. [HC, HC2]
Monogr. Campan. 312. 1830.
pale bellflower

Downingia [HC, HC2]
downingia

Downingia elegans (Douglas ex Lindl.) Torr. [HC, HC2]
U.S. Expl. Exped. 17(2): 375. 1874.
common downingia

Downingia elegans (Douglas ex Lindl.) Torr. var. _brachypetala_ (Gand.) McVaugh [KZ99]
Downingia elegans (Douglas ex Lindl.) Torr. var. _corymbosa_ (A. DC.) A. Gray
Downingia elegans (Douglas ex Lindl.) Torr. var. _elegans_ [KZ99]

Downingia pulcherrima M. Peck [HC2]
Proc. Biol. Soc. Washington 50: 94. 1937.
showy downingia

Downingia willamettensis M. Peck [HC2]
Willamette downingia

Downingia yina Applegate var. *major* McVaugh [HC]

Githopsis [HC, HC2]
blue-cup

Githopsis specularioides Nutt. [HC, HC2]
Trans. Amer. Philos. Soc., n.s., 8: 258 [1842]. 1843.
common bluecup

Githopsis calycina Benth.
Githopsis specularioides Nutt. var. *hirsuta* Nutt.

Heterocodon [HC, HC2]
heterocodon

Heterocodon rariflorus Nutt. [HC2]
western pearlflower

Heterocodon rariflorum Nutt. [HC], orthographic variant
Specularia rariflora (Nutt.) McVaugh

Howellia [HC, HC2]
water howellia

Howellia aquatilis A. Gray [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 15(1): 43-44. 1880.
water Howellwort

**Jasione* [HC2]
sheep's bit

**Jasione montana* L. [HC2]
Sp. Pl. 2: 928. 1753.
mountain sheep's bit

Lobelia [HC, HC2]
lobelia

Lobelia dortmanna L. [HC, HC2]
Sp. Pl. 2: 929. 1753.
water lobelia

**Lobelia erinus* L. [HC2]
trailing lobelia

Lobelia kalmii L. [HC, HC2]
Sp. Pl. 2: 930. 1753.
brook lobelia, Kalm's lobelia

**Phyteuma* [HC2]

**Phyteuma scorzonerifolium* Vill. [HC2]
Hist. Pl. Dauphiné 2: 519. 1787.

Single collection in 2012 from Mt. Baker-Snoqualmie National Forest in King County, WA.

Triodanis [HC, HC2]
Venus's looking-glass

Triodanis perfoliata (L.) Nieuwl. [HC, HC2]
Amer. Midl. Naturalist 3(7): 192. 1914.
clasping-leaf Venus'-looking-glass

Legousia perfoliata (L.) Britton
Specularia perfoliata (L.) A. DC.

Cannabaceae [FNA3, HC2] Hemp Family

FNA3: "Genera in Cannabaceae have sometimes been included in Moraceae (H. A. Gleason 1968); M. L. Fernald (1950) placed them in a separate family, Cannabinaceae. Cannabaceae are wind pollinated. They are indigenous to the temperate Northern Hemisphere, widely cultivated, often introduced, and often ruderal."

**Cannabis* [FNA3, HC, HC2]
Sp. Pl. 2: 1027. 1753; Gen. Pl. ed. 5, 453, 1754.
cannabis, hemp, marijuana

**Cannabis sativa* L. [FNA3, HC, HC2]
Sp. Pl. 2: 1027. 1753.
hemp, marihuana

Under Moraceae in H&C.

Celtis [FNA3, HC, HC2]
Sp. Pl. 2: 1043. 1753; Gen. Pl. ed. 5, 467, 1754.
hackberry

Celtis reticulata Torr. [FNA3, HC, HC2]
Ann. Lyceum Nat. Hist. New York. 2: 247. 1828.
netleaf hackberry

Celtis douglasii Planch.
Celtis laevigata Willd. var. *reticulata* (Torr.) L.D. Benson [KZ99]
Celtis occidentalis L. var. *reticulata* (Torr.) Sarg.

**Humulus* [FNA3, HC, HC2]
Sp. Pl. 2: 1028. 1753; Gen. Pl. ed. 5, 453, 1754.
hop

**Humulus lupulus* L. [FNA3, HC, HC2]
Sp. Pl. 2: 1028. 1753.

*var. *lupuloides* E. Small [FNA3, HC2]
Syst. Bot. 3: 63. 1978.

*var. *neomexicanus* A. Nelson & Cockerell [FNA3, HC2]
Proc. Biol. Soc. Wash. 16: 45. 1903.
hops

Under Moraceae in H&C

Caprifoliaceae [HC, HC2] Honeysuckle Family

Lonicera [HC, HC2]
honeysuckle

**Lonicera ×bella* Zabel [HC2]
Gartenflora xxxviii. 525. 1889.
showy fly honeysuckle
(= *L. morrowii* × *L. tatarica*)

Lonicera cauriana Fernald [HC2]
Rhodora 27(313): 10?11. 1925.
bluefly honeysuckle, sweet-berry honeysuckle

Lonicera caerulea L. var. *cauriana* (Fernald) B. Boivin [KZ99]

Type for L. caerulea var. cauriana a Suksdorf collection.

Lonicera ciliosa (Pursh) Poir. ex DC. [HC, HC2]
Prodr. 4: 333. 1830.
orange honeysuckle

Lonicera conjugialis Kellogg [HC, HC2]
Proceedings of the California Academy of Sciences 2: 67-69, f. 15. 1863.
purple-flower honeysuckle

**Lonicera etrusca* Santi [HC, HC2]
Viaggio al Montamiata...Pisa 113, pl. 1. 1795.
Etruscan honeysuckle

Native to the Mediterranean.

Lonicera hispidula (Lindl.) Douglas ex Torr. & A. Gray [HC, HC2, JPM2]
Fl. N. Amer. 2(1): 8. 1841.
hairy honeysuckle, pink honeysuckle

Lonicera hispidula (Lindl.) Dougl. ex Torr. & Gray var. *californica* Jeps. [JPM]

Lonicera involucrata (Richardson) Banks ex Spreng. [HC, HC2, VPBC1]
Syst. Veg., ed. 16 [Sprengel] 1: 759. 1824.
bearberry honeysuckle, black twin-berry

Distegia involucrata (Richardson) Cockerell
Xylosteon involucratum Richardson

var. *involucrata* [HC, HC2, JPM2]
Syst. Veg. 1: 759. 1825.
bearberry honeysuckle, black twin-berry

Lonicera involucrata (Richardson) Banks ex Spreng. var. *flavescens* (Dippel) Rehder

**Lonicera japonica* Thunb. [HC2, JPM2]
Systema Vegetabilium. 1784.
Japanese honeysuckle

**Lonicera maackii* (Rupr.) Herder [HC2]
Amur honeysuckle

**Lonicera periclymenum* L. [HC2]
Sp. Pl. 1: 173. 1753.
woodbine

**Lonicera pileata* Oliv. [HC2]

**Lonicera tatarica* L. [HC2]
Sp. Pl. 1: 173-174. 1753.
Tartarian honeysuckle

Reported by Curtis Bjork as becoming common in E.Washington along the Spokane R. Fred Weinmann reports the hybrid L. X bella persists at Juanita Bay Park in Kirkland WA.

Lonicera utahensis S. Watson [HC, HC2]
United States Geological Expolration [sic] of the Fortieth Parallel. Botany 133. 1871.
Rocky Mountain honeysuckle, Utah honeysuckle

Lonicera ebractulata

**Lonicera xylosteum* L. [HC2]
European fly honeysuckle

Symphoricarpos [HC, HC2]
snowberry

Symphoricarpos albus (L.) S.F. Blake [HC, HC2]
Rhodora 16: 118. 1914.

common snowberry

var. *albus* [HC, HC2]
Rhodora 16(187): 118. 1914.
common snowberry

Symphoricarpos albus (L.) S.F. Blake var. *pauciflorus* (W.J. Rob. ex A. Gray) S.F. Blake
Symphoricarpos pauciflorus W.J. Rob. ex A. Gray
Symphoricarpos racemosus Michx.

There has been some discussion about this taxon being introduced from east of the Rocky Mountains. Fieldwork in Skamania County over the years suggests that this is not accurate due to the existence of large stands of this taxon in relatively undisturbed forest openings and edge. Where encountered, the upright and larger-fruited var. laevigatus is not encountered.

var. *laevigatus* (Fernald) S.F. Blake [HC, HC2, JPM2]
Rhodora 16(187): 119. 1914.
common snowberry

Symphoricarpos albus (L.) S.F. Blake ssp. *laevigatus* (Fernald) Hultén
Symphoricarpos rivularis Suksd.

Symphoricarpos mollis Nutt. [HC, HC2]
Fl. N. Amer. 2(1): 4. 1841.
creeping snowberry

var. *hesperius* (G.N. Jones) Cronquist [HC, HC2]
Vasc. Pl. Pacific N.W. 4: 465. 1959.
creeping snowberry, spreading snowberry

Symphoricarpos hesperius G.N. Jones
Symphoricarpos mollis Nutt. ssp. *hesperius* (G.N. Jones) Abrams ex Ferris

Symphoricarpos occidentalis Hook. [HC, HC2]
Fl. Bor.-Amer. 1: 285. 1833.
western snowberry, wolfberry

Symphoricarpos rotundifolius A. Gray [HC2]
Dendrologie 2(1): 48. 1872.
mountain snowberry

var. *vaccinioides* (Rydb.) A. Nelson [HC2]
New Man. Bot. Centr. Rocky Mt. 471. 1909.
mountain snowberry

Symphoricarpos oreophilus A. Gray var. *utahensis* (Rydb.) A. Nelson [HC], misapplied
Symphoricarpos rotundifolius A. Gray var. *vaccinoides* (Rydb.) A. Nelson [Draft FNA, JPM2], orthographic variant

Here we follow the recent treatments in the Jepson Manual, 2nd edition and the upcoming treatment in FNA. Draft FNA: "Symphoricarpos rotundifolius, according to the broadest circumscription (accepted here), is a widespread and variable complex comprising four relatively well distinguished varieties. Indument characters have often been relied upon in the circumscription of taxa. However, the presence and morphology of trichomes varies within all four varieties of S. rotundifolius, and the geographic distributions of indument types are complicated and overlapping. Corolla morphology offers more reliable features. Intermediate specimens not classifiable to variety, even in flower, do exist. A few specimens have been identified, based on morphological intermediacy, as possible hybrids between S. rotundifolius varieties and other sympatric species, including S. albus, S. longifolius, and S. mollis. Variety vaccinioides is very often labeled Symphoricarpos oreophilus var. utahensis in herbaria and in floristic literature; however, the type of the latter name is referable to S. rotundifolius var. oreophilus."

Caryophyllaceae [FNA5, HC, HC2] Pink Family

The treatment here follows Flora of North America, Volume 5.

*Agrostemma [FNA5, HC, HC2]
Sp. Pl. 1: 435. 1753. Gen. Pl. ed. 5, 198. 1754.
corn campion, corncockle

*Agrostemma githago L. [FNA5, HC, HC2]
Sp. Pl. 1: 435. 1753.
common corncockle

Lycnhis githago (L.) Scop.

*var. *githago* [FNA5, HC2]
common corncockle

Arenaria [FNA5, HC, HC2]
Sp. Pl. 1: 423. 1753. Gen. Pl. ed. 5, 193. 1754.
sandwort
(see also *Cherleria*, *Eremogone*, *Moehringia*, *Sabulina*)

Arenaria paludicola B.L. Rob. [FNA5, HC, HC2]
Proc. Amer. Acad. Arts. 29: 298. 1894.
marsh sandwort

Alsine palustris Kellogg
Minuartia paludicola (B.L. Rob.) House

Extripated in WA, WDNR [KZ]. FNA: "Arenaria paludicola is federally listed as endangered, and now is known only from a few sites in San Luis Obispo County; urban development and resultant habitat conversion have impacted it significantly. Historical collections of A. paludicola are known from other areas of the California coast and from Washington."

*Arenaria serpyllifolia L. [FNA5, HC, HC2]
Sp. Pl. 1: 423. 1753.
thyme-leaf sandwort

*var. *serpyllifolia* [FNA5, HC2]
Sp. Pl. 1: 423. 1753.
thyme-leaf sandwort

Arenaria serpyllifolia L. ssp. *serpyllifolia* [FMR]

FNA shows A. serpyllifolia var. tenuior is not reported from WA, but states it "is to be expected elsewhere" than the states listed.

*Atocion [HC2]
catchfly

Atocion armeria (L.) Raf. [HC2]
Autik. Bot. 29. 1840.
sweet William catchfly

Silene armeria L. [FNA5, HC]

FNA5: "The long-tubular, clavate calyx enclosing the unusually long carpophore helps to distinguish Silene armeria. It is an occasional and adventive garden escape."

Cardionema [FNA5, HC, HC2]
Prodr. 3: 372. 1828.
sandmat

Cardionema ramosissimum (Weinm.) A. Nelson & J.F. Macbr. [FNA5, HC, HC2]
Bot. Gaz. 56: 473. 1913.
sandcarpet, sandmat

Cardionema ramosissima (Weinm.) A. Nelson & J.F. Macbr., orthographic variant
Loeflingia ramosissima Weinm.

Cerastium [FNA5, HC, HC2]
Sp. Pl. 1: 437. 1753. Gen. Pl. ed. 5. 199. 1754.
cerastium, chickweed, mouse-ear chickweed
(see also *Dichodon*)

Cerastium arvense L. [FNA5, HC, HC2]
Sp. Pl. 1: 438. 1753.
starry cerastium, field chickweed, field mouse-ear chickweed

ssp. *strictum* Gaudin [FNA5, HC2]
Fl. Helv. 3: 245. 1828.
field chickweed

See FNA Volume 5 for extensive description of C. arvense ssp. strictum regarding plasticity of growth, distribution, and lack of interfertility with C. arvense ssp. arvense, and C. beeringianum.

Cerastium beeringianum Cham. & Schltdl. [FNA5, HC, HC2]
Linnaea. 1: 62. 1826.
alpine chickweed

Cerastium alpinum L. var. *beeringianum* Regel
Cerastium alpinum L. var. *capillare* (Fernald & Wiegand) B. Boivin
Cerastium beeringianum Cham. & Schltdl. ssp. *beeringianum* [KZ99]
Cerastium beeringianum Cham. & Schltdl. ssp. *earlei* (Rydb.) Hultén [KZ99]
Cerastium beeringianum Cham. & Schltdl. var. *capillare* Fernald & Wiegand [JPM]
Cerastium beeringianum Cham. & Schltdl. var. *glabratum* Hultén
Cerastium beeringianum Cham. & Schltdl. var. *grandiflorum* Hultén
Cerastium berringianum Cham. & Schltdl. [HC], orthographic variant
Cerastium buffumiae A. Nelson
Cerastium earlei Rydb.
Cerastium fischerianum Ser. ex DC. var. *beeringianum* (Cham. & Schltdl.) Hultén
Cerastium pilosum Greene, homonym (illegitimate)
Cerastium pulchellum Rydb.
Cerastium scammamiae Polunin
Cerastium variabile Goodd.
Cerastium vulgatum L. var. *beeringianum* (Cham. & Schltdl.) Fenzl

Rare in WA; difficult to distinguish from dwarf mountain forms of C. arvense. FNA5: "Cerastium beeringianum is distinguished from C. alpinum by the absence of the long, silvery, flexuous, translucent, glistening hairs of that species. Cerastium beeringianum\\\\\\'s pubescence consists of straight, strigose, multicellular, somewhat fuscous hairs of several lengths, many of those in the mid and distal stem and inflorescence being glandular and viscid. The nodes and the leaves, at least in the mid and distal stem, typically have long, strigose, eglandular, fuscous hairs; those on the adaxial surface of the leaf being appressed, and those on the nodes retrorse. However, plants from the many small, isolated populations on the mountains of western North America show a great deal of variation. Some of these populations tend to be subglabrous, lacking most of the long hairs normally found on this species. Others are small, delicate plants with slender divaricate pedicels and smaller capsules and seeds. Though names have been given to several of these variants, they frequently intergrade, and much of the variation is greatly influenced by the environment."

**Cerastium brachypetalum* Pers. [FNA5, HC2]
Syn. Pl. 1: 520. 1805.
gray mouse-ear chickweed

Cerastium brachypetalum Pers. ssp. *brachypetalum*
Cerastium brachypetalum Pers. var. *tauricum* (Spreng.) Murbeck
Cerastium tauricum Spreng.

FNA5:"The wholly herbaceous bracts of Cerastium brachypetalum distinguish it from C. fontanum subsp. vulgare, C. semidecandrum, and C. pumilum; the ciliate petal and filament bases distinguish it from C.

diffusum and C. glomeratum. Cerastium brachypetalum differs from all those species in the long, silvery hairs that give it a grayish appearance. In Europe C. brachypetalum is more variable and eight subspecies have been recognized, two of which?subsp. brachypetalum and subsp. tauricum?occur in North America. However, they differ only in the absence or presence of glandular hairs, an insufficient distinction for recognition at the subspecific level."

Cerastium brachypodum (Engelm. ex A. Gray) B.L. Rob. [FNA5, HC2]
Mem. Torrey Bot. Club 5. (Sig. 10): 150. 27 Apr. 1894.
short-stalk mouse-ear chickweed

Cerastium adsurgens Greene
Cerastium brachypodum (Engelm. ex A. Gray) B.L. Rob. var. *compactum* B.L. Rob.
Cerastium nutans Raf. var. *brachypodum* Engelm. ex A. Gray

**Cerastium dichotomum* L. [FNA5, HC2]
Sp. Pl. 1: 438. 1753.
forked mouse-ear chickweed

Cerastium siculum Guss. [HC], misapplied

FNA5: "Cerastium dichotomum is a rare weed of arable land and roadsides."

**Cerastium fontanum* Baumg. [FNA5, HC2]
Enum. Stirp. Transsilv. 1: 425. 1816.
common mouse-ear chickweed

*ssp. *vulgare* (Hartm.) Greuter & Burdet [FNA5, HC2]
Willdenowia. 12: 37. 1982.
common chickweed, mouse-ear chickweed

Cerastium caespitosum Gilib.
Cerastium fontanum Baumg. ssp. *triviale* (Link) Jalas
Cerastium triviale Link
Cerastium vulgare Hartm.
Cerastium vulgatum L. [HC]
Cerastium vulgatum L. var. *hirsutum* Fr.

**Cerastium glomeratum* Thuill. [FNA5, HC2]
Fl. Env. Paris, ed. 2. 226. 1799.
sticky mouse-ear chickweed

Cerastium acutatum Suksd.
Cerastium fulvum Raf.
Cerastium viscosum L. [HC]

Cerastium nutans Raf. [FNA5, HC, HC2]
Précis Découv. Somiol. 36. 1814.
nodding mouse-ear chickweed

var. *nutans* [FNA5, HC2]
Précis Découv. Somiol. 36. 1814.
nodding chickweed

Cerastium longipedunculatum Muhl. ex Britton
Cerastium nutans Raf. var. *occidentale* B. Boivin

**Cerastium pumilum* Curtis [FNA5, HC2]
Fl. Londin. 2(6,69): plate 30. 1794.
dwarf mouse-ear chickweed

Cerastium glutinosum Fr.
Cerastium pumilum Curtis ssp. *glutinosum* (Fr.) Jalas

**Cerastium semidecandrum* L. [FNA5, HC, HC2]
Sp. Pl. 1: 438. 1753.
five-stamen mouse-ear chikweed

**Cerastium tomentosum* L. [FNA5, HC2]

Sp. Pl. 1: 440. 1753.
snow-in-summer

Cherleria [HC2]
sandwort

Cherleria biflora (L.) A. J. Moore & Dillenb. [HC2]
Willdenowia 47(1): 9. 2017.
two-flowered sandwort

Minuartia biflora (L.) Schinz & Thell. [FNA5]

Cherleria obtusiloba (Rydb.) A. J. Moore & Dillenb. [HC2]
Willdenowia 47(1): 12. 2017.
alpine sandwort

Arenaria obtusiloba (Rydb.) Fernald [HC]
Minuartia obtusiloba (Rydb.) House [FNA5]

**Corrigiola* [FNA5, HC, HC2]
Sp. Pl. 1: 271. 1753. Gen. Pl. ed. 5, 132. 1754.
strapwort

**Corrigiola litoralis* L. [FNA5, HC, HC2]
Sp. Pl. 1: 271. 1753.
strapwort

*ssp. *litoralis* [FNA5, HC2]
Sp. Pl. 1: 271. Gen. Pl. ed. 5, 132. 1754.
strapwort

**Dianthus* [FNA5, HC, HC2]
Sp. Pl. 1: 409. 1753. Gen. Pl. ed. 5, 191. 1754.
pink

**Dianthus armeria* L. [FNA5, HC, HC2]
Sp. Pl. 1: 410. 1753.
Deptford pink

*ssp. *armeria* [FNA5, HC2]
Deptford pink

**Dianthus barbatus* L. [FNA5, HC, HC2]
Sp. Pl. 1: 409. 1753.
sweet William

*ssp. *barbatus* [FNA5, HC2]
sweet William

**Dianthus deltoides* L. [FNA5, HC, HC2]
Sp. Pl. 1: 411. 1753.
maiden pink

*ssp. *deltoides* [FNA5, HC2]
maiden pink

**Dichodon* [HC2]
mouse-ear chickweed

**Dichodon viscidus* (M. Bieb.) Holub [HC2]
Folia Geobotanica & Phytotaxonomica 9. 1974.

Cerastium anomalum Waldst. & Kit.
Cerastium dubium (Bastard) Guépin [FNA5, HC]
Dichodon viscidum (M.Bieb.) Holub, Orthographic variant
Stellaria dubia Bastard

Shildneck, P. and A. G. Jones. 1986. Cerastium dubium (Caryophyllaceae) new for the eastern half of North America (a comparison with sympatric Cerastium species, including cytological data). Castanea 51: 49-55.

Eremogone [FNA5, HC2]

Vers. Darstell. Alsin. 13, unnumbered plate. 1833.
sandwort

Eremogone aculeata (S. Watson) Ikonn. [FNA5, HC2]

Novosti Sist. Vyssh. Rast. 10: 139. 1973.
needle-leaf sandwort, prickly sandwort

Arenaria aculeata S. Watson [HC]
Arenaria fendleri A. Gray var. *aculeata* (S. Watson) S.L. Welsh
Arenaria pumicola Coville & Leiberg var. *californica* Maguire

[FNA lists Eremogone aculeata as present in Washington. WTU has specimens from OR, ID, and MT but none from WA. Examination of specimens from closely related taxa for possible misidentifications is warranted.

Eremogone capillaris (Poir.) Fenzl [FNA5, HC2]

Vers. Darstell. Alsin. 37. 1833.
mountain sandwort, thread-leaved sandwort

Arenaria capillaris Poir. [HC]

var. *americana* (Maguire) R.L. Hartm. & Rabeler [FNA5, HC2]

Sida. 21: 239. 2004.
fescue sandwort, thread-leaved sandwort

Arenaria capillaris Poir. ssp. *americana* Maguire [KZ99]
Arenaria capillaris Poir. var. *americana* (Maguire) R.J. Davis [HC]
Eremogone americana (Maguire) Ikonn.

Arenaria nardifolia [misapplied, HC]

Eremogone congesta (Nutt.) Ikonn. [FNA5, HC2]

Novosti Syst. Vyssh. Rast. 10: 139. 1973.
ballhead sandwort, capitate sandwort

Arenaria congesta Nutt. [HC]

var. *cephaloidea* (Rydb.) R.L. Hartm. & Rabeler [FNA5, HC2]

Sida. 21: 239. 2004.
ballhead sandwort, sharptip sandwort

Arenaria cephaloidea Rydb.
Arenaria congesta Nutt. var. *cephaloidea* (Rydb.) Maguire [HC]

var. *congesta* [FNA5, HC2]

Novosti Syst. Vyssh. Rast. 10: 139. 1973.
ballhead sandwort

Arenaria congesta Nutt. var. *congesta* [HC]

var. *prolifera* (Maguire) R.L. Hartm. & Rabeler [FNA5, HC2]

Sida. 21: 239. 2004.
ballhead sandwort

Arenaria congesta Nutt. var. *glandulifera* Maguire [HC]
Arenaria congesta Nutt. var. *prolifera* Maguire [HC]

Eremogone franklinii (Douglas ex Hook.) R.L. Hartm. & Rabeler [FNA5, HC2]

Sida. 21: 240. 2004.
Franklin's sandwort

Arenaria franklinii Douglas ex Hook. [HC]

var. *franklinii* [FNA5, HC2]

Sida. 21: 240. 2004.
Franklin's sandwort

Arenaria franklinii Douglas ex Hook. var. *franklinii* [HC]

var. *thompsonii* (M. Peck) R.L. Hartm. & Rabeler [FNA5, HC2]
Sida. 21: 240. 2004.
Thompson's sandwort

Arenaria franklinii Douglas ex Hook. var. *thompsonii* M. Peck [HC]

**Gypsophila* [FNA5, HC, HC2]
Sp. Pl. 1: 406. 1753. Gen. Pl. ed. 5, 191. 1754.
baby's-breath

**Gypsophila paniculata* L. [FNA5, HC, HC2]
Sp. Pl. 1: 407. 1753.
baby's breath

State Listed Noxious Weed.

**Herniaria* [FNA5, HC2]
Sp. Pl. 1: 218. 1753. Gen. Pl. ed. 5, 103. 1754.
rupturewort

**Herniaria hirsuta* L. [FNA5, HC2]
Sp. Pl. 1: 218. 1753.
hairy rupturewort

Recently (2016) collected in Spokane and Pierce counties, WA.

*var. *cinerea* (DC.) Loret & Barrandon [FNA5, HC2]
Fl. Montpellier. 243. 1876.
hairy rupturewort

**Holosteum* [FNA5, HC, HC2]
Sp. Pl. 1: 88. 1753. Gen. Pl. ed. 5, 39. 1754.
jagged chickweed

**Holosteum umbellatum* L. [FNA5, HC, HC2]
Sp. Pl. 1: 88. 1753.
jagged-chickweed

FNA5: "The first collection from the western United States was made in 1926 and the species has since spread to various disturbed sites in the Pacific Northwest. Several plants in two recent collections from Oregon (e.g., Joyal 463, OSC) are infected with an ovary smut (Microbotryum sp.), the first evidence of such infection on Holosteum in North America known to us."

*ssp. *umbellatum* [FNA5, HC2]
jagged chickweed

Honckenya [FNA5, HC2]
Neues Mag. Aerzte. 5: 206. 1783.
sea purslane, seabeach sandwort

Honkenya [HC], orthographic variant

Honckenya peploides (L.) Ehrh. [FNA5, HC2]
Neues Mag. Aerzte. 5: 206. 1783.
sea purslane, seabeach sandwort

Honkenya peploides L. [HC], orthographic variant

ssp. *major* (Hook.) Hultén [FNA5, HC2]
Fl. Aleut. Isl. 171. 1937.
sea purslane, seabeach sandwort

Arenaria peploides L. ssp. *major* (Hook.) Calder & Roy L. Taylor
Arenaria peploides L. var. *major* Hook.
Arenaria peploides L. var. *maxima* Fernald
Arenaria peploides L. var. *oblongifolia* (Torr. & A. Gray) S. Watson
Honckenya oblongifolia Torr. & A. Gray
Honckenya peploides (L.) Ehrh. var. *major* (Hook.) Abrams

**Lepyrodiclis* [FNA5, HC2]
Gen. Pl. 13: 966. 1840.
false jagged-chickweed

***Lepyrodiclis holosteoides* (C.A. Mey.) Fenzl ex Fisch. & C.A. Mey. [FNA5, HC2]
Enum. Pl. Nov. 1: 93, 110. 1841.
False jagged chickweed

Gouffeia holosteoides C.A. Mey.

Loeflingia [FNA5, HC, HC2]
Sp. Pl. 1: 35. 1753. Gen. Pl. ed. 5, 22. 1754.
loeflingia, pygmyleaf

Loeflingia squarrosa Nutt. [FNA5, HC, HC2]
Fl. N. Amer. 1: 174. 1838.
spreading pygmyleaf

Loeflingia pusilla Curran
Loeflingia squarrosa Nutt. ssp. *artemisiarum* Barneby & Twisselm.
Loeflingia squarrosa Nutt. ssp. *cactorum* Barneby & Twisselm.
Loeflingia squarrosa Nutt. ssp. *texana* (Hook.) Barneby & Twisselm.
Loeflingia squarrosa Nutt. var. *artemisiarum* (Barneby & Twisselm.) Dorn
Loeflingia texana Hook.

Rare, WNDR. FNA5 (Hartman and Rabeler): "R. C. Barneby and E. C. Twisselmann (1970) recognized four subspecies of Loeflingia squarrosa, for the most part allopatric. After a reevaluation of the characters used in their key, we feel that those entities are best regarded as geographical races of the species. This is justified largely by both the overlap in expressions of and the lack of correlation of the characters."

**Lychnis* [HC, HC2]
campion
(see also *Silene*)

***Lychnis coronaria* (L.) Desr. [HC, HC2]
Encycl. [J. Lamarck & al.] 3(2): 643. 1792.
rose campion

Agrostemma coronaria L.
Silene coronaria (L.) Clairville [FNA5]

FNA5: "Silene coronaria is commonly cultivated and occasionally escapes."

Moehringia [FNA5, HC2]
Sp. Pl. 1: 359. 1753. Gen. Pl. ed. 5, 170. 1754.
sandwort

Moehringia lateriflora (L.) Fenzl [FNA5, HC2]
Vers. Darstell. Alsin. 18, 38. 1833.
blunt-leaf sandwort, bluntleaf sandwort

Arenaria lateriflora L. [HC]
Arenaria lateriflora L. var. *angustifolia* H. St. John
Arenaria lateriflora L. var. *lateriflora*
Arenaria lateriflora L. var. *taylorae* H. St. John
Arenaria lateriflora L. var. *tenuicaulis* Blank.

FNA5: "Four varieties of Moehringia laterifolia have been described based on variation in leaf width and pubescence; they have been little used, and the variation appears not to be correlated with geography."

Moehringia macrophylla (Hook.) Fenzl [FNA5, HC2]
Vers. Darstell. Alsin. 18, 38. 1833.
large-leaf sandwort

Arenaria macrophylla Hook. [HC]

**Moenchia* [FNA5, HC2]
Neues Mag. Aerzte. 5: 203. 1783.
[name conserved]
upright chickweed

**Moenchia erecta* (L.) P. Gaertn., B. Mey. & Scherbius [FNA5, HC2]
Oekon. Fl. Wetterau. 1: 219. 1799.
upright chickweed

Sagina erecta L.

*ssp. *erecta* [FNA5, HC2]
upright chickweed

**Myosoton* [FNA5, HC2]
Methodus. 225. 1794.
water chickweed

**Myosoton aquaticum* (L.) Moench [FNA5, HC2]
Methodus. 225. 1794.
giant chickweed, water chickweed

Alsine aquatica (L.) Britton
Cerastium aquaticum L.
Stellaria aquatica (L.) Scop. [HC]

**Polycarpon* [FNA5, HC2]
Syst. Nat. ed. 10. 2: 859, 881, 1360. 1759. (as Polycarpa), 881, 1360. 1759.
manyseed

**Polycarpon tetraphyllum* (L.) L. [FNA5, HC2]
Syst. Nat. ed. 10. 2: 881. 1759.
fourleaf allseed, fourleaf manyseed

*ssp. *tetraphyllum* [FNA5, HC2]
fourleaf allseed, fourleaf manyseed

Recently collected (2016) in the Ballard neighborhood in north Seattle, where well established as a weed along a several hundred meter stretch of road side. Also known from southwest British Columbia and western Oregon.

Pseudostellaria [FNA5, HC2]
Nat. Pflanzenfam., ed. 2. 16c: 318. 1934.
starwort

Pseudostellaria jamesiana (Torr.) W.A. Weber & R.L. Hartm. [FNA5, HC2]
Phytologia. 44: 314. 1979.
sticky starwort

Alsine glutinosa A. Heller
Arenaria jamesiana (Torr.) Shinners
Stellaria jamesiana Torr. [HC]

Sabulina [HC2]
sandwort

Sabulina basaltica B.S. Legler [HC2]

PhytoKeys 81: 79-102. 2017.
basalt sandwort, Olympic sandwort

Arenaria rossii R. Br. ex Richardson [HC], misapplied
Arenaria rossii R. Br. ex Richardson var. *rossii* [HC], misapplied
Minuartia elegans (Cham. & Schltdl.) Schischk. [FNA5], misapplied
Minuartia rossii (R. Br. ex Richardson) Graebn. [FNA5], misapplied

Sabulina macra (A. Nelson & J.F. Macbr.) Dillenb. & Kadereit [HC2]
Taxon 63(1): 86. 2014.
slender sandwort, slender stitchwort

Alsinopsis tenella (J. Gay) A. Heller
Arenaria macra A. Nelson & J.F. Macbr.
Arenaria stricta Michx. [HC]
Arenaria stricta Michx. ssp. *macra* (A. Nelson & J.F. Macbr.) Maguire
Arenaria stricta Michx. var. *puberulenta* (M. Peck) C.L. Hitchc. [HC]
Greniera tenella J. Gay
Minuartia tenella (J. Gay) Mattf. [FNA5]

Sabulina nuttallii (Pax) Dillenb. & Kadereit [HC2]
Taxon 63(1): 87. 2014.
Nuttall's sandwort

Arenaria nuttallii Pax [HC]
Minuartia nuttallii (Pax) Briquet [FNA5]
Minuopsis nuttallii (Pax) W.A. Weber

var. *fragilis* (Maguire & A.H. Holmgren) Dillenb. & Kadereit [HC2]
Taxon 63(1): 87. 2014.
brittle sandwort, brittle stichwort

Arenaria nuttallii Pax ssp. *fragilis* Maguire & A.H. Holmgren
Arenaria nuttallii Pax var. *fragilis* (Maguire & A.H. Holmgren) C.L. Hitchc. [HC]
Minuartia nuttallii (Pax) Briquet ssp. *fragilis* (Maguire & A.H. Holmgren) McNeill
Minuartia nuttallii (Pax) Briquet var. *fragilis* (Maguire & A.H. Holmgren) Rabeler & R.L. Hartm. [FNA5]

var. *nuttallii* [HC2]
Nuttall's sandwort

Arenaria nuttallii Pax var. *nuttallii* [HC]
Arenaria pungens Nutt., homonym (illegitimate)
Minuartia nuttallii (Pax) Briq. ssp. *nuttallii*
Minuartia nuttallii (Pax) Briquet var. *nuttallii* [FNA5]
Minuopsis pungens (Nutt.) Mattf.

Sabulina pusilla (S. Watson) Dillenb. & Kadereit [HC2]
Taxon 63(1): 87. 2014.
annual sandwort, dwarf sandwort, dwarf stitchwort

Alsinopsis pusilla (S. Watson) Rydb.
Arenaria pusilla S. Watson [HC]
Minuartia pusilla (S. Watson) Mattf. [FNA5]

Sabulina rubella (Wahlenb.) Dillenb. & Kadereit [HC2]
Taxon 63(1): 87. 2014.
boreal stitchwort

Alsine rubella Wahlenb.
Arenaria hirta (Wormskjöld) Hartm. var. *rubella* (Wahlenb.) Hartm.
Arenaria propinqua Richardson
Arenaria rubella (Wahlenb.) Sm. [HC]
Arenaria verna L. var. *propinqua* (Richardson) Fernald
Arenaria verna L. var. *pubescens* (Cham. & Schltdl.) Fernald
Arenaria verna L. var. *rubella* (Wahlenb.) S. Watson
Minuartia rubella (Wahlenb.) Hiern [FNA5]

Tryphane rubella (Wahlenb.) Rchb.

FNA5: "We follow Ö. Nilsson (2001) in not recognizing infraspecific taxa that have been described based at least partly on pubescence. Variety propinqua has been applied to glabrous plants, which occur infrequently and sporadically throughout the range of the species. Where they do occur they are often intermixed with sparsely stipitate-glandular plants. This glabrous variety is rarely encountered in western North America."

Sabulina sororia B.S. Legler [HC2]
Phytokeys 81: 79-102. 2017.
Twin Sisters sandwort

Arenaria rossii R. Br. ex Richardson [HC], misapplied
Arenaria rossii R. Br. ex Richardson var. *rossii* [HC], misapplied
Minuartia elegans (Cham. & Schltdl.) Schischk. [FNA5], misapplied
Minuartia rossii (R. Br. ex Richardson) Graebn. [FNA5], misapplied

Sagina [FNA5, HC, HC2]
Sp. Pl. 1: 128. 1753. Gen. Pl. ed. 5, 62. 1754.
pearlwort

**Sagina apetala* Ard. [FNA5, HC, HC2]
Animadv. Bot. Spec. Alt. 2: 22, fig. 1. 1764.
annual pearlwort

Sagina apetala Ard. var. *barbata* Fenzl ex Ledeb.

Sagina decumbens (Elliott) Torr. & A. Gray [FNA5, HC2]
Fl. N. Amer. 1: 177. 1838.
western pearlwort

ssp. *occidentalis* (S. Watson) G.E. Crow [FNA5, HC2]
Rhodora. 80: 68. 1978.
western pearlwort

Sagina occidentalis S. Watson [HC]

FNA5: "Except by geography, subsp. occidentalis is very difficult to distinguish from subsp. decumbens. In plants of subsp. occidentalis the sepals tend to be more orbiculate and the capsules, prior to dehiscence, tend to be more globose. Extremely variable, subsp. decumbens generally can be recognized on the basis of presence of tuberculate seeds (60% frequency) and 80% have a combination of tuberculate seeds and glandular-pubescent pedicels and calyx bases. But when seeds are smooth, seeing the reticulate ridge pattern requires high magnification, and while SEM readily clarifies the differences, its use is hardly practical. Subspecies decumbens has a greater tendency to possess purple sepal tips or sepal margins, and purplish coloration frequently at the nodes."

Sagina maxima A. Gray [FNA5, HC2]
Mem. Amer. Acad. Arts, n. s. 6: 382. 1858.
stick-stemmed pearlwort

ssp. *crassicaulis* (S. Watson) G.E. Crow [FNA5, HC2]
Rhodora. 80: 79. 1978.
stick-stemmed pearlwort

Sagina crassicaulis S. Watson [HC]

No varietal distinction of S. crassicaulis in HC

ssp. *maxima* [FNA5, HC2]
stick-stemmed pearlwort

Sagina crassicaulis S. Watson var. *litoralis* (Hultén) Hultén
Sagina litoralis Hultén

FNA5 reports this taxon from Washington.

**Sagina procumbens* L. [FNA5, HC, HC2]
Sp. Pl. 1: 128. 1753.

bird-eye pearlwort

Sagina procumbens L. var. *compacta* Lange

Sagina saginoides (L.) H. Karsten [FNA5, HC, HC2]
Deut. Fl. 539. 1882.
alpine pearlwort, arctic pearlwort

Sagina linnaei C. Presl
Sagina micrantha (Bunge) Fernald
Sagina saginoides (L.) H. Karsten var. *hesperia* Fernald
Spergula saginoides L.

**Saponaria* [FNA5, HC, HC2]
Sp. Pl. 1: 408. 1753. Gen. Pl. ed. 5, 191. 1754.
soapwort

**Saponaria ocymoides* L. [FNA5, HC2]
Sp. Pl. 1: 409. 1753.
rock soapwort

**Saponaria officinalis* L. [FNA5, HC, HC2]
Sp. Pl. 1: 408. 1753.
bouncing-bet

**Scleranthus* [FNA5, HC, HC2]
Sp. Pl. 1: 406. 1753. (as Schleranthus); Gen. Pl. ed. 5, 190. 1754.
knawel

**Scleranthus annuus* L. [FNA5, HC, HC2]
Sp. Pl. 1: 406. 1753.
annual knawel

*ssp. *annuus* [FNA5, HC2]
annual knawel

Silene [FNA5, HC, HC2]
Sp. Pl. 1: 416. 1753. Gen. Pl. ed. 5, 193. 1754.
[name conserved]
campion, catchfly, wild pink, silene
(see also *Atocion*)

Silene acaulis (L.) Jacq. [FNA5, HC, HC2]
Enum. Stirp. Vindob. 78, 242. 1762.
moss campion

Cucubalus acaulis L.
Silene acaulis (L.) Jacq. ssp. *exscapa* (All.) DC.
Silene acaulis (L.) Jacq. var. *exscapa* (All.) DC. [HC]
Silene acaulis (L.) Jacq. var. *subacaulescens* (F.N. Williams) Fernald & H. St. John [HC]
Silene exscapa All.
Xamilensis acaulis (L.) Tzvelev

FNA5: "Silene acaulis is a variable species, and most workers have recognized infraspecific taxa in North America: subsp. acaulis (subsp. exscapa and subsp. arctica), which is predominantly arctic; and subsp. subacaulescens, which extends down the Rocky Mountains from Alaska to Arizona and New Mexico. In subsp. acaulis, the leaves are flat and short and the flowers are subsessile and smaller in size. Subspecies subacaulescens is typically a larger, less-compact plant with longer, narrower leaves and larger, pedunculate flowers. However, in many populations, these two variants are poorly differentiated, and in others both occur together, connected by intermediates. Silene acaulis is widely distributed in arctic and alpine Europe."

Silene antirrhina L. [FNA5, HC, HC2]
Sp. Pl. 1: 419. 1753.

sleepy catchfly

FNA5: "The ... varieties and forms of Silene antirrhina ... were named on the basis of stature and flower color, but none appear to be worthy of recognition. The species is very plastic, being greatly affected by moisture, exposure, and nutrients."

Silene bernardina S. Watson [FNA5, HC2]
Proc. Amer. Acad. Arts. 24: 82. 1889.
Palmer's catchfly

Silene bernardina S. Watson ssp. *bernardina* [KZ99]
Silene bernardina S. Watson var. *maguirei* Bocquet [KZ99]
Silene bernardina S. Watson var. *rigidula* (B.L. Rob.) Tiehm [KZ99]
Silene bernardina S. Watson var. *sierrae* (C.L. Hitchc. & Maguire) Bocquet [KZ99]
Silene shockleyi S. Watson

FNA5: "Silene bernardina is the earliest valid name for this species. Watson had previously (1875) named it S. montana, and that name was taken up by C. L. Hitchcock and B. Maguire (1947), who cited S. bernardina as a subspecies of S. montana. Unfortunately, the epithet montana is pre-occupied in Silene by S. montana Arrondeau (1863), an unrelated European species. The situation was further complicated by Watson in 1877, when he used the name Lychnis montana for another unrelated species now transferred to Silene and called S. hitchguirei. Silene bernardina varies in leaf width, pubescence, and flower color. The broader-leaved and more sparsely pubescent forms have been referred to subsp. bernardina, and the more-common, narrower-leaved, more-densely pubescent, and viscid forms have been referred to subsp. maguirei. Some forms of Silene bernardina can be difficult to distinguish from S. verecunda, S. sargentii, and S. oregana. Silene verecunda differs in its smaller, clavate calyx and in its petals being only shortly two-lobed. Silene sargentii is a small, densely cespitose, high-alpine species with very narrow, linear leaves (1-2 mm wide), shortly two-lobed petals, and seeds with much larger papillae around the margins. In S. oregana the petals are larger (two times the calyx) and deeply divided into many very narrow segments; the claw and the filaments are glabrous; the leaves, particularly the basal ones, are broader; and the inflorescences are narrower, with the more numerous flowers arranged on short, ascending branches; also, the calyx lobes are ovate and obtuse instead of lanceolate and acute."

**Silene conoidea* L. [FNA5, HC, HC2]
Sp. Pl. 1: 418. 1753.
conoid catchfly

FNA5: "Similar to Silene conica but larger in all its parts, S. conoidea is a rare adventive weed with showy flowers and inflated fruiting calyces."

**Silene csereii* Baumg. [FNA5, HC2]
Enum. Stirp. Transsilv. 3: 345. (as cserei). 1816.
biennial campion

Silene cserei Baumg. [HC], orthographic variant

FNA5: "Often confused with Silene vulgaris, S. csereii may be readily separated by the long, racemose primary branches of its inflorescence, the elliptic calyx that is constricted at both ends, tightly enclosing the capsule and lacking obvious reticulate venation, and the purple filaments."

**Silene dichotoma* Ehrh. [FNA5, HC, HC2]
Beitr. Naturk. 7: 143. 1792.
forked catchfly

*ssp. *dichotoma* [FNA5, HC2]
forked catchfly

**Silene dioica* (L.) Clairville [FNA5, HC2]
Man. Herbor. Suisse. 146. 1811.
red catchfly

Lychnis dioica L. [HC]

FNA5: "Silene dioica is closely related to S. latifolia and completely interfertile with it. The two species hybridize wherever they grow in close proximity, and the offspring (S. Â´hampeana Meusel & K. Werner) usually have pale pink flowers. Silene dioica and S. latifolia are difficult to separate in herbarium material

unless flower color has been noted. The characters that distinguish S. dioica are the usually dense, long, and soft pubescence covering at least the distal portion of the plant; the broad, almost globose, thin, and brittle capsule with revolute teeth; and the softer, thinner, usually broader leaves. Occasionally, double-flowered plants are encountered as garden escapes."

Silene douglasii Hook. [FNA5, HC, HC2]
Fl. Bor.-Amer. 1: 88. 1830.
Douglas's catchfly, Douglas's silene

var. *douglasii* [FNA5, HC, HC2]
Fl. Bor.-Amer. 1: 88. 1830.
Douglas's catchfly

Silene douglasii Hook. var. *monantha* (S. Watson) B.L. Rob. [HC]

var. *rupinae* Kephart & Sturgeon [FNA5, HC2]
Madroño. 40: 96, fig. 2. 1993.
Douglas's catchfly

**Silene gallica* L. [FNA5, HC, HC2]
Sp. Pl. 1: 417. 1753.
windmill pink

**Silene latifolia* Poir. [FNA5, HC2]
Voy. Barbarie. 2: 165. 1789.
white campion, evening catchfly

Lychnis alba Mill. [HC]
Silene alba (Mill.) E.H.L. Krause
Silene latifolia Poir. ssp. *alba* (Mill.) Greuter & Burdet

Silene menziesii Hook. [FNA5, HC, HC2]
Fl. Bor.-Amer. 1: 90, plate 30. 1830.
Menzies's catchfly

Silene menziesii Hook. var. *menziesii* [HC]
Silene menziesii Hook. var. *viscosa* (Greene) C.L. Hitchc. & Maguire [HC]

FNA5:"Silene menziesii is quite variable in the extent to which the inflorescence is developed and in its pubescence. This, coupled with the functionally dioecious nature of the species, has spawned a plethora of names, none of which appear to warrant recognition."

**Silene noctiflora* L. [FNA5, HC, HC2]
Sp. Pl. 1: 419. 1753.
night-flowering catchfly

Melandrium noctiflorum (L.) Fr.

FNA5: "Silene noctiflora is sometimes confused with S. latifolia, but they are very different species. Silene noctiflora differs in having perfect flowers with long, very narrow calyx teeth and an elliptic, fruiting calyx that is narrow at the mouth and constricted around the capsule base. It also has three styles and a capsule that dehisces by six teeth; S. latifolia has (four or) five styles and a capsule that dehisces by five bifid teeth. The flowers of S. noctiflora, as its name indicates, are nocturnal and moth-pollinated."

Silene oregana S. Watson [FNA5, HC, HC2]
Proc. Amer. Acad. Arts. 10: 343. 1875.
Oregon catchfly

Silene filisecta M. Peck
Silene gormanii Howell

FNA5: "The creamy white laciniate petals are the best field (and herbarium) guide to distinguishing this species from Silene parryi and S. scouleri, both of which have 2-4-lobed petals that are usually dingy cream to greenish or purple tinged."

**Silene paradoxa* L. [HC2]
Hist. Pl. Pyrenées 246. 1813.

Silene parryi (S. Watson) C.L. Hitchc. & Maguire [FNA5, HC, HC2]
Revis. N. Amer. Silene. 36. 1947.
Parry's, Parry's silene

Silene douglasii Hook. var. *macounii* (S. Watson) B.L. Rob.
Silene macounii S. Watson

FNA5: "Silene parryi is very similar to S. douglasii, but the latter is normally eglandular with a characteristic short, gray, retrorse pubescence. The two species may hybridize, accounting for the occurrence of populations of S. douglasii with some glandular pubescence in the inflorescence. Silene parryi is closely related also to S. scouleri, but the latter is normally readily distinguished by its pink flowers; taller stature; long, narrow, many-flowered inflorescences; and fusiform fruiting calyces that are constricted around the carpophore. However, some depauperate specimens of S. scouleri from montane habitats are difficult to place. Also, small plants of S. parryi from alpine habitats can easily be mistaken for S. grayi. The anthers of S. parryi are often smutted with Microbotryum violaceum (Persoon) G. Deml & Oberwinker [= Ustilago violacea (Persoon) Roussel], e.g., in the type collection of S. tetonensis."

Silene scouleri Hook. [FNA5, HC, HC2]
Fl. Bor.-Amer. 1: 88. 1830.
Scouler's catchfly, Scouler's siliene

ssp. *hallii* (S. Watson) C.L. Hitchc. & Maguire [FNA5, HC2]
Revis. N. Amer. Silene. 26. 1947.
Hall's catchfly, Hall's silene

Silene hallii S. Watson

FNA includes WA within the distribution of S. scouleri ssp. hallii. FNA5: "The main center of distribution of subsp. hallii is Colorado, but plants referable to or approaching this subspecies occur along the Rocky Mountains from New Mexico to southern British Columbia and Alberta."

ssp. *scouleri* [FNA5, HC2]
Fl. Bor.-Amer. 1: 88. 1830.
Scouler's catchfly, Scouler's silene

Silene scouleri Hook. var. *pacifica* (Eastw.) C.L. Hitchc. [HC]
Silene scouleri Hook. var. *scouleri* [HC]

Silene seelyi C.V. Morton & J.W. Thomp. [FNA5, HC, HC2]
Torreya. 33: 70. 1933.
Seely's silene

Anotites seelyi (C.V. Morton & J.W. Thomp.) W.A. Weber

Rare.

Silene spaldingii S. Watson [FNA5, HC, HC2]
Proc. Amer. Acad. Arts. 10: 344. 1875.
Spalding's catchfly, Spalding's silene

Rare.

Silene suksdorfii B.L. Rob. [FNA5, HC, HC2]
Bot. Gaz. 16: 44, plate 6, figs. 9-11. 1891.
Cascade catchfly, Suksdorf's catchfly

FNA5: "Silene suksdorfii appears to be closely related to S. parryi but differs in its broadly winged seeds, smaller size, cespitose habit, and the prominent purple-septate hairs of the calyx, although the latter occasionally are present in S. parryi. It is very similar to, and in Idaho appears to intergrade with, another alpine species, S. sargentii, which has linear leaves and lacks the purple septa in the hairs and the broad wing on the seeds. It is similar also to S. hitchguirei; see discussion under that species."

**Silene vulgaris* (Moench) Garcke [FNA5, HC2]
Fl. N. Mitt.-Deutschland, ed. 9. 46. 1869.
bladder campion

Silene cucubalus Wibel [HC]
Silene inflata Sm.

Silene latifolia Rendle & Britten var. *pubescens* (DC.) Farw.

FNA5: "Silene vulgaris is less variable in North America than in its native Europe, where five subspecies are recognized on the basis of capsule size, petal color, leaf shape, and habit. All North American material appears to belong to subsp. vulgaris, although a few collections from sandy habitats tend to have unusually narrow leaves. Similar plants from Europe have been named var. litoralis (Ruprecht) Jalas and subsp. angustifolia Hayek."

**Spergula* [FNA5, HC, HC2]
Sp. Pl. 1: 440. 1753. Gen. Pl. ed. 5, 199. 1754.
spurry

**Spergula arvensis* L. [FNA5, HC, HC2]
Sp. Pl. 1: 440. 1753.
corn spurry

Spergula arvense L. var. *sativa* (Boenn.) Rchb. [FMR]

FNA5: "Spergula arvensis is often a significant weed in sandy crop lands, but it is sometimes used as a forage crop in areas with poor, sandy soils; it was intentionally introduced to Crawford County, Michigan, in 1888 (O. Clute and O. Palmer 1893)."

Spergularia [FNA5, HC, HC2]
Fl. ech. 94. 1819.
[name conserved]
sandspurry

**Spergularia bocconei* (Scheele) Graebn. [HC, HC2]
5(1, Lief. 11): 849. 1919.
Bocconi's sandspurry

Spergularia bocconi (Scheele) Graebn. [FNA5], orthographic variant
Spergularia bocconii (Scheele) Graebn. [HC], orthographic variant

Spergularia canadensis (Pers.) G. Don [FNA5, HC, HC2]
Gen. Hist. 1: 426. 1831.
Canada sandspurry

var. *occidentalis* R. Rossbach [FNA5, HC2]
Rhodora. 42: 116. 1940.
Canadian sandspurry

**Spergularia diandra* (Guss.) Heldr. [FNA5, HC, HC2]
Pl. Atticae. unnumbered. 1851.
alkali sandspurry

Spergularia salsuginea Fenzl

Spergularia macrotheca (Hornem.) Heynh. [FNA5, HC, HC2]
Alph. Aufz. Gew. 689. 1846.
beach sandspurry

var. *macrotheca* [FNA5, HC2]
Alph. Aufz. Gew. 689. 1846.
beach sandspurry

**Spergularia rubra* (L.) J. Presl & C. Presl [FNA5, HC, HC2]
Fl. ech. 94. 1819.
red sandspurry

Arenaria rubra L.

FNA5: "Spergularia rubra was collected in 1901 on ballast in Alabama (Mohr, DS), the only record in the southeastern United States. It is the most widely distributed Spergularia species found outside of saline areas in the flora and has been in North America since at least the 1860s."

Spergularia salina J. Presl & C. Presl [FNA5, HC2]

Fl. ech. 95. 1819.
saltmarsh sandspurry

Spergularia marina (L.) Griseb. [HC]
Spergularia marina (L.) Griseb. var. *tenuis* (Greene) R. Rossbach
Spergularia salina J. Presl & C. Presl var. *tenuis* (Greene) Jeps.

FNA5: "While Spergularia salina may be native in coastal areas and some inland saline sites in much of the cited range, populations in the Great Lakes region are introduced where, as in S. media, highway and sidewalk salt runoff has created favorable habitats. Variety tenuis has been distinguished from var. salina by some authors as follows: cyme crowded versus lax, sepals 1.6-3.8 mm versus 2.4-5 mm, mature capsules 3-4.4 mm versus 3.6-6.4 mm, respectively. Due to the extreme overlap in morphologic features as well as geographic ranges, var. tenuis is not recognized here. The name Spergularia marina var. leiosperma (Kindberg) Gurke has been applied to plants with smooth seeds but, as pointed out by R. P. Rossbach (1940), separation of plants with smooth versus papillose seeds is not practical. Some authors believe that the correct name for this species is Spergularia marina."

Stellaria [FNA5, HC, HC2]
Sp. Pl. 1: 421. 1753. Gen. Pl. ed. 5, 193. 1754.
chickweed, starwort, stitchwort
(see also *Myosoton*, *Pseudostellaria*)

**Stellaria alsine* Grimm [FNA5, HC, HC2]
Nova Acta Phys.-Med. Acad. Caes. Leop.-Carol. Nat. Cur. 3(app.): 313. 1767.
bog stichwort

FNA5: "Stellaria alsine is presumed to be native in eastern North America but has been introduced elsewhere in North America and Chile."

Stellaria borealis Bigelow [FNA5, HC2]
Fl. Boston., ed. 2. 182. 1824.
boreal starwort, boreal stitchwort

ssp. *borealis* [FNA5, HC2]
Fl. Boston., ed. 2. 182. 1824.
boreal starwort

New taxon

ssp. *sitchana* (Steud.) Piper & Beattie [FNA5, HC2]
Fl. N.W. Coast. 147. 1915.
boreal starwort

Stellaria calycantha (Ledeb.) Bong. var. *bongardiana* (Fernald) Fernald [HC]
Stellaria calycantha (Ledeb.) Bong. var. *sitchana* (Steud.) Fernald [HC]

FNA5: "Subspecies sitchana is sturdier than subsp. borealis and is readily distinguished by its leaf blades, which are narrowly lanceolate and widest at the base, and by its narrowly triangular, 3-veined sepals. It is a western taxon associated mainly with the slopes of the Coast Ranges and the Rocky Mountains. On the eastern side of its range and in the Aleutian Islands it tends to intergrade with subsp. borealis."

Stellaria calycantha (Ledeb.) Bong. [FNA5, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2: 127. 1833.
northern bog starwort
(see also *Stellaria borealis*)

Stellaria calycantha (Ledeb.) Bong. var. *calycantha* [HC]
Stellaria simcoei (Howell) C.L. Hitchc. [HC]

Stellaria crispa Cham. & Schltdl. [FNA5, HC, HC2]
Linnaea. 1: 51. 1826.
crisped starwort

Alsine crispa (Cham. & Schltdl.) Holz.
Stellaria borealis Bigelow var. *crispa* (Cham. & Schltdl.) Fenzl ex Torr. & A. Gray

*_Stellaria graminea_ L. [FNA5, HC, HC2]
Sp. Pl. 1: 422. 1753.
grass-leaf starwort

Alsine graminea (L.) Britton

FNA5: "In Europe, both diploid and tetraploid cytotypes of Stellaria graminea occur with occasional triploid hybrids. Only the tetraploid form has been found in North America, except for a triploid colony in Newfoundland. This species is often confused with S. longifolia but differs in its stems, which are very angular, glabrous, and not scabrid; the narrowly triangular leaves on the flowering stems; the smooth leaf margins; the stiff, triangular, prominently 3-veined sepals; and the larger, rugulose seeds. The sterile overwintering shoots of Stellaria graminea have broader elliptic to elliptic-lanceolate leaf blades measuring 5-15 × 1.5-4 mm. They are broadest near the middle. This state of the plant has been named var. latifolia Petermann. Usually S. graminea has perfect flowers but occasionally plants that are entirely staminate-sterile are encountered. The flowers in these are partially fertile depending on the occurrence of cross- pollination."

Stellaria humifusa Rottb. [FNA5, HC, HC2]
Skr. Kiøbenhavnske Selsk. Laerd. Elsk. 10: 447, plate 4, fig. 14. 1770.
saltmarsh starwort

Alsine humifusa (Rottb.) Britton
Stellaria humifusa Rottb. var. _marginata_ Fenzl
Stellaria humifusa Rottb. var. _oblongifolia_ Fenzl
Stellaria humifusa Rottb. var. _suberecta_ B. Boivin

FNA5: "Stellaria humifusa is often confused with S. crassifolia, but has thicker stems and fleshy leaves that wrinkle and tend to turn brownish when dried. Also, in S. crassifolia the long pedicels are very slender and sharply angled below the capsule."

Stellaria longifolia Muhl. ex Willd. [FNA5, HC, HC2]
Enum. Pl. 479. 1809.
long-leaved starwort

Stellaria longipes Goldie [FNA5, HC, HC2]
Edinburgh Philos. J. 6: 327. 1822.
longstalk starwort

ssp. *longipes* [FNA5, HC2]
Edinburgh Philos. J. 6: 327. 1822.
Goldie's starwort

Stellaria longipes Goldie var. _altocaulis_ (Hultén) C.L. Hitchc. [HC]
Stellaria longipes Goldie var. _longipes_ [HC, JPM]

*_Stellaria media_ (L.) Vill. [FNA5, HC, HC2]
Hist. Pl. Dauphiné. 3: 615. 1789.
common chickweed

Alsine media L.
Stellaria apetala Ucria ex Roem.
Stellaria media (L.) Vill. var. _procera_ Klatt & Richter

*_Stellaria neglecta_ Weihe ex Bluff & Fingerh. [FNA5, HC2]
Comp. Fl. German. 1: 560. 1825.
greater chickweed

Alsine neglecta (Weihe) Á. Löve & D. Löve
Stellaria media (L.) Vill. ssp. _neglecta_ (Weihe) Gremli

FNA5: "Formerly, Stellaria neglecta was rare in North America, but during the last ten to 15 years it has spread rapidly and become weedy. It is very like larger forms of S. media (see note under that species), but usually differs in having larger flowers, sepals, and seeds; having a larger number of stamens; and having seeds with acute conic tubercles. Flowers are self-compatible but usually are pollinated by flies."

Stellaria nitens Nutt. [FNA5, HC, HC2]
Fl. N. Amer. 1: 185. 1838.

shiny starwort

Stellaria praecox A. Nelson

Stellaria obtusa Engelm. [FNA5, HC, HC2]
Bot. Gaz. 7: 5. 1882.
blunt-sepaled starwort

Alsine obtusa (Engelm.) Rose
Alsine viridula Piper
Alsine washingtoniana (B.L. Rob.) A. Heller
Stellaria viridula (Piper) St. John
Stellaria washingtoniana B.L. Rob.

**Stellaria pallida* (Dumort.) Crépin [FNA5, HC2]
Man. Fl. Belgique, ed. 2. 19. 1866.
lesser chickweed

Alsine pallida Dumort.
Stellaria boraeana Jordan
Stellaria media (L.) Vill. ssp. *pallida* (Dumort.) Asch. & Graebn.

FNA5: "Stellaria pallida is automatically self-pollinated and often cleistogamous. It usually can be distinguished from apetalous forms of S. media by its smaller size, yellowish green color, its small sepals and small, pale seeds. Also the base and tip of the sepals occasionally are dark-red pigmented."

Stellaria umbellata Turcz. [FNA5, HC, HC2]
Bull. Soc. Imp. Naturalistes Moscou. 15: 173. 1842.
umbrella starwort

Alsine baicalensis Coville
Stellaria gonomischa B. Boivin
Stellaria weberi B. Boivin

**Vaccaria* [FNA5, HC, HC2]
Gen. Pl. 3. 1776.
cowcockle, cowherb

**Vaccaria hispanica* (Mill.) Rauschert [FNA5, HC2]
Feddes Repert. 73: 52. 1966.
cowcockle

Saponaria vaccaria L.
Vaccaria segetalis (Necker) Garcke ex Asch. [HC]

Celastraceae [HC, HC2] Bittersweet Family

Synonyms:
Parnassiaceae (Grass of Parnassus Family)

Euonymus [HC, HC2]
wahoo

**Euonymus europaeus* L. [FNA12, HC2]
Sp. Pl. 1: 197. 1753.
European spindle tree

**Euonymus fortunei* (Turcz.) Hand.-Maz. [HC2]

Euonymus occidentalis Nutt. ex Torr. [HC, HC2]
Pacif. Railr. Rep. 4(5): 74. 1857.
burning bush, western wahoo

var. *occidentalis* [HC2, JPM]
In Pacif. Rail. Rep. iv. 74. 1857.
western wahoo

Parnassia [HC, HC2]
grass-of-parnassus

Parnassia cirrata Piper [HC2]
Erythea 7: 128. 1899.
Cascade grass-of-parnassus

var. *intermedia* (Rydb.) P.K. Holmgren & N.H. Holmgren [HC2, JPM2]
In A. Cronquist et al., Intermount. Fl. 3(A): 61. 1997.
Cascade grass-of-Parnassus

Parnassia fimbriata K.D. Koenig var. *hoodiana* C.L. Hitchc. [HC]
Parnassia fimbriata K.D. Koenig var. *intermedia* (Rydb.) C.L. Hitchc. [HC]
Parnassia intermedia Rydb.

Parnassia fimbriata K.D. Koenig [HC, HC2, JPM2]
Ann. Bot. (König & Sims) 1: 391. 1805.
fringed grass-of-Parnassus, fringed grass of parnassus
(see also *Parnassia cirrata*)

Parnassia fimbriata K.D. Koenig var. *fimbriata* [HC]

Parnassia kotzebuei Cham. ex Spreng. [HC, HC2, IFBC]
Syst. Veg. 1: 951. 1825.
Kotzebue's grass-of-Parnassus

Parnassia kotzebuei Cham. ex Spreng. var. *pumila* C.L. Hitchc. & Ownbey [HC]

Parnassia palustris L. [HC, HC2, JPM]
Sp. Pl. 1: 273. 1753.
grass-of-parnassus, northern grass-of-parnassus

Parnassia multiseta (Ledeb.) Fernald
Parnassia palustris L. ssp. *neogaea* (Fernald) Hultén
Parnassia palustris L. var. *montanensis* (Fernald & Rydb. ex Rydb.) C.L. Hitchc. [HC]
Parnassia palustris L. var. *neogaea* Fernald [WNHP]
Parnassia palustris L. var. *tenuis* Wahlenb. [KZ99]

The Jepson Manual, 2nd Edition and Illustrated Flora of British Columbia both synonymize all infraspecific taxa for this species. H&C recognize various infraspecific taxa, of which var. neogaea is tracked as a rare plant by the Washington Natural Heritage Program. Until a contemporary treatment supports the taxonomy of this species described by H&C, the treatment here follows Jepson and Illustrated Flora B.C.

Parnassia parviflora DC. [HC, HC2, JPM]
Prodr. 1: 320. 1824.
small-flowered grass-of-Parnassus

Parnassia palustris L. var. *parviflora* (DC.) B. Boivin [KZ99]

Paxistima [HC2]

Pachistima [HC], orthographic variant

Paxistima myrsinites (Pursh) Raf. [HC2, IFBC, JPM]
Sylva Tellur. 42. 1838.
Oregon boxleaf

Ilex myrsinites Pursh
Myginda myrtifolia Nutt.
Oreophila myrtifolia (Nutt.) Torr. & A. Gray
Pachistima myrsinites Raf. [HC], orthographic variant
Paxistima myrsinites (Pursh) Raf. ssp. *mexicana* Navaro & W.H. Blackwell

Ceratophyllaceae [FNA3, HC, HC2] Hornwort Family

FNA3: "Useful in identification of species of Ceratophyllum are leaf-forking characteristics. Leaves with no forking are "0-order"; they consist only of a primary segment. Those forking once are "1st-order"; their ultimate segments are secondary. Those in which at least one secondary segment forks are "2d-order"; their ultimate segments are tertiary. Those in which at least one tertiary segment forks are "3d-order"; their ultimate segments are quaternary. Those in which at least one quaternary segment forks are "4th order.""

Ceratophyllum [FNA3, HC, HC2]

Sp. Pl. 2: 992. 1753; Gen. Pl. ed. 5, 428, 1754.
coontail, hornwort

Ceratophyllum demersum L. [FNA3, HC, HC2]

Sp. Pl. 2: 992. 1753.
coon's-tail

Ceratophyllum apiculatum Cham.

FNA3: "Specimens of Ceratophyllum demersum with short basal spines or tubercles have been misidentified as C . submersum Linnaeus, a species not known in the New World despite reports to the contrary. Ceratophyllum demersum is the most common species of Ceratophyllum in North America and also the least likely to be found with fruit, its reproduction being primarily asexual. Predominantly low leaf order is, therefore, the most reliable means of identifying this species. Noted for its prolific growth, Ceratophyllum demersum occasionally has attained status as a serious weed."

Ceratophyllum echinatum A. Gray [FNA3, HC2]

Ann. Lyceum Nat. Hist. New York. 4: 49. 1837.
spineless hornwort

Ceratophyllum demersum L. var. *echinatum* (A. Gray) A. Gray
Ceratophyllum submersum L. var. *echinatum* (A. Gray) Wilmot-Dear

FNA3: "Principally an eastern North American species--and the only species of its genus endemic to North America-- Ceratophyllum echinatum is disjunct in the Pacific Northwest as a result of repeated Pleistocene glaciation. The habitats of C . echinatum are typically more acidic (avg. pH 6.6) than those of C . demersum (avg. pH 7.4). The two species only rarely coexist. Ceratophyllum echinatum also thrives in cooler, clearer, and more oligotrophic water than C . demersum and often is found in more ephemeral sites, such as shrub swamps (e.g., with Cephalanthus occidentalis) and beaver ponds. This species, relatively uncommon, is fast disappearing from much of its range because of habitat alteration or destruction and the introduction of nonindigenous species; steps should be taken to secure its conservation. Unlike Ceratophyllum demersum , C . echinatum does not attain status as a serious weed."

Chenopodiaceae: see Amaranthaceae

Cleomaceae [FNA7, HC2] Spiderflower Family

Peritoma [FNA7, HC2]

Prodr. 1: 23. 1824.
beeplant, cleome, spiderflower

Peritoma lutea (Hook.) Raf. [FNA7, HC2]

Sylva Tellur. 112. 1838.
yellow beeplant, yellow spiderflower

Cleome lutea Hook. [HC]

Cleome lutea Hook. var. *lutea* [KZ99]

Peritoma serrulata (Pursh) DC. [FNA7, HC2]
Prodr. 1: 237. (as serrulatum). 1824.
guaco Rocky Mountain bee-plant, Rocky Mountain beeplant, guaco, stinkweed

Cleome serrulata Pursh [HC]

FNA7: " Most collections of Peritoma serrulata from the northeastern and midwestern United States apparently represent non-persistent waifs or garden escapes. The species has been cultivated as a source of nectar for honeybees since ca. 1880 (L. H. Bailey 1900-1902). It shows considerable variation in fruit size, even within populations. The variation may reflect environmental influences, especially water availability, rather than genetics (H. H. Iltis 1952).

The seeds and leaves of Peritoma serrulata are consumed by the Navajo as food and provide a source of black dye. The leaves have been used as a remedy for insect bites, inflammation, and intestinal upsets (L. S. M. Curtin 1947)."

Polanisia [FNA7, HC, HC2]
Amer. J. Sci. 1: 37. 1819.
clammyweed

ssp. *trachysperma* (Torr. & A. Gray) Iltis [FNA7, HC2, KZ99]
Rhodora. 68: 47. 1966.
western clammyweed, sandyseed, clammy weed

Polanisia dodecandra (L.) DC. var. *trachysperma* (Torr. & A. Gray) Iltis
Polanisia trachysperma Torr. & A. Gray [HC]

FNA7 includes Washington in the distribution of this taxon, indicating that specimens from Washington have been examined and verified. Which herbaria hold these specimens is not known at this time.

Comandraceae: see Santalaceae

Compositae: see Asteraceae

Convolvulaceae [HC, HC2] Morning-Glory Family

Synonyms:
Cuscutaceae [HC] (Dodder Family)

Cusctaceae is a monophyletic clade within Convolvulaceae, and for this reason has been subsumed within the latter family. There is no consensus among regional floristic resources on the treatment of Calystegia and Convolvulus as distinct genera. Morphological differences distinguishing the genera have included stigmatic lobe shape (linear and acute-tipped in Convolvulus; oblong and blunt-tipped, flat in Calystegia) and number of capsular locules (one in Calystegia, two in Convolvulus). Recent molecular studies indicate that Calystegia is nested within Convolvulus (Stefanovic, Krueger, and Olmstead, 2002). Recognition of Calystegia at the rank of genus makes Convolvulus paraphyletic, a situation that is avoided here.

Calystegia [HC2]
bindweed, morning-glory

Calystegia atriplicifolia Hallier f. [HC2]

Bull. Herb. Boissier 5: 385. 1897.
night-blooming morning-glory

ssp. *atriplicifolia* [HC2, KZ99]
night-blooming morning-glory

Convolvulus nyctagineus Greene [HC]

**Calystegia ×lucana* (Ten.) G. Don
Gen. Hist. iv. 296. 1837.
large bindweed
(= *Calystegia sepium* × *Calystegia silvatica*)

Calystegia silvatica (Kit.) Griseb. ssp. *disjuncta* Brummitt

Hybrid of Calystegia sepium × Calystegia silvatica.

Calystegia sepium (L.) R. Br. [HC2, JPM]
Prodromus Florae Novae Hollandiae. 1810.
hedge bindweed

Convolvulus sepium L. [HC, ILBC2]

Molecular data indicate that Calystegia is a monophyletic clade within Convolvulus, so some taxonomists opt to retain the combinations used for Calystegia. The Jepson Flora Project has chosen to treat Calystegia as a genus distinct form Convolvulus. Illustrated Flora of British Columbia is the most contemporary regional flora, and like H&C it uses Convolvulus sepium. Note that H&C (1973) is incorrect by listing C. silvatica as a synonym of C. sepium. The name Convolvulus silvatica has never been validly published.

ssp. *angulata* Brummitt [HC2, KZ99]
Kew Bull. 35(2): 328 1980.
hedge bindweed, lady's nightcap

Calystegia sepium (L.) R. Br. var. *angulata* (Brummitt) N.H. Holmgren [IMF]
Convolvulus repens L.
Convolvulus sepium L. var. *repens* (L.) A. Gray

Calystegia soldanella (L.) R. Br. [HC2]
Prodr. Fl. Nov. Holland. 484. 1810.
seashore false bindweed, beach morning glory

Calystegia soldanella (L.) Roem. & Schult. [KZ99], invalid name
Convolvulus soldanella L. [HC]

**Convolvulus* [HC, HC2]
bindweed
(see also *Calystegia*)

**Convolvulus arvensis* L. [HC, HC2, ILBC2]
Sp. Pl. 153. 1753.
field bindweed

Convolvulus ambigens House

Noxious weed.

Cuscuta [HC, HC2]
coral-vine, dodder, love-tangle

**Cuscuta approximata* Bab. [HC, HC2, JPM2]
Ann. Mag. Nat. Hist. 13: 253. 1844.
alfalfa dodder

**var. approximata* [HC2]
alfalfa dodder

Cuscuta californica Hook. & Arn. [HC, HC2]

Bot. Beechey Voy. pt. 8: 364. 1839.
California dodder, chaparral dodder

var. *californica* [Draft FNA, HC2]
Bot. Beechey Voy. 364. 1839.
California dodder

Cuscuta campestris Yunck. [Draft FNA, HC2]
Mem. Torrey Bot. Club 18(2): 138. 1932.
field dodder

Cuscuta pentagona Engelm. var. *calycina* Engelm. [HC]

Cuscuta cephalanthi Engelm. [HC, HC2]
American Journal of Science, and Arts 43(2): 336-337, pl. 6, f. 1-6. 1842.
buttonbush dodder

Cuscuta denticulata Engelm. [HC, HC2]
Amer. Naturalist 9(6): 348. 1875.
desert dodder

**Cuscuta epithymum* Murray [HC, HC2]
clover dodder, common dodder, thyme dodder

var. *epithymum* [Draft FNA, HC2]
Syst. Veg. (ed. 14) 140. 1774.
clover dodder, thyme dodder

Note that H&C use this combination with authorship by Linnaeus (L.), which is considered invalidly published.

Cuscuta indecora Choisy [HC, HC2]
inelegant dodder, large-seeded dodder

var. *indecora* [HC2]

Cuscuta indecora Choisy var. *neuropetala* (Engelm.) Hitchc. [HC]

Cuscuta occidentalis Millsp. [HC, HC2]
Publ. Field Columbian Mus., Bot. Ser. 5: 204. 1923.
western dodder

Cuscuta californica Hook. & Arn. var. *breviflora* Engelm. [KZ99]

Cuscuta pacifica Costea & M.A.R. Wright [HC2]
Systematic Botany, 34(4):787?795. 2009.
salt marsh dodder

Cuscuta salina Engelm. [HC, HC2], misapplied
Cuscuta salina Engelm. var. *major* Yunck. [KZ99], misapplied
Cuscuta salina Engelm. var. *salina* [KZ99], misapplied
Cuscuta subinclusa Durand & Hilg. var. *abbreviata* Engelm.

var. *pacifica* [HC2]

**Cuscuta pentagona* Engelm. [Draft FNA, HC, HC2]
Amer. J. Sci. Arts 43(2): 340-341, pl. 6, f. 22-24. 1842.
five-angled dodder
(see also *Cuscuta campestris*)

Cuscuta arvensis Beyr. ex Engelm.
Cuscuta pentagona Engelm. var. *pentagona* [HC]

Cuscuta suksdorfii Yunck. [HC, HC2]
Mem. Torrey Bot. Club 18(2): 167. 1932.
mountain dodder

Cuscuta suksdorfii Yunck. var. *suksdorfii* [KZ99]

Cornaceae [HC, HC2] Dogwood Family

Cornus [HC, HC2]
dogwood

Cornus canadensis L. [HC, HC2]
Sp. Pl. 1: 118. 1753.
bunchberry, puddingberry
(see also *Cornus unalaschkensis*)

Cornus nuttallii Audubon [HC, HC2]
Ornithological Biography 4: 482. 1838.
mountain dogwood, Nuttall's dogwood, Pacific dogwood, western flowering dogwood

Cornus occidentalis (Torr. & A. Gray) Coville [HC2]
Contr. U.S. Natl. Herb. 4: 117. 1893.
creek dogwood, western red osier
(see also *Cornus stolonifera*)

Cornus sericea L. ssp. *occidentalis* (Torr. & A. Gray) Fosberg [JPM]
Cornus stolonifera Michx. var. *occidentalis* (Torr. & A. Gray) C.L. Hitchc. [HC]

Cornus stolonifera Michx. [HC, HC2, ILBC2]
Fl. Bor.-Amer. (Michaux) 1: 92. 1803.
red-osier dogwood
(see also *Cornus occidentalis*)

Cornus sericea L., Ambiguous
Cornus sericea L. ssp. *sericea* [JPM]
Cornus stolonifera Michx. var. *stolonifera* [HC]

Cornus unalaschkensis Ledeb. [HC2, IFBC]
Flora Rossica 2: 378. 1844.
western bunchberry

Tetraploid presumably derived from hybridization between C. canadensis and C. suecica.

Crassulaceae [FNA8, HC, HC2] Stonecrop Family

Crassula [FNA8, HC2]
Sp. Pl. 1: 282. 1753; Gen. Pl. ed. 5, 136. 1754.
pygmy-weed

Tillaea [HC]

Crassula aquatica (L.) Schönland [FNA8, HC2]
Nat. Pflanzenfam. 51[III,2a]: 37. 1890.
wrinkle-seed pygmyweed, water pygmy weed

Crassula saginoides (Maxim.) M. Bywater & Wickens [KZ99]
Crassula vaillantii (Willd.) Roth., misapplied
Hydrophila vaillantii House
Tillaea angustifolia Nutt. var. *bolanderi* S. Watson
Tillaea aquatica L. [HC]
Tillaea bolanderi (S. Watson) Greene
Tillaea drummondii Torr. & A. Gray var. *bolanderi* (S. Watson) Jeps.
Tillaea vaillantii A. Gray, invalid name
Tillaeastrum pringlei Rose

FNA8: "The typical form of Crassula aquatica, with very short fruiting pedicels, grows chiefly in coastal salt

marsh. It is rare and widely scattered in Alaska and Canada (W. J. Cody 1954), scarcely more common southward. M. Bywater and G. E. Wickens (1984) separated C. saginoides by pedicels elongate in fruit, sometimes to ca. 2 cm. It grows mostly inland and sometimes to 3000 meters, but from the specimens that they annotated, the ranges are not distinct. N. L. Britton and J. N. Rose (1905) and W. L. Jepson (1923-1925) have separated it, at least varietally, under other names, but most authors have included it without comment or at most have called it doubtfully distinct. I call it merely a phase of C. aquatica not needing a formal name (R. V. Moran 1992b). A typical strand plant is depicted in the lower left corner of the illustration panel on this page."

Crassula connata (Ruiz & Pav.) A. Berger [FNA8, HC2]

Nat. Pflanzenfam. ed. 2. 18a: 389. 1930.

pygmy weed

Crassula connata (Ruiz & Pav.) A. Berger var. *subsimplex* (S. Watson) M. Bywater & Wickens [JPM2]
Crassula erecta (Hook. & Arn.) A. Berger
Tillaea connata Ruiz & Pav.
Tillaea erecta Hook. & Arn.
Tillaea leptosepala Benth.

Not in H&C. FNA8: "M. Bywater and G. E. Wickens (1984) proposed five varieties, four partly in the flora area, where they have largely overlapping ranges and overlapping characteristics. Further, some supposed differences probably result from local and year-to-year rainfall differences. Although probably having some genetic basis, these varieties seem too poorly defined to be useful (R. V. Moran 1992b). S. L. Hatch et al. (1990) were first to report Crassula connata in Texas, from a 1968 collection (F. B. Jones 7292), suggesting that it may be a recent arrival there. It was first discovered in British Columbia and Washington in 1977 (A. Ceska and O. Ceska 1980) and is treated as a rare native species by the heritage program in British Columbia and the Washington Natural Heritage Program, where it has a habitat typical of other southern disjunct natives (A. Ceska, pers. comm.)."

**Crassula tillaea* Lester-Garl. [FNA8, HC2]

Fl. Jersey. 87. 1903.

mossy stonecrop

Tillaea muscosa L.

FNA8: "First found in California in 1925 (J. T. Howell 1942), Crassula tillaea is now widespread and locally common, often mingling with C. connata. It has been spreading northward, being first found in Oregon in 1984 (D. H. Wagner 1991), in Washington in 1999 (A. L. Jacobson et al. 2001), and in British Columbia in 2002 (P. F. Zika 2002); it has not yet been found growing with C. connata in this part of its range (A. Ceska, pers. comm.)."

Rhodiola [FNA8, HC2]

Sp. Pl. 2: 1035. 1753; Gen. Pl. ed. 5, 457. 1754.

roseroot

Rhodiola integrifolia Raf. [FNA8, HC2]

Atlantic J. 1: 146. 1832.

king's crown, midsummer-men, roseroot

Sedum integrifolium (Raf.) A. Nelson

ssp. *integrifolia* [FNA8, HC2]

Atlantic J. 1(4): 146. 1832.

King's crown, roseroot

Sedum alaskanum (Rose) Rose ex Hutch.
Sedum roseum (L.) Scop. ssp. *integrifolium* (Raf.) Hultén [JPM], orthographic variant

FNA8: "The plants treated here as Rhodiola integrifolia and R. rosea are part of a difficult polymorphic complex of arctic to cool-temperate North America and Eurasia and of high mountains southward. Some authors have included them all in R. rosea [or Sedum rosea (Linnaeus) Scopoli], often with subspecies or varieties; N. L. Britton and J. N. Rose (1905) earlier divided them into two to several species. For this complex C. H. Uhl (1952) cited six published chromosome counts from Greenland through Eurasia to Japan, all n = 11 or 2n = 22; he found the same numbers in seven collections from

northeastern North America (all these Rhodiola rosea proper). From Eurasia, according to R. L. Taylor and G. A. Mulligan (1968), races with 2n = 16 and 33 also are known. On the other hand, for endemics in Minnesota and New York and for five plants from New Mexico and California, Uhl found n = 18 or 2n = 36, and Taylor and Mulligan likewise found 2n = 36 in plants of Moresby Island, British Columbia. With the support of five more counts, but with none for the large area of Oregon and Wyoming to the Bering Sea, R. T. Clausen (1975) separated the 36-chromosome plants as Sedum integrifolium. More counts of 2n = 36 have since appeared, including one from Sutwick Island, off the Alaska Peninsula (Á. Löve 1979). In middle North America, Rhodiola integrifolia and R. rosea are geographically distinct. The local endemic subsp. leedyi of the former grows in Minnesota, midway between the western subspecies of R. integrifolia and the eastern R. rosea, and grows in New York state within 100 km of R. rosea. Otherwise, the ranges of the two species are over 2000 km apart in the south and nearly 3000 km in the north. Rhodiola integrifolia also is the prevailing plant in eastern Asia, where it has been named Sedum atropurpureum N. S. Turczaninow (E. Hultén 1941-1950, vol. 5), and R. rosea seems to extend (although not verified by chromosome counts) from eastern Asia to far-western Alaska, on the coast of the Bering Sea. Although saying that Sedum integrifolium differs from S. rosea in many ways besides the chromosome number, R. T. Clausen (1975) found few absolute distinctions. His best key characters were those used here, petal width of staminate flowers, largely supported by flower color. Although questions remain unanswered, it seems best for now to follow Clausen in keeping the two species for North America. Over its broad range, Rhodiola integrifolia is quite variable (e.g., see E. Hultén 1941-1950, vol. 5). R. T. Clausen (1975) noted that in some populations pistillate plants outnumber staminate; in others staminate may be six times as many as pistillate. He distinguished two outlying endemics as subspp. leedyi and neomexicana, also kept as subspecies here. He also proposed subsp. procer[a] for tall robust plants of Colorado, New Mexico, and (less typical) California, all within the range of subsp. integrifolia and all with the same chromosome number. Some of his plants look remarkably different from the usual dwarf forms of subsp. integrifolia that grow at the same high elevations. He did not include in subsp. procera (and apparently did not see alive) the tall plants often found inland in Alaska and northwestern Canada, which would be Sedum frigidum Rydberg according to Hultén. Thus the racial situation is much more complex than the naming of only two peripheral subspecies might suggest."

Sedum [FNA8, HC, HC2]
Sp. Pl. 1: 430. 1753; Gen. Pl. ed. 5, 197. 1754.
stonecrop
(see also *Rhodiola*)

**Sedum acre* L. [FNA8, HC, HC2]
Sp. Pl. 1: 432. 1753.
mossy stonecrop

Sedum elrodii M.E. Jones

**Sedum album* L. [FNA8, HC2]
Sp. Pl. 1: 432. 1753.
white stonecrop

FNA8: "Sedum album was first reported as naturalized in the United States in 1934."

**Sedum brevifolium* DC. [HC2]
Soc. Agr. Dept. Seine 11: 79. 1808.
short-leaved stonecrop

Recently collected in King County, where fully naturalized on a montane rocky bald north of Interstate 90 east of North Bend. The bald is adjacent to rock climbing routes, suggesting propagules may have arrived with climbers. The plants form reproducing populations across a several hectare area of balds and rock faces.

Sedum divergens S. Watson [FNA8, HC, HC2]
Proc. Amer. Acad. Arts. 17: 372. 1882.
Pacific stonecrop, spreading stonecrop

Amerosedum divergens (S. Watson) Á. Löve & D. Löve

FNA8: "Leaves of Sedum divergens are close-set, thick, and turgid. This species occurs in scattered and

disjunct populations from the coastal mountains of Alaska (D. F. Murray 1980) and British Columbia to the northern Cascade Mountains and Olympic Mountains of Washington; Lake Peak, Josephine County, Oregon; and Klamath Mountains near Mount Robson in Alberta and British Columbia."

**Sedum forsterianum* Sm. [HC2]
Engl. Bot. 26: t. 1802. [1 Oct 1807-1 Apr 1808]. 1802.
Forster's stonecrop

Sedum lanceolatum Torr. [FNA8, HC, HC2]
Ann. Lyceum Nat. Hist. New York. 2: 205. 1827.
lance-leaved stonecrop
(see also *Sedum rupicola*)

Amerosedum nesioticum (G.N. Jones) Á. Löve & D. Löve
Sedum lanceolatum Torr. ssp. *lanceolatum* [KZ99]
Sedum lanceolatum Torr. ssp. *nesioticum* (G.N. Jones) R.T. Clausen [KZ99]
Sedum lanceolatum Torr. var. *lanceolatum* [FNA8, HC]
Sedum lanceolatum Torr. var. *nesioticum* (G.N. Jones) C.L. Hitchc. [FNA8, HC]
Sedum nesioticum G.N. Jones
Sedum stenopetalum Pursh var. *subalpinum* Fröd.

Sedum leibergii Britton [FNA8, HC, HC2]
N. Amer. Fl. 22: 73. 1905.
Leiberg's stonecrop

Amerosedum leibergii (Britton) Á. Löve & D. Löve
Sedum divaricatum S. Watson

Sedum oreganum Nutt. [FNA8, HC, HC2]
Fl. N. Amer. 1: 559. 1840.
Oregon stonecrop

Gormania oregana (Nutt.) Britton
Sedum oreganum Nutt. ssp. *oreganum* [KZ99]
Sedum oreganum Nutt. ssp. *tenue* R.T. Clausen
Sedum oreganum Nutt. var. *oreganum* [FNA8]
Sedum oreganum Nutt. var. *tenue* (R.T. Clausen) H. Ohba [FNA8]

Sedum rupicola G.N. Jones [FNA8, HC2]
Res. Stud. State Coll. Wash. 2: 125. 1931.
lance-leaved stonecrop

Sedum lanceolatum Torr. var. *rupicola* (G.N. Jones) C.L. Hitchc., orthographic variant
Sedum lanceolatum Torr. var. *rupicolum* (Jones) Hitchc. [HC]

FNA8: "The leaves of Sedum rupicola detach very easily and the fallen ones sprout and produce plantlets from their bases. R. T. Clausen (1975) considered S. rupicola to be most closely related to S. lanceolatum. He recognized it as a species because, although it sometimes grows sympatrically with S. lanceolatum, the two do not hybridize, and because S. rupicola flowers a week earlier and grows in soils of higher pH than does S. lanceolatum. The general morphological differences are: in S. rupicolum leaves of sterile shoots are ovate and detach easily, sepals have obtuse apices, petals have minutely mucronate tips (0.1 mm), and nectaries are deep yellow; in S. lanceolatum leaves of sterile shoots are linear-lanceolate and do not detach easily, sepals have acute apices, petal apices are long-acuminate (0.8 mm), and nectaries are pale yellow."

Sedum spathulifolium Hook. [FNA8, HC, HC2]
Fl. Bor.-Amer. 1: 227. 1832.
broadleaf stonecrop, spatula-leaf stonecrop

Sedum pruinosum Britton
Sedum spathulifolium Hook. ssp. *pruinosum* (Britton) R.T. Clausen & C.H. Uhl
Sedum spathulifolium Hook. ssp. *spathulifolium* [KZ99]
Sedum spathulifolium Hook. var. *pruinosum* (Britton) B. Boivin [FNA8]
Sedum spathulifolium Hook. var. *spathulifolium* [FNA8]

Sedum stenopetalum Pursh [FNA8, HC, HC2]

Fl. Amer. Sept. 1: 324. 1813.
wormleaf stonecrop

Amerosedum stenopetalum (Pursh) Á. Löve & D. Löve
Sedum douglasii Hook.

ssp. *stenopetalum* [HC2, KZ99]
wormleaf stonecrop

Sedum monanthum Suksd.
Sedum stenopetalum Pursh ssp. *monanthum* (Suksd.) R.T. Clausen [KZ99]
Sedum stenopetalum Pursh var. *monanthum* (Suksd.) H. Ohba [FNA8]
Sedum stenopetalum Pursh var. *stenopetalum* [FNA8]

**Sedum thartii* L.P. Hébert [HC2]

Sedum rupestre L. [FNA8], misapplied

Sporadically naturalized on road cuts and other disturbed areas in western Washington and southwestern B.C. FNA8: "Most naturalized records of S. rupestre in North America have been incorrectly named S. reflexum." Gallo and Zika (2014) determined that the names Sedum rupestre and S. reflexum are misapplied to North American plants; our plants can be assigned to Sedum thartii and S. forsterianum.

Crossosomataceae [HC2] Rockflower Family

Glossopetalon [HC, HC2]
green-bush

Glossopetalon spinescens A. Gray [HC2]
Nevada greasewood, spiny green-bush

var. *aridum* M.E. Jones [HC2, JPM2]
Contr. W. Bot. 8: 28. 1898.
spiny green-bush

Glossopetalon nevadense A. Gray [HC]
Glossopetalon nevadense A. Gray var. *stipuliferum* (H. St. John) C.L. Hitchc.
Glossopetalon stipuliferum H. St. John

H&C does not list for WA.

Cruciferae: see Brassicaceae

Cucurbitaceae [HC, HC2] Cucumber Family

**Bryonia* [HC2]
bryony

**Bryonia alba* L. [HC2, Stace 1997]
Sp. Pl. 2: 1012. 1753.
white bryony

Not in H&C; listed as noxious by state of WA. Curtis Bjork has confirmed that it is not only present, but is becoming quite a pest: "It\'s killing Crataegus all over the Palouse and has been agressively spreading for decades. In some places it grows so robustly, it resembles pictures those monster nonnative vines in the

SE states, like kudzu and Lonicera japonica."

*Citrullus [HC2]

*Citrullus lanatus (Thunb.) Matsum. & Nakai [HC2, JPM2]
Catalogus Seminum et Sporarum in Horto Botanico Universitatis Imperialis Tokyoensis per annos 1915 et 1916 lectorums Imperialis Tokyoensis 30, no. 854. 1916.
watermelon

Uncommon as a casual introduction in disturbed areas in Washington. At this time (2012) documented populations do not appear to be self-sustaining.

*Cucurbita [HC2]

*Cucurbita pepo L. [HC2]

Echinocystis [HC, HC2]
balsam apple, wild cucumber

*Echinocystis lobata (Michx.) Torr. & A. Gray [HC, HC2]
Fl. N. Amer. 1(3): 542. 1840.
wild cucumber

Marah [HC, HC2]
bigroot, manroot

Marah oregana (Torr. & A. Gray) Howell [HC2]
A Flora of Northwest America 2: 239. 1898.
coastal manroot

Marah oreganus (Torr. & A. Gray) Howell [HC], orthographic variant

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Cuscutaceae: see Convolvulaceae

Dipsacaceae [HC, HC2] Teasel Family

*Dipsacus [HC, HC2]
teasel

*Dipsacus fullonum L. [FNA, JPM2]
Sp. Pl. 1: 97. 1753.
teasel

Dipsacus fullonum L. ssp. *sylvestris* (Huds.) Clapham
Dipsacus sylvestris Huds. [HC, HC2]

*Knautia [HC, HC2]
scabiosa

*Knautia arvensis (L.) Coult. [HC, HC2]
Mém. Dipsac., 41. 1823.
Bluebuttons

Scabiosa arvensis L.

Currently (2012) one known specimen from Western Washington University collected in 1969 in Port Angeles.

Droseraceae [HC, HC2] Sundew Family

**Dionaea* [HC2]

**Dionaea muscipula* J. Ellis [Gray's Manual, HC2]
The St James's Chronicle; or the British Evening Post No. 1172: [p. 4]. 1768.
Venus fly trap

Not in H&C; intentionally planted in various locations over the years by carnivorous plant enthusiasts. Reported and collected by Fred Weinmann and Peter Zika.

Drosera [HC, HC2]
sundew

Drosera anglica Huds. [HC, HC2]
Flora Anglica, Editio Altera 135. 1778.
English sundew, giant sundew

Drosera longifolia L.

Drosera ×obovata Mert. & W. Koch [HC2]

Drosera rotundifolia L. [HC, HC2]
Sp. Pl. 1: 281. 1753.
round-leaf sundew

Ehretiaceae [Draft FNA, HC2] Ehretia Family
Formerly included within a broadly defined Boraginaceae. See citations under Boraginaceae treatment.

Tiquilia [HC2]
crinklemat

Tiquilia nuttallii (Hook.) A.T. Richardson [HC2, JPM]
Sida 6(3): 236. 1976.
coldenia, rosette crinklemat, rosette tequilia

Coldenia nuttallii Hook. [HC]

Elaeagnaceae [HC, HC2] Oleaster Family

Elaeagnus [HC, HC2]
elaeagnus

**Elaeagnus angustifolia* L. [HC, HC2]
Sp. Pl. 1: 121. 1753.
Russian-olive

Elaeagnus commutata Bernh. ex Rydb. [HC, HC2]
Flora of the Rocky Mountains 582. 1917.
American silver-berry, wolfberry

Elaeagnus argentea Pursh, homonym (illegitimate)

**Elaeagnus umbellata* Thunb. [HC2, Stace 1997]
Syst. Veg., ed. 14 (J. A. Murray). 164. [May-Jun 1784]. 1784.
autumn olive

Shepherdia [HC, HC2]
buffalo-berry

Shepherdia canadensis (L.) Nutt. [HC, HC2]
Gen. N. Amer. Pl. 2: 240. 1818.
russet buffalo-berry, soapberry, soopolallie

Elaeagnus canadensis (L.) A. Nelson

Elatinaceae [HC, HC2] Waterwort Family

Bergia [HC, HC2]
bergia

Bergia texana (Hook.) Seub. ex Walp. [HC, HC2]
Repertorium Botanices Systematicae. 1: 285. 1842.
Texas bergia

Elatine brachysperma A. Gray; shortseed waterwort, or short-fruited waterwort, has been reported from WA by Abrams and KZ99, but no specimens have been found

Elatine [HC, HC2]
mud-purslane, waterwort

Elatine californica A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 13: 361, 364. 1878.
California waterwort

Elatine williamsii Rydb.

Elatine chilensis Gay [HC2, JPM]
Chilena 1: 286. [1846]. 1845.
Chilean waterwort

Elatine americana (Pursh) Arn. [Abrams, Peck, HC], misapplied
Elatine triandra Schkuhr [Abrams, Peck, HC], misapplied

The author is Claude Gay, not Gray as in KZ99. Elatine rubella Rydb., redstem waterwort, three-flowered waterwort, three-stamen waterwort, is reported from WA by KZ99, based on a collection from Usk, cited in Abrams as E. triandra (Kreager 367 WTU, 1902). That collection is E. chilensis

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Empetraceae: see Ericaceae

Ericaceae [FNA8, HC, HC2] Heath Family

Synonyms:
Empetraceae [HC] (Crowberry Family)
Monotropaceae (Indian-Pipe Family)
Pyrolaceae (Wintergreen Family)

FNA8: "The closest relatives of the broadly defined Ericaceae are Clethraceae and Cyrillaceae. Some phylogenies show Cyrillaceae as sister to Ericaceae; other analyses have Clethraceae and Cyrillaceae as closest relatives to each other, together forming the sister group to Ericaceae. Monotropa and related genera (genera 5-12 of this treatment), and Pyrola and related genera (genera 1-4 of this treatment) have been treated as families Monotropaceae and Pyrolaceae. Not all botanists agreed with this, as summarized by G. H. M. Lawrence (1951):

"Many botanists (including Hutchinson) have held the view that the Pyrolaceae are not sufficiently distinct from the Ericaceae to be treated as a separate family." Differences in habit, floral features, and pollen have helped maintain family status for Pyrolaceae and Monotropaceae in regional floras. Molecular and morphological analyses (K. A. Kron et al. 2002) show these lineages embedded within Ericaceae. Similarly, Empetraceae has been demonstrated to be nested within Ericaceae and is here included in the Ericaceae. Studies in the last several decades, especially since 1990 including molecular data, have resulted in rearrangements of generic limits in the Ericaceae. These are discussed under the various genera; for the reader's convenience they are summarized here. Ledum is included in Rhododendron; Leiophyllum and Loiseleuria are included in Kalmia; and Hypopitys is included in Monotropa. Arctous is separated from the much larger Arctostaphylos, to which it is inferred to form a sister clade. Eubotrys is segregated from Leucothoe, with which it has often been combined. Vaccinium is treated in a broad sense, to include segregates such as Oxycoccus; although Vaccinium is decidedly polymorphic, this seems a workable approach until generic limits in the Vaccinieae Reichenbach are better understood."

Allotropa [FNA8, HC, HC2]
Pacif. Railr. Rep. 6(3): 81. 1858.
candystick, sugarstick

Allotropa virgata Torr. & A. Gray [FNA8, HC, HC2]
Pacif. Railr. Rep. 6(3): 80, 81. 1858.
candystick, sugarstick

Andromeda [FNA8, HC, HC2]
Sp. Pl. 1: 393. 1753; Gen. Pl. ed. 5, 186. 1754.
bog-rosemary, moorwort

Andromeda polifolia L. [FNA8, HC, HC2]
Sp. Pl. 1: 393. 1753.
bog rosemary

Reported to occur in Washington in Flora of North America, but no specimens from WA currently exist in PNW herbaria.

var. *polifolia* [FNA8, HC2]
Sp. Pl. 1: 393. 1753.
bog rosemary

Andromeda polifolia L. var. *concolor* B. Boivin

FNA8: "Variety polifolia is circumpolar in its distribution. In North America it occurs in the northwest arctic from Alaska to the west coast of Greenland, south as far as northern Washington and Idaho, eastward in boreal forests to Hudson Bay, James Bay, and northern Labrador. Plants with the leaves not glaucous abaxially, rather than glaucous, have been distinguished as var. concolor (type from Kodiak Island, Alaska); such plants appear in scattered locations throughout the species range. A diminutive, narrow-leaved northern form, var. acerosa Hartman, was described from northern Europe, and specimens fitting that description occur in the extreme northern coastal areas of Alaska, Northwest Territories, Nunavut, Quebec, and Yukon."

Arbutus [FNA8, HC, HC2]
Sp. Pl. 1: 395. 1753; Gen. Pl. ed. 5, 187. 1754.
madroña, madrone, madroño

Arbutus menziesii Pursh [FNA8, HC, HC2]
Fl. Amer. Sept. 1: 282. 1813.
Pacific madrona, Pacific madrone

Arbutus procera Douglas ex Lindl.

**Arbutus unedo* L. [HC2]
Sp. Pl. 1: 395. 1753.
strawberry tree

Arctostaphylos [FNA8, HC, HC2]

Fam. Pl. 2: 165. 1763.
bearberry, manzanita

Arctostaphylos columbiana Piper [FNA8, HC, HC2]
Fl. N.W. Coast. 279. 1915.
bristly manzanita

Arctostaphylos tomentosa (Pursh) Lindl. [FNA8], misapplied

FNA8: "Arctostaphylos columbiana is widespread near the coast from northern California to southern British Columbia; it extends inland along the Columbia River Gorge in Oregon and Washington, and inland in Oregon to the western base of the Cascades. Some variation in twig indument occurs in the prominence of longer, stiff hairs, and in the degree of glandulosity. Some plants along the immediate coast of northern California into Oregon lack the longer hairs and have been distinguished as var. tracyi. Hybrids with A. uva-ursi are low shrubs (0.5-1 m) with intermediate vegetative characters. Referred to as A. ×media Piper, these hybrids have been reported from British Columbia, California, Oregon, and Washington."

Arctostaphylos ×media Greene [FNA8, HC, HC2]
Pittonia 2: 171. 1891.
medium manzanita

Arctostaphylos nevadensis A. Gray [FNA8, HC, HC2]
Syn. Fl. N. Amer. 2: 27. 1878.
pinemat manzanita

ssp. *nevadensis* [FNA8, HC2]
In A. Gray et al., Syn. Fl. N. Amer. 2: 27. 1878.
pinemat manzanita

FNA8: "Subspecies nevadensis occurs from the North Coast Ranges of California (Del Norte and Humboldt counties) and the Sierra Nevada through the Cascades of Oregon to the Wenatchee Mountains of central Washington. It hybridizes with Arctostaphylos patula. Some botanists have assumed A. parvifolia Howell is of hybrid origin of A. nevadensis × A. glandulosa."

Arctostaphylos nevadensis A. Gray × ***Arctostaphylos patula*** Greene

Arctostaphylos patula Greene [FNA8, HC, HC2]
Pittonia. 2: 171. 1891.
green-leaf manzanita

Arctostaphylos acutifolia Eastw.
Arctostaphylos parryana Lemmon var. *pinetorum* (Rollins) Wiesl. & B. Schreib.
Arctostaphylos patula Greene ssp. *platyphylla* (A. Gray) P.V. Wells
Arctostaphylos patula Greene var. *coalescens* W. Knight
Arctostaphylos platyphylla (Bray) Kuntze

FNA8: "Arctostaphylos patula is abundant and widespread in western North America as a dominant in montane chaparral, pine forest gaps, and high-elevation arid-steppe and canyon-land environments. Populations throughout western North America are characterized by twigs and inflorescence parts covered with relatively short hairs tipped with golden glands. In the central to northern Sierra Nevada, mixed with the widespread form are individuals that are eglandular and have a cover of relatively short, whitish hairs on the stems and inflorescences. Similarly, throughout most of its range, A. patula is nonsprouting after fire, and in areas characterized by winter snow cover it layers and creates broad, low mounds. In much of California, it typically sprouts after fires from obscure and flattened burls, forming circles of erect sprouts."

Arctostaphylos uva-ursi (L.) Spreng. [FNA8, HC, HC2]
Syst. Veg. 2: 287. 1825.
red bearberry, kinnikinnick

Arbutus uva-ursi L.

FNA8: "Arctostaphylos uva-ursi exhibits great variation in indument associated with the young twigs. Most of this variation has historically been separated into subspecies, except that a recent analysis of the group suggested environmentally-based variation in these characters (T. J. Rosatti 1987b). This is the most widely distributed of all Arctostaphylos species and is the only one found outside of North America. Two ploidy levels are common, and populations sometimes contain both diploids and tetraploids. More work on

this widespread species will likely elucidate its variation in morphology and ploidy. Infraspecific taxa may well be recognized once these patterns are further assessed. A form with somewhat puberulent and larger leaves has been described as Arctostaphylos ×media Greene. It occurs along the northern California coast and in Oregon and Washington. It is assumed to be a hybrid between A. uva-ursi and A. columbiana. Similarly, in the Rocky Mountains in areas with both A. uva-ursi and A. patula, hybrids have been called A. coloradensis Rollins."

**Calluna* [FNA8, HC2]
Trans. Linn. Soc. London. 6: 317. 1802.
Scotch heather

**Calluna vulgaris* (L.) Hull [FNA8, HC2]
Brit. Fl. ed. 2. 114. 1808.

Cassiope [FNA8, HC, HC2]
Edinburgh New Philos. J. 17: 157. 1834.
moss-heather, mountain-heather
(see also *Harrimanella*)

Cassiope lycopodioides (Pall.) D. Don [FNA8, HC2]
Edinburgh New Philos. J. 17: 158. 1834.
clubmoss mountain-heather

Andromeda lycopodioides Pall.

FNA8: "Subspecies cristapilosa was based on a collection from the Queen Charlotte Islands, British Columbia. The only distinction that the authors drew between it and subsp. lycopodioides was that subsp. cristapilosa has one to three crisped apical hairs on the leaves. Their claim that subsp. lycopodioides has entirely glabrous leaves is not supported. All specimens of Cassiope lycopodioides that I have seen have curled hairs on the leaf apices of at least the young leaves. The hairs appear to be fugacious. However, subsp. cristapilosa does differ from subsp. lycopodioides in several features. It lacks the hyaline leaf margin as well as the adaxial surface and abaxial leaf base pubescence. In addition, the stems are thicker, and the pedicels and corollas are longer. This insular material warrants further investigation."

Cassiope mertensiana (Bong.) G. Don [FNA8, HC, HC2]
Gen. Hist. 3: 829. 1834.
Mertens's moss-heather

Andromeda mertensiana Bong.

ssp. *mertensiana* [FNA8, HC2]
Gen. Hist. 3: 829. 1834.
Mertens' mountain heather, western moss heather

Andromeda cupressina Hook.
Cassiope mertensiana (Bong.) G. Don var. *mertensiana* [HC]

Cassiope tetragona (L.) D. Don [FNA8, HC, HC2]
Edinburgh New Philos. J. 17: 158. 1834.
four-angled moss-heather

ssp. *saximontana* (Small) A.E. Porsild [FNA8, HC2]
Canad. Field-Naturalist. 54: 68. 1940.
four-angled mountain heather, white arctic mountain heather

Cassiope saximontana Small
Cassiope tetragona (L.) D. Don var. *saximontana* (Small) C.L. Hitchc. [HC]

Chimaphila [FNA8, HC, HC2]
Fl. Amer. Sept. 1: 279, 300. 1813.
pipsissewa, prince's-pine

Chimaphila menziesii (R. Br.) Spreng. [FNA8, HC, HC2]
Syst. Veg. 2: 317. 1825.
little pipsissewa, little prince's-pine

Pyrola menziesii R. Br.

Chimaphila umbellata (L.) W.P.C. Barton [FNA8, HC, HC2]
Veg. Mater. Med. U.S. 1: 17. 1817.
common Pipsissewa, prince's-pine

Pyrola umbellata L.

ssp. *umbellata* [FNA8, HC2]
Veg. Mater. Med. U.S. 1: 17. 1. 1817.
Pipsissewa, common prince's-pine

Chimaphila acuta Rydb.
Chimaphila occidentalis Rydb.
Chimaphila umbellata (L.) W.P.C. Barton ssp. *acuta* (Rydb.) Hultén
Chimaphila umbellata (L.) W.P.C. Barton ssp. *cisatlantica* (S.F. Blake) Hultén
Chimaphila umbellata (L.) W.P.C. Barton ssp. *occidentalis* (Rydb.) Hultén [KZ99]
Chimaphila umbellata (L.) W.P.C. Barton var. *acuta* (Rydb.) S.F. Blake
Chimaphila umbellata (L.) W.P.C. Barton var. *occidentalis* (Rydb.) S.F. Blake [HC]

FNA8: "Chimaphila umbellata is morphologically variable across its extensive range. Six subspecies have been recognized widely in the literature: subsp. acuta in the southwestern United States, subsp. cisatlantica in eastern North America, subsp. domingensis (S. F. Blake) Dorr in Hispaniola, subsp. mexicana (de Candolle) Hultén in Mexico, and subsp. umbellata in Eurasia. S. F. Blake (1917), in discussing the complex, stated, "...while the differential characters brought forward for their specific separation are confined to differences in size, in the prominence of the venation, the shape of the sepals, the direction of the pedicels, and the rotundity of the stem, characters which are not only rather obscure but at best are merely comparative, and are shown by the material examined to be by no means absolutely constant." Hiroshi Takahashi (1987), who did not consider subsp. domingensis, found broad overlap in most morphologic characters used to distinguish the subspecies. Extreme forms of the spectrum of morphologic expression may be distinctive; variation among the taxa appears to be clinal. Only subsp. domingensis, which is geographically isolated on Hispaniola and has glabrous peduncles and pedicels, glabrous filaments, and relatively small leaves, appears to be sufficiently distinct from the rest of the species to warrant recognition (L. J. Dorr 1995). It also has rugulate pollen; other taxa included here within subsp. umbellata have psilate pollen (Takahashi 1986b)."

Elliottia [FNA8, HC2]
Sketch Bot. S. Carolina. 1: 448. 1817.

Cladothamnus [HC]

Elliottia pyroliflora (Bong.) Brim & P.F. Stevens [FNA8, HC2]
J. Arnold Arbor. 59: 336. 1978.
copperbush

Cladothamnus pyrolaeflorus Bong. [HC], orthographic variant
Cladothamnus pyroliflorus Bong. [HC]
Leiophyllum pyroliflorum (Bong.) Dippel

Some resources list this species as E. pyroliflorus, an orthographic variant with incongruent gender endings between the genus and specific epithets.

Empetrum [FNA8, HC, HC2]
Sp. Pl. 2: 1022. 1753; Gen. Pl. ed. 5, 447. 1754.
crowberry

Empetrum nigrum L. [FNA8, HC, HC2]
Sp. Pl. 2: 1022. 1753.
crowberry

Empetrum nigrum L. ssp. *hermaphroditum* (Hagerup) Böcher [KZ99]
Empetrum nigrum L. ssp. *nigrum* [KZ99]

Gaultheria [FNA8, HC, HC2]

Sp. Pl. 1: 395. 1753; Gen. Pl. ed. 5, 187. 1754.
gaultheria, salal, wintergreen

Gaultheria hispidula (L.) Muhl. ex Bigelow [FNA8, HC, HC2]
Fl. Boston. (ed. 2). 165. 1824.
creeping snowberry

Chiogenes hispidula (L.) Torr. & A. Gray
Vaccinium hispidulum Michx., invalid name

Rare in WA.

Gaultheria humifusa (Graham) Rydb. [FNA8, HC, HC2]
Mem. New York Bot. Gard. 1: 300. 1900.
alpine wintergreen

Gaultheria myrsinites Hook.
Vaccinium humifusum Graham

Gaultheria ovatifolia A. Gray [FNA8, HC, HC2]
Proc. Amer. Acad. Arts. 19: 85. 1883.
western teaberry, slender wintergreen

Gaultheria shallon Pursh [FNA8, HC, HC2]
Fl. Amer. Sept. 1: 283, plate 12. 1813.
salal

Harrimanella [FNA8, HC2]
Proc. Wash. Acad. Sci. 3: 570, figs. 62, 66. 1901.
harrimanella, moss-heather, mossplant

Harrimanella stelleriana (Pall.) Coville [FNA8, HC2]
Proc. Wash. Acad. Sci. 3: 574. 1901.
Alaska bell-heather, Alaska bellheather, alpine heather, Alaskan moss-heather, Alaskan mountain-heather

Andromeda stelleriana Pall.
Cassiope stelleriana (Pall.) DC. [HC]

Hemitomes [FNA8, HC, HC2]
Pacif. Railr. Rep. 6(3): 80, plate 12. 1858.
gnome-plant

Hemitomes congestum A. Gray [FNA8, HC, HC2]
Pacif. Railr. Rep. 6(3): 80, plate 12. 1858.
coneplant, gnome-plant

Hemitomes spicatum Greene
Newberrya congesta Torr.
Newberrya longiloba Small
Newberrya spicata A. Gray

Kalmia [FNA8, HC, HC2]
Sp. Pl. 1: 391. 1753; Gen. Pl. ed. 5, 185. 1754.
azalea, laurel

Loiseleuria [HC]

Kalmia microphylla (Hook.) A. Heller [FNA8, HC, HC2]
Bull. Torrey Bot. Club. 25: 581. 1898.
western bog laurel

Kalmia polifolia Wangenh. [FNA8], misapplied

var. *microphylla* [FNA8, HC2]
Bull. Torrey Bot. Club 25(11): 581. 1898.
alpine-laurel, bog laurel

Kalmia polifolia Wangenh. ssp. *microphylla* (Hook.) Calder & Roy L. Taylor
Kalmia polifolia Wangenh. var. *microphylla* (Hook.) Hall

FNA8: "Kalmia microphylla is highly variable and has been treated as two species (J. K. Small 1914), two subspecies (R. L. Taylor and B. MacBryde 1978), or two varieties (J. E. Ebinger 1974). A flavonoid study (S. Liu 1993) indicated that the Pacific lowland (from Washington to Alaska) var. occidentalis populations are hardly separable from the alpine var. microphylla populations. The flavonoid data cited in support of combining K. microphylla and K. occidentalis are unpublished and impossible to judge. In any case, one would not expect varieties to necessarily differ chemically; the morphological and ecological differences seem sufficient. The two varieties of Kalmia microphylla are generally distinct; var. microphylla is common in alpine meadows of western North America from California through the Rocky Mountains into northern Canada and Alaska. The elevations at which it is found range from an average 2500 meters (1500-3500 m) in California to an average 1700 meters (900-2200 m) in Alberta, British Columbia, and Washington. Variety occidentalis, in contrast, is always encountered growing below 900 meters, being common in coastal areas and islands off the coast of Alaska and British Columbia. These two varieties are known to hybridize (J. E. Ebinger 1974), and the hybrids are highly fertile and set large quantities of viable seed (R. A. Jaynes 1988)."

var. *occidentalis* (Small) Ebinger [FNA8, HC2]
Rhodora. 76: 340. 1974.
Western swamp laurel

Kalmia occidentalis Small [HC]
Kalmia polifolia Wangenh. ssp. *occidentalis* (Small) Abrams

FNA8: "Kalmia microphylla is highly variable and has been treated as two species (J. K. Small 1914), two subspecies (R. L. Taylor and B. MacBryde 1978), or two varieties (J. E. Ebinger 1974). A flavonoid study (S. Liu 1993) indicated that the Pacific lowland (from Washington to Alaska) var. occidentalis populations are hardly separable from the alpine var. microphylla populations. The flavonoid data cited in support of combining K. microphylla and K. occidentalis are unpublished and impossible to judge. In any case, one would not expect varieties to necessarily differ chemically; the morphological and ecological differences seem sufficient. The two varieties of Kalmia microphylla are generally distinct; var. microphylla is common in alpine meadows of western North America from California through the Rocky Mountains into northern Canada and Alaska. The elevations at which it is found range from an average 2500 meters (1500-3500 m) in California to an average 1700 meters (900-2200 m) in Alberta, British Columbia, and Washington. Variety occidentalis, in contrast, is always encountered growing below 900 meters, being common in coastal areas and islands off the coast of Alaska and British Columbia. These two varieties are known to hybridize (J. E. Ebinger 1974), and the hybrids are highly fertile and set large quantities of viable seed (R. A. Jaynes 1988). Variety occidentalis and Kalmia polifolia are strikingly similar. Both have the same general habit and size and are very similar in most morphological characteristics. These taxa are easily separated by the revolute leaf margins and small stalked glands along the leaf midrib in K. polifolia, which are lacking in var. occidentalis (J. E. Ebinger 1974). Hybrids between them are sterile (R. A. Jaynes 1988)."

Kalmia procumbens (L.) Gift & Kron [FNA8, HC2]
Nordic J. Bot. 26: 47. 2008.
alpine-azalea, alpine azalea, trailing azalea

Azalea procumbens L.
Chamaecistus procumbens (L.) Kuntze
Loiseleuria procumbens (L.) Desv. [HC]

Known only from a single collection (1963) in Skagit County, with no additional reports since. FNA8: "Kalmia procumbens is the only species of the genus that is not endemic to North America. An attractive dwarf shrub, it is sometimes cultivated in rock gardens. The inclusion here of Kalmia procumbens and K. buxifolia, traditionally treated as the monotypic genera Loiseleuria and Leiophyllum, is in keeping with the results of recent morphological and molecular phylogenetic studies. P. F. Stevens et al. (2004) also included Leiophyllum and Loiseleuria within an expanded Kalmia. These two species have evolved deeply cleft corollas with nearly separate petals, and thus lost the characteristic pockets of Kalmia; otherwise they are typical for the genus."

Moneses [FNA8, HC2]

Nat. Arr. Brit. Pl. 2: 396, 403. 1821.
wood nymph, one-flowered wintergreen

Moneses uniflora (L.) A. Gray [FNA8, HC2]
Manual. 273. 1848.
single-delight

Moneses reticulata Nutt.
Moneses uniflora (L.) A. Gray ssp. *reticulata* (Nutt.) Calder & Roy L. Taylor
Moneses uniflora (L.) A. Gray var. *reticulata* (Nutt.) S.F. Blake
Pyrola uniflora L. [HC]

FNA8: "Most chromosome counts are 2n = 26; there are reports of 2n = 22, 24, and 32 (Á. Löve and D. Löve 1975b). The veracity of the latter reports has not been confirmed. Moneses uniflora has been used by different Native American tribes as a dermatological aid, cold remedy, throat aid, and analgesic (D. E. Moerman 1998)."

Monotropa [FNA8, HC, HC2]
Sp. Pl. 1: 387. 1753; Gen. Pl. ed. 5, 183. 1754.

Monotropa hypopitys L. [FNA8, HC2]
Sp. Pl. 1: 387. 1753.
many-flower Indian-pipe

Hipopitys fimbriata (A. Gray) Howell
Hipopitys lanuginosa (Michx.) Raf.
Hipopitys monotropa Crantz
Hypopitys americana (DC.) Small
Hypopitys monotropa Crantz [HC]
Monotropa hypopitys L. ssp. *lanuginosa* (Michx.) H. Hara
Monotropa latisquama (Rydb.) Hultén

Monotropa uniflora L. [FNA8, HC, HC2]
Sp. Pl. 1: 387. 1753.
one-flower Indian-pipe

Monotropa brittonii Small
Monotropa morisoniana Michx.

Orthilia [FNA8, HC2]
Autik. Bot. 103. 1840.
one-sided wintergreen

Orthilia secunda (L.) House [FNA8, HC2]
Amer. Midl. Naturalist. 7: 134. 1921.
one-sided pyrola, sidebells

Orthilia secunda (L.) House ssp. *obtusata* (Turcz.) Böcher
Pyrola secunda L. [HC]
Pyrola secunda L. ssp. *obtusata* (Turcz.) Hultén
Pyrola secunda L. var. *obtusata* Turcz. [HC]
Pyrola secunda L. var. *secunda* [HC]

FNA8: "Plants in open, alpine and arctic habitats often have leaf blades orbiculate to orbiculate-ovate, 10-20 mm, apices obtuse, anthers ca. 1 mm, and styles 3-4.5 mm, and have been called Orthilia secunda subsp. obtusata. E. Haber (1972) concluded that these characters vary too freely among populations to warrant distinction."

Phyllodoce [FNA8, HC, HC2]
Parad. Lond. 1: plate 36. 1806.
mountain-heath

Phyllodoce empetriformis (Sm.) D. Don [FNA8, HC, HC2]
Edinburgh New Philos. J. 17: 160. 1834.

pink mountain-heath

Menziesia empetriformis Sm.

FNA8: "Hybrids between Phyllodoce empetriformis and P. glanduliflora are encountered occasionally where the two species occur together. The hybrids, P. ×intermedia (Hooker) Rydberg, consisting largely of first-generation crosses (F1 progeny), have a decidedly intermediate floral morphology, combining glandular, mostly nonciliate sepals more than 3 mm long and pinkish, cylindric to ovoid corollas."

Phyllodoce glanduliflora (Hook.) Coville [FNA8, HC, HC2]
Mazama. 1: 196. 1897.
yellow mountain-heath

Menziesia glanduliflora Hook.
Phyllodoce aleutica (Spreng.) A. Heller ssp. *glanduliflora* (Hook.) Hultén

FNA8: "Phyllodoce glanduliflora hybridizes with P. aleutica and with P. empetriformis."

Phyllodoce ×intermedia (Hook.) Rydb. [FNA8, HC, HC2]
New Fl. & Silva 12: 210. 1940.
hybrid mountain heather

Phyllodoce hybrida Rydb.

FNA8: "Hybrids between Phyllodoce empetriformis and P. glanduliflora are encountered occasionally where the two species occur together. The hybrids, P. ×intermedia (Hooker) Rydberg, consisting largely of first-generation crosses (F1 progeny), have a decidedly intermediate floral morphology, combining glandular, mostly nonciliate sepals more than 3 mm long and pinkish, cylindric to ovoid corollas."

Pityopus [FNA8, HC, HC2]
N. Amer. Fl. 29: 16. 1914.
pine-foot, pityopus

Pityopus californicus (Eastw.) H.F. Copel. [FNA8, HC2]
Madroño. 3: 155. 1935.
California pinefoot

Monotropa californica Eastw.
Pityopus californica (Eastw.) H.F. Copel. [HC], orthographic variant
Pityopus oreganus Small

Rare. Note that the species name is misspelled in H&C (P. californica, a combination that has never been published).

Pleuricospora [FNA8, HC, HC2]
Proc. Amer. Acad. Arts. 7: 369. 1868.
fringed-pinesap, Sierra-sap

Pleuricospora fimbriolata A. Gray [FNA8, HC, HC2]
Proc. Amer. Acad. Arts. 7: 369. 1868.
fringed pinesap

Pleuricospora densa Small
Pleuricospora longipetala Howell

Pterospora [FNA8, HC, HC2]
Gen. N. Amer. Pl. 1: 269. 1818.
Albany-beechdrops, pinedrops

Pterospora andromedea Nutt. [FNA8, HC, HC2]
Gen. N. Amer. Pl. 1: 269. 1818.
woodland pinedrops

Pyrola [FNA8, HC, HC2]
Sp. Pl. 1: 396. 1753; Gen. Pl. ed. 5, 188. 1754.
pyrola, shinleaf, wintergreen

(see also *Moneses*, *Orthilia*)

Pyrola aphylla Sm. [HC, HC2]
leafless wintergreen

Pyrola asarifolia Michx. [FNA8, HC, HC2]
Fl. Bor.-Amer. 1: 251. 1803.
common pink wintergreen, liver-leaf wintergreen

ssp. *asarifolia* [FNA8, HC2]
Fl. Bor.-Amer. 1: 251. 1803.
pink pyrola, common pink wintergreen, liver-leaf wintergreen

Pyrola asarifolia Michx. var. *asarifolia* [HC]
Pyrola asarifolia Michx. var. *purpurea* (Bunge) Fernald [HC]
Pyrola californica Krísa
Pyrola elata Nutt.
Pyrola uliginosa Torr. & A. Gray

FNA8: "Regional variation in Pyrola asarifolia in North America was examined by E. Haber (1983) using morphological and flavonoid data. Despite finding some longitudinal geographic differentiation, he concluded that most earlier-recognized segregates of the P. asarifolia complex were best included within a single, polymorphic species, with the large-bracted, denticulate-leaved, Pacific Northwest and northern Rocky Mountains element (subsp. bracteata) distinguishable from the relatively short-bracted, crenate-leaved, transcontinental element (subsp. asarifolia). Included within his concept of the latter subspecies were Asian plants referred to P. incarnata (de Candolle) Freyn. A more comprehensive study of the Asian element (Haber and Hiroshi Takahashi 1988) led to the conclusion that this vicariad was sufficiently distinct to warrant recognition as P. asarifolia subsp. incarnata (de Candolle) Haber & Hir. Takahashi; it is distinguished from the North American subspecies by its narrower sepals. Takahashi (1993) found differences also in the seeds of the two subspecies."

ssp. *bracteata* (Hook.) Haber [FNA8, HC2]
Syst. Bot. 8: 298. 1983.
pink pyrola

Pyrola asarifolia Michx. var. *bracteata* (Hook.) Jeps.
Pyrola bracteata Hook.

FNA8: "Regional variation in Pyrola asarifolia in North America was examined by E. Haber (1983) using morphological and flavonoid data. Despite finding some longitudinal geographic differentiation, he concluded that most earlier-recognized segregates of the P. asarifolia complex were best included within a single, polymorphic species, with the large-bracted, denticulate-leaved, Pacific Northwest and northern Rocky Mountains element (subsp. bracteata) distinguishable from the relatively short-bracted, crenate-leaved, transcontinental element (subsp. asarifolia). Included within his concept of the latter subspecies were Asian plants referred to P. incarnata (de Candolle) Freyn. A more comprehensive study of the Asian element (Haber and Hiroshi Takahashi 1988) led to the conclusion that this vicariad was sufficiently distinct to warrant recognition as P. asarifolia subsp. incarnata (de Candolle) Haber & Hir. Takahashi; it is distinguished from the North American subspecies by its narrower sepals. Takahashi (1993) found differences also in the seeds of the two subspecies."

Pyrola chlorantha Sw. [FNA8, HC, HC2]
Kongl. Svenska Vetensk. Akad. Nya Handl. 31: 190, plate 5. 1810.
green-flower wintergreen

Pyrola oxypetala Aust. ex A. Gray
Pyrola virens Schweigg.
Pyrola virens Schweigg. var. *convoluta* (W.P.C. Barton) Fernald

FNA8: "E. Haber (1993) interpreted some herbarium specimens with intermediate morphologies and abnormal pollen as putative hybrids between Pyrola chlorantha and P. minor, and between P. chlorantha and P. picta. Leafless forms of P. chlorantha can be distinguished reliably from those of P. picta by the size and shape of the calyx lobes."

Pyrola dentata Sm. [HC, HC2]
Cycl. [A. Rees], (London ed.) 29: Pyrola #6. 1814.

toothleaf pyrola

Pyrola dentata Sm. var. *integra* A. Gray
Pyrola picta Sm. ssp. *dentata* (Sm.) Piper
Pyrola picta Sm. ssp. *integra* (A. Gray) Piper
Pyrola picta Sm. var. *dentata* (Sm.) Dorn

Pyrola elliptica Nutt. [FNA8, HC, HC2]
Gen. N. Amer. Pl. 1: 273. 1818.
white wintergreen

Pyrola minor L. [FNA8, HC, HC2]
Sp. Pl. 1: 396. 1753.
lesser wintergreen, snowline wintergreen

Pyrola conferta Fisch. ex Cham. & Schlecht.
Pyrola minor L. var. *parviflora* B. Boivin

FNA8: "Pyrola minor and P. asarifolia are broadly sympatric in North America. Scattered hybrids between these species have been reported, mostly from the area of sympatry (E. Haber 1984). Haber (1993) found herbarium evidence for at least one case of hybridization between P. minor and P. chlorantha. T. W. Böcher (1961) discussed hybrids between P. minor and P. grandiflora from western Greenland. The straight style and actinomorphic corolla of Pyrola minor have been interpreted as paedomorphic conditions (J. V. Freudenstein 1999b). Among three northern European species of Pyrola studied by J. T. Knudsen and J. M. Olesen (1993), the shifts in floral morphology in P. minor were found to be associated with a significantly higher capacity for self-pollination."

Pyrola picta Sm. [FNA8, HC, HC2]
Cycl. 29: Pyrola no. 8. 1814.
white-vein wintergreen

Pyrola conardiana Andres
Pyrola paradoxa Andres
Pyrola septentrionalis Andres

FNA8: "E. Haber (1987) concluded that Pyrola picta, P. aphylla, and P. dentata are morphotypes of a single, highly variable species, a finding consistent with seed morphology data compiled by Hiroshi Takahashi (1993). Leafless scapes frequently are found attached to rhizomes bearing leafy shoots (W. H. Camp 1940; Haber 1987). Putative hybrids between P. picta and P. chlorantha have been reported at three locations in the western United States (Haber 1993). Cladistic analyses of molecular and morphologic data suggest that P. picta is sister to P. chlorantha (J. V. Freudenstein 1999b), which also occasionally is leafless."

Rhododendron [FNA8, HC, HC2]
Sp. Pl. 1: 392. 1753; Gen. Pl. ed. 5, 185. 1754.
azalea, Labrador-tea, menziesia, rhododendron

Ledum [HC]
Menziesia [FNA8, HC]

Rhododendron albiflorum Hook. [FNA8, HC, HC2]
Fl. Bor.-Amer. 2: 43, plate 133. 1834.
white rhododendron

Azaleastrum albiflorum (Hook.) Rydb.
Rhododendron albiflorum Hook. var. *warrenii* (A. Nelson) M.A. Lane

FNA8: "Rhododendron albiflorum is especially distinctive due to its axillary, white, somewhat pendulous, and nearly actinomorphic flowers, and it is placed in the monotypic subg. Candidastrum (Sleumer) Philipson & Philipson (W. R. Philipson and M. N. Philipson 1986). It is occasionally used as an ornamental. The disjunct population in Colorado has somewhat smaller calyx lobes and corollas and shorter stamens; it is sometimes recognized as var. warrenii (M. A. Lane et al. 1993). This variety is not recognized here because of the extent of morphological overlap between that population and those of the Pacific Northwest."

Rhododendron columbianum (Piper) Harmaja [FNA8, HC2]

Ann. Bot. Fenn. 27: 203. 1990.
mountain Labrador-tea, smooth Labrador-tea, western Labrador-tea

Ledum glandulosum Nutt. [HC]
Ledum glandulosum Nutt. ssp. *australe* C.L. Hitchc.
Ledum glandulosum Nutt. ssp. *columbianum* (Piper) C.L. Hitchc.
Ledum glandulosum Nutt. ssp. *olivaceum* C.L. Hitchc.
Ledum glandulosum Nutt. var. *californicum* (Kellogg) C.L. Hitchc.
Ledum glandulosum Nutt. var. *columbianum* (Piper) C.L. Hitchc. [HC]
Ledum glandulosum Nutt. var. *glandulosum* [HC]

FNA8: "Rhododendron groenlandicum, R. columbianum, and R. tomentosum customarily have been placed in the genus Ledum. Ledum is here considered to be a subsection of Rhododendron subg. Rhododendron (as subsect. Ledum), a placement supported by the presence in these species of comparable complex, multicellular, glandular, peltate scales and phylogenetic analyses of morphological and molecular data. The glandular scales of species of subsect. Ledum lack the radiating, broad-rimmed fringe-cells found in some members of subg. Rhododendron (and characteristic of R. minus and R. lapponicum) but are essentially identical to those of species of subsect. Edgeworthia, e.g., R. pendulum (see K. A. Kron and W. S. Judd 1990). More than 500 species of subg. Rhododendron occur in tropical and temperate eastern Asia (J. Cullen 1980; D. F. Chamberlain et al. 1996)."

Rhododendron groenlandicum (Oeder) Kron & Judd [FNA8, HC2]
Syst. Bot. 15: 67. 1990.
bog Labrador-tea, rusty Labrador-tea

Ledum groenlandicum Oeder [HC]

FNA8: "Rhododendron groenlandicum, R. columbianum, and R. tomentosum customarily have been placed in the genus Ledum. Ledum is here considered to be a subsection of Rhododendron subg. Rhododendron (as subsect. Ledum), a placement supported by the presence in these species of comparable complex, multicellular, glandular, peltate scales and phylogenetic analyses of morphological and molecular data. The glandular scales of species of subsect. Ledum lack the radiating, broad-rimmed fringe-cells found in some members of subg. Rhododendron (and characteristic of R. minus and R. lapponicum) but are essentially identical to those of species of subsect. Edgeworthia, e.g., R. pendulum (see K. A. Kron and W. S. Judd 1990). More than 500 species of subg. Rhododendron occur in tropical and temperate eastern Asia (J. Cullen 1980; D. F. Chamberlain et al. 1996)."

Rhododendron macrophyllum D. Don ex G. Don [FNA8, HC, HC2]
Gen. Hist. 3: 843. 1834.
California rhododendron, Pacific rhododendron

Rhododendron californicum Hook.

FNA8: "Rhododendron macrophyllum, R. maximum, and R. catawbiense represent subg. Hymenanthes (Blume) K. Koch in North America; the subgenus is represented by hundreds of species in temperate eastern Asia and is characterized by its branched, eglandular hairs (D. F. Chamberlain 1982). These showy plants are frequently used as ornamentals."

Rhododendron menziesii Craven [HC2]
Blumea 56(1): 34. (16 Mar 2011). 2011.
false azalea, fool's huckleberry, rusty menziesia

Menziesia ferruginea Sm. [FNA8, HC]
Menziesia ferruginea Sm. ssp. *ferruginea*
Menziesia ferruginea Sm. ssp. *glabella* (A. Gray) Calder & Roy L. Taylor
Menziesia ferruginea Sm. var. *ferruginea* [HC]
Menziesia ferruginea Sm. var. *glabella* (A. Gray) M. Peck [HC]
Menziesia glabella A. Gray

FNA8 (for Menziesia ferruginea): Two infraspecific taxa have been recognized and are still in use in some floras. Neither chemical (B. A. Bohm et al. 1984) nor morphological (J. C. Hickman and M. P. Johnson 1969) analyses have unequivocally supported the recognition of these infraspecific taxa. Character differences between var. ferruginea of coastal areas and the Cascade Mountains and var. glabella of the Rocky Mountains are most noticeable between specimens from the extremes of their ranges.

Heterogeneity in character states is seen throughout the geographic range of Menziesia ferruginea and intermediate specimens are noticeable, particularly in the more southerly Cascade portion of the range."

Rhododendron neoglandulosum Harmaja
Ann. Bot. Fenn. 27(2): 203, nom. nov. 1990.
western Labrador tea

FNA8: "Rhododendron groenlandicum, R. columbianum, and R. tomentosum customarily have been placed in the genus Ledum. Ledum is here considered to be a subsection of Rhododendron subg. Rhododendron (as subsect. Ledum), a placement supported by the presence in these species of comparable complex, multicellular, glandular, peltate scales and phylogenetic analyses of morphological and molecular data. The glandular scales of species of subsect. Ledum lack the radiating, broad-rimmed fringe-cells found in some members of subg. Rhododendron (and characteristic of R. minus and R. lapponicum) but are essentially identical to those of species of subsect. Edgeworthia, e.g., R. pendulum (see K. A. Kron and W. S. Judd 1990). More than 500 species of subg. Rhododendron occur in tropical and temperate eastern Asia (J. Cullen 1980; D. F. Chamberlain et al. 1996)."

Vaccinium [FNA8, HC, HC2]
Sp. Pl. 1: 349. 1753; Gen. Pl. ed. 5, 166. 1754.
bilberry, blueberry, cranberry, huckleberry

Vaccinium cespitosum Michx. [HC2]
dwarf bilberry, dwarf huckleberry

Vaccinium arbuscula (A. Gray) Merriam
Vaccinium caespitosum Michx. [FNA8, HC], orthographic variant
Vaccinium caespitosum Michx. var. *angustifolium* A. Gray
Vaccinium caespitosum Michx. var. *arbusculum* A. Gray
Vaccinium caespitosum Michx. var. *caespitosum* [KZ99]
Vaccinium caespitosum Michx. var. *cuneifolium* Nutt.
Vaccinium caespitosum Michx. var. *paludicola* (Camp) Hultén [KZ99]
Vaccinium geminiflorum Kunth
Vaccinium nivictum Camp
Vaccinium paludicola Camp

**Vaccinium corymbosum* L. [FNA8, HC2]
Sp. Pl. 1: 350. 1753.
high-bush blueberry

Cyanococcus amoenus (Aiton) Small
Cyanococcus atrococcus (A. Gray) Small
Cyanococcus corymbosus (L.) Rydb.
Vaccinium amoenum Aiton

FNA8: "Every morphological variant of the high-bush blueberry has been named formally at one time or another. At least 25 such taxa have been raised to specific rank; none is distinct throughout its putative range nor has the properties normally associated with biological species, including Vaccinium atrococcum and V. elliottii. See S. P. Vander Kloet (1980) for a complete list of synonyms. Feral populations readily become established wherever cultivars have been planted, e.g., Britain, British Columbia, Japan, Missouri, The Netherlands, New Zealand, Washington, and Wisconsin."

Vaccinium deliciosum Piper [FNA8, HC, HC2]
Mazama. 2: 103. 1901.
Cascade blueberry, Rainier blueberry, blueleaf huckleberry

FNA8: "Vaccinium deliciosum produces especially flavorful berries. Research at the University of Idaho and Washington State University identified 31 aromatic flavor compounds in the fruits. Despite its outstanding flavor and large fruit size, it is harvested less than is V. membranaceum because it has a smaller range and is less abundant there than its black-fruited congener. Also, like V. membranaceum, V. deliciosum is native at higher elevations and can be difficult to grow at low elevations. Although rhizomatous, V. deliciosum has a dense root system and transplants easily."

**Vaccinium macrocarpon* Aiton [FNA8, HC, HC2]
Hort. Kew. 2: 13, plate 7. 1789.

cultivated cranberry, large cranberry

Oxycoccus macrocarpus (Aiton) Pers., invalid name

FNA8: "Vaccinium macrocarpon is introduced and escaping elsewhere (British Columbia, Oregon, Washington) with respect to its normal range in eastern North America."

Vaccinium membranaceum Douglas ex Torr. [FNA8, HC, HC2]
U.S. Expl. Exped. 17: 377. 1874.
square-twig blueberry, tall huckleberry, thin-leaved huckleberry

Vaccinium coccineum Piper
Vaccinium globulare Rydb. [HC]
Vaccinium macrophyllum Piper
Vaccinium membranaceum Douglas ex Torr. var. *rigidum* (Hook.) Fernald

FNA8: "Vaccinium membranaceum is, by far, the most widely commercially utilized western huckleberry for fruit and is harvested extensively from the wild. This species served as an especially important source of food for native peoples throughout western North America, and the dried berries were used for winter food and trade.'

Vaccinium myrtilloides Michx. [FNA8, HC2]
Fl. Bor.-Amer. 1: 234. 1803.
velvet-leaf blueberry

Cyanococcus canadensis (Kalm ex Richardson) Rydb.
Vaccinium angustifolium Aiton var. *myrtilloides* (Michx.) House
Vaccinium canadense Kalm ex Richardson

Rare. Not observed in the Pacific Northwest at the time H&C (1973) was published.

Vaccinium myrtillus L. [FNA8, HC, HC2]
Sp. Pl. 1: 349. 1753.
dwarf blueberry, low blueberry

Vaccinium myrtillus L. ssp. *oreophilum* (Rydb.) Á. Löve, D. Löve & B.M. Kapoor
Vaccinium myrtillus L. var. *oreophilum* (Rydb.) Dorn [KZ99]
Vaccinium oreophilum Rydb.

FNA8: "Vaccinium myrtillus fruits are popular in Europe and are known to possess antioxidants and other compounds beneficial to vascular health. Berries in Europe are extensively harvested from wild stands. In North America, the fruits were used by the Kootenai, Carrier, Shuswap, and other native tribes. The small plant and fruit sizes create challenges for commercialization in North America."

Vaccinium ovalifolium Sm. [FNA8, HC, HC2]
Cycl. 36: Vaccinium no. 2. 1817.
Alaska blueberry, oval-leaf blueberry

Vaccinium alaskaense Howell [HC]

Vaccinium ovatum Pursh [FNA8, HC, HC2]
Fl. Amer. Sept. 1: 290. 1813.
evergreen huckleberry

Vaccinium ovatum Pursh var. *saporosum* Jeps.

Vaccinium oxycoccos L. [FNA8, HC, HC2]
Sp. Pl. 1: 351. 1753.
small cranberry

Oxycoccus hagerupii Á. Löve & D. Löve
Oxycoccus intermedius (A. Gray) Rydb.
Oxycoccus microcarpus Turczaninov ex Rupr.
Oxycoccus oxycoccos (L.) Adolphi
Oxycoccus oxycoccos (L.) MacMill.
Vaccinium microcarpum (Turczaninov ex Rupr.) Schmalhausen
Vaccinium oxycoccos L. ssp. *microphyllum* (Lange) Feilberg
Vaccinium oxycoccos L. var. *intermedium* A. Gray

Vaccinium oxycoccos L. var. *microphyllum* (Lange) J. Rouss. & Raymond
Vaccinium oxycoccos L. var. *ovalifolium* Michx.

FNA8: "Vaccinium oxycoccos is interruptedly circumboreal (absent from the Canadian Arctic Archipelago, including Baffin Island) extending southward in North America to California in the Cascade Range and to West Virginia in the Appalachian Mountains. In Europe, some chromosome races of Vaccinium oxycoccos have been given specific rank (S. P. Vander Kloet 1983) at one time or another; unfortunately, hexaploids cannot be differentiated consistently from diploids or tetraploids using morphological features such as leaf indumentum or bract size. On most vines, especially north of 50Â° north latitude, the leafy portion of the fertile shoot fails to develop, giving the illusion that Vaccinium oxycoccos has an inflorescence comprising a short rachis bearing flowers on a slender pedicel."

Vaccinium parvifolium Sm. [FNA8, HC, HC2]
Cycl. 36: Vaccinium no. 3. 1817.
red huckleberry

FNA8: "The red, waxy fruits of Vaccinium parvifolium were popular with all coastal Indian tribes and remain so with recreational pickers. The berries are somewhat sour but make excellent pastries and preserves. Commercial use of V. parvifolium is limited; vigorous growth, ease of harvest, and site adaptability provide opportunities."

Vaccinium scoparium Leiberg ex Coville [FNA8, HC, HC2]
Contr. U.S. Natl. Herb. 5: 103. 1897.
grouseberry

Vaccinium erythrococcum Rydb.
Vaccinium myrtillus L. var. *microphyllum* Hook.

FNA8: "The soft, tart, bright red berries of Vaccinium scoparium, to 6 mm diameter, have fair to good flavor and were gathered and eaten raw by the Kootenay, Okanogan, Shuswap, and other Indian tribes. Harvesting was probably done using wooden or fish-bone combs. Small fruit size, low yields, and difficult harvesting make commercial prospects for V. scoparium questionable."

Vaccinium uliginosum L. [FNA8, HC, HC2]
Sp. Pl. 1: 350. 1753.
bog bilberry, bog blueberry

Vaccinium gaultherioides Bigelow
Vaccinium occidentale A. Gray [HC]
Vaccinium uliginosum L. ssp. *alpinum* (Bigelow) Hultén
Vaccinium uliginosum L. ssp. *microphyllum* Lange
Vaccinium uliginosum L. ssp. *occidentale* (A. Gray) Hultén
Vaccinium uliginosum L. ssp. *pedris* (Harshberger) S.B. Young
Vaccinium uliginosum L. ssp. *pubescens* (Wormsk. ex Horneman) S.B. Young
Vaccinium uliginosum L. var. *salicinum* (Cham.) Hultén

Euphorbiaceae [HC, HC2] Spurge Family

Croton [HC2]
croton

Eremocarpus [HC]

Croton setigerus Hook.
Fl. Bor.-Amer. (Hooker) 2(9): 141. (as setigerum) 1838.
doveweed, turkey mullein, fish poison

Croton setiger Hook. [HC2, JPM2], orthographic variant
Eremocarpus setigerus (Hook.) Benth. [HC]

Euphorbia [HC, HC2]

euphorbia, sandmat, spurge

*_Euphorbia agraria_ M. Bieb. [HC2]
Fl. Taur.-Caucas. 1: 375. 1808.
urban spurge

*_Euphorbia amygdaloides_ L. [HC2]

*_Euphorbia characias_ L. [HC2]
Sp. Pl. 1: 463. 1753.
Mediterranean spurge

Collected for first time in Washington in 2018 in San Juan County.

*_Euphorbia cyparissias_ L. [HC, HC2]
Sp. Pl. 1: 461. 1753.
cypress spurge

*_Euphorbia epithymoides_ L. [HC2]

Euphorbia glyptosperma Engelm. [HC, HC2]
Rep. U.S. Mex. Bound. 2(1): 187. 1859.
rib seed sandmat, corrugate seeded spurge, ridge seeded spurge

Chamaesyce glyptosperma (Engelm.) Small [KZ99, JPM]

Here we follow Voss (1985) and Cronquist (1991), including Chamaesyce as a subgenus within Euphorbia, as their flowers and fruits are essentially the same.

*_Euphorbia helioscopia_ L. [HC, HC2]
Sp. Pl. 1: 459. 1753.
mad woman's milk, summer spurge, sun spurge, wart spurge, wartweed

*_Euphorbia lathyris_ L. [HC2, IFBC]
Sp. Pl. 1: 457. 1753.
mole plant, gopher plant, caper spurge

Euphorbia lathyrus L. [HC], orthographic variant

Misspelled Euphorbia lathyrus in H&C.

*_Euphorbia maculata_ L. [HC, HC2]
Sp. Pl. 1: 455. 1753.
sandmat, milk spurge, spotted spurge

Chamaesyce maculata (L.) Small [KZ99]
Euphorbia supina Raf. [HC]

*_Euphorbia myrsinites_ L. [HC2]
Sp. Pl. 461. 1753.
broad leaved glaucous spurge, myrtle spurge

*_Euphorbia oblongata_ Griseb. [HC2, Stace 1997]
Spic. Fl. Rumel. 1: 136. 1843.
balkan spurge, egg-leaf spurge

*_Euphorbia peplus_ L. [HC, HC2]
Sp. Pl. 1: 456. 1753.
petty spurge

*_Euphorbia platyphyllos_ L. [HC2, Stace 1997]
Sp. Pl. 1: 460. 1753.
broad leaved spurge

Recently collected in King Co. - perhaps in mounting backlog at WTU.

*_Euphorbia segetalis_ L. [HC2]

Euphorbia serpillifolia Pers. [FNA, HC2]
Syn. Pl. 2: 14. 1806.

thyme leaved spurge

Euphorbia serpyllifolia Pers. [HC], orthographic variant

ssp. *hirtula* (Engelm. ex S. Watson) Oudejans [FNA]
Phytologia. 67: 48. 1989. (as serpyllifolia).

Recently (2018) collected in Benton County.

ssp. *serpillifolia* [FNA, HC2]

Chamaesyce serpyllifolia (Pers.) Small ssp. *serpyllifolia* [KZ99, JPM]
Euphorbia serpyllifolia Pers. ssp. *serpyllifolia*, orthographic variant

**Euphorbia serrulata* Thuill. [HC2, Stace 1997]
Fl. Env. Paris (ed. 2) 2: 237. 1799.
upright spurge

Euphorbia stricta L.

Euphorbia spathulata Lam. [HC, HC2]
Encycl. 2(2): 428. 1788.
reticulate seeded spurge, spatulate leaved spurge, warty spurge

**Euphorbia virgata* Waldst. & Kit. [FNA, HC2]
Descr. Icon. Pl. Hung. 2: 176?177, pl. 162. 1804.
wolf's milk, leafy spurge

Euphorbia esula L. [HC], misapplied

Draft FNA: "Euphorbia virgata is native to Europe and temperate Asia. The species is here treated as the widespread, weedy, "leafy spurge"• that is a pest plant across much of the northern flora area. Euphorbia virgata is similarly widespread and weedy across much of its native range in Europe and Asia, whereas the true E. esula is much more restricted in range and is never as pervasive and weedy as E. virgata in either its native range or in the flora area."

**Mercurialis* [HC2]

Fabaceae [HC2, IFBC, JPM, JPM2] Pea Family

Synonyms:
Leguminosae [HC]

Acmispon [HC2]
deervetch, lotus

Acmispon americanus (Nutt.) Rydb. [HC2]
Bull. Torrey Bot. Club 40: 45 (1913). 1913.
American bird's-foot trefoil

Lotus americanus (Nutt.) Bisch., homonym (illegitimate)
Lotus purshiana (Benth.) Clements & Clements [HC], orthographic variant
Lotus purshianus Clem. & E.G. Clem.

var. *americanus* [Draft FNA, HC2]
Bull. Torrey Bot. Club 40(2): 45. 1913.
American bird's-foot trefoil

Lotus purshianus Clem. & E.G. Clem. var. *glaber* (Nutt.) Munz
Lotus unifoliolatus (Hook.) Benth. var. *unifoliolatus*

Acmispon denticulatus (Drew) Sokoloff [Draft FNA, HC2]
Annales Botanici Fennici 37(2): 130. 2000.

riverbar bird's-foot-trefoil

Hosackia denticulata Drew
Lotus denticulatus (Drew) Greene [HC]

Acmispon nevadensis (S. Watson) Brouillet [HC2]
J. Bot. Res. Inst. Texas 2(1): 391 (2008). 2008.
Nevada bird's-foot trefoil, Nevada deervetch

Lotus nevadensis (S. Watson) Greene [HC]

var. *nevadensis* [HC2]
J. Bot. Res. Inst. Texas 2(1): 391. 2008.
Nevada deervetch

Hosackia decumbens Benth.
Lotus douglasii Greene
Lotus nevadensis (S. Watson) Greene var. *douglasii* (Greene) Ottley [HC]

Acmispon parviflorus (Benth.) D.D. Sokoloff [Draft FNA, HC2]
Annales Botanici Fennici 37(2): 129. 2000.
small-flowered bird's-foot trefoil

Hosackia parviflora Benth.
Lotus micranthus Benth. [HC]

**Alhagi* [HC, HC2]
camel-thorn

**Alhagi maurorum* Medik. [HC2, JPM2]
Vorles. Churpfälz. Phys.-Öcon. Ges. 2: 397. 1787.
camelthorn

Alhagi camelorum Fisch. [HC]
Alhagi pseudalhagi (M. Bieb.) Desv. ex B. Keller & Shap. [JPM]

**Amorpha* [HC2]
false indigo

**Amorpha fruticosa* L. [HC2, JPM]
Sp. Pl. 2: 713. 1753.
false indigo-bush

Amorpha angustifolia (Pursh) F.E. Boynton
Amorpha bushii Rydb.
Amorpha croceolanata P. Watson
Amorpha curtissii Rydb.
Amorpha dewinkeleri Small
Amorpha occidentalis Abrams
Amorpha tennesseensis Shuttlew. ex Kunze
Amorpha virgata Small

Astragalus [HC, HC2]
locoweed, milk-vetch, poison-vetch, rattle-pod

Astragalus agrestis Douglas ex G. Don [HC, HC2]
Gen. Hist. 2: 258. 1832.
cock's-head, field milk vetch, purple milk vetch

Astragalus danicus Retz. var. *dasyglottis* (Fisch. ex DC.) B. Boivin
Astragalus dasyglottis Fisch. ex DC.
Astragalus goniatus Nutt. ex Torr. & A. Gray
Astragalus hypoglottis Hook., homonym (illegitimate)

Astragalus alpinus L. [HC, HC2]
Sp. Pl. 2: 760. 1753.

alpine milk-vetch, purple milk-vetch

Atelophragma alpinum (L.) Rydb.

var. *alpinus* [HC2, IFBC]
Sp. Pl. 2: 760. 1753.
alpine milk-vetch

Astragalus alpinus L. ssp. *alaskanus* Hultén
Astragalus alpinus L. ssp. *arcticus* (Bunge) Hultén
Astragalus astragalinus (Hook.) Á. Löve & D. Löve

Astragalus arrectus A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 8: 289-290. 1870.
hanging pod milk-vetch, Palouse milk-vetch

Astragalus palousensis Piper

Rare.

Astragalus arthuri M.E. Jones [HC]
Contr. W. Bot. 8: 20. 1898.
Arthur's milk-vetch

Astragalus asotinensis Björk & Fishbein [HC2]
Novon 16(3): 299-303, f. 1. 2006.
Asotin milk-vetch

Astragalus australis (L.) Lam. [HC2]
Fl. Franç. (Lamarck) 2: 637. 1779.
Indian milk-vetch, subarctic milk-vetch

var. *cottonii* (M.E. Jones) S.L. Welsh [Draft FNA, HC2]
Great Basin Naturalist 58(1): 48. 1998.
Cotton's milk-vetch, Cotton's milkvetch

Astragalus australis (L.) Lam. var. *olympicus* Isely
Astragalus cottonii M.E. Jones [HC]

Endemic to Olympic Mountains of Washington. FNA treats var. olympicus as a synonym of var. cottonii.

Astragalus beckwithii Torr. & A. Gray [HC, HC2]
In Pacif. Rail. Rep. iii. 120. 1854.
Beckwith's milk-vetch

var. *weiserensis* M.E. Jones [HC, HC2]
Zoë 5(3): 47-48. 1900.
Beckwith's milk-vetch

Astragalus weiserensis (M.E. Jones) Abrams

Astragalus canadensis L. [HC, HC2]
Sp. Pl. 2: 757. 1753.
Canada milk-vetch

var. *brevidens* (Gand.) Barneby [HC, HC2]
Leafl. W. Bot. 4(9): 238. 1946.
Canada milk-vetch

Astragalus brevidens (Gand.) Rydb.

var. *canadensis* [HC2, IFBC]
Sp. Pl. 2: 757. 1753.
Canada milk-vetch

var. *mortonii* (Nutt.) S. Watson [HC, HC2]
Botany Fortieth Parallel 68. 1871.
Morton's Canadian milk-vetch

Astragalus mortonii Nutt.

Astragalus caricinus (M.E. Jones) Barneby [HC, HC2]
Amer. Midl. Naturalist 55(2): 502. 1956.
buckwheat milk-vetch

Astragalus lyallii A. Gray var. *caricinus* M.E. Jones

**Astragalus cicer* L. [HC, HC2]
Sp. Pl. 2: 757. 1753.
chickpea milk-vetch

Astragalus collinus (Hook.) Douglas ex G. Don [HC, HC2]
Gen. Hist. 2: 256. 1832.
hill milk-vetch, hillside milk-vetch

var. *collinus* [HC, HC2]
Gen. Hist. 2: 256. 1832.
hillside milk-vetch

Astragalus columbianus Barneby [HC, HC2]
Memoirs of the New York Botanical Garden 13: 649-650. 1964.
Columbian milk-vetch

Endemic to Washington.

Astragalus conjunctus S. Watson [HC, HC2]
Proc. Amer. Acad. Arts xvii. 371. 1881.
basalt milk-vetch, stiff milk-vetch

var. *rickardii* S.L. Welsh, K.A. Beck & F. Caplow [HC2]
Great Basin Naturalist 57(4): 354. 1997.
stiff milk-vetch

Astragalus cusickii A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 13: 370. 1878.
Cusick's milk-vetch

var. *cusickii* [HC, HC2]
Proc. Amer. Acad. Arts 13: 370. 1878.
Cusick's milk-vetch

Rare.

Astragalus diaphanus Douglas [HC, HC2]
Fl. Bor.-Amer. 1(3): 151. 1831.
John Day milk-vetch, transparent milk-vetch

Astragalus diaphanus Douglas var. *diaphanus*
Astragalus diaphanus Douglas var. *diurnus* (S. Watson) Barneby ex M. Peck

Extirpated from WA.

**Astragalus falcatus* Lam. [HC, HC2]
Encycl. 1(1): 310. 1783.
Russian milk-vetch, sickle milk-vetch

Astragalus filipes Torr. ex A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 6: 226. 1864.
basalt milk-vetch

Astragalus filipes Torr. ex A. Gray var. *residuus* Jeps.
Astragalus macgregorii (Rydb.) Tidestr.
Astragalus stenophyllus Torr. & A. Gray
Astragalus stenophyllus Torr. & A. Gray var. *filipes* (Torr. ex A. Gray) Tidestr.

Astragalus geyeri A. Gray [HC, HC2]
Proc. Amer. Acad. Arts vi. 214. 1864.
Geyer's milk-vetch

var. *geyeri* [HC2, JPM]
Proc. Amer. Acad. Arts 6: 214. 1864.
Geyer's milk-vetch

Astragalus hoodianus Howell [HC, HC2]
Erythea 1(5): 111. 1893.
Hood River milk-vetch

Astragalus conjunctus S. Watson var. *oxytropidoides* M.E. Jones
Astragalus reventus A. Gray var. *oxytropidoides* (M.E. Jones) C.L. Hitchc.
Cnemidophacos knowlesianus Rydb.

Astragalus howellii A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 15(1): 46-47. 1880.
Howell's milk-vetch

Astragalus howellii A. Gray var. *howellii*

Astragalus inflexus Douglas [HC, HC2]
Fl. Bor.-Amer. 1: 151. 1831.
bent milk-vetch, hairy milk-vetch

Astragalus kentrophyta A. Gray [HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 60. 1863 1863.
thistle milk-vetch, spiny milk-vetch

Considered extirpated in Washington.

var. *douglasii* Barneby [HC, HC2]
Mem. New York Bot. Gard. 13: 364-365. 1964.
spiny millk-vetch, thistle milk-vetch

Astragalus kentrophyta A. Gray ssp. *douglasii* (Barneby) W.A. Weber

Considered extinct.

Astragalus laxmannii Jacq. [HC2]
Hort. Bot. Vindob. 3: 22 (t. 37). 1776.
Laxmann's milk-vetch, standing milk-vetch

var. *robustior* (Hook.) Barneby & S.L. Welsh [HC2, IFBC]
Great Basin Naturalist 56(1): 85. 1996.
standing milk-vetch

Astragalus adsurgens Pall. ssp. *robustior* (Hook.) S.L. Welsh
Astragalus adsurgens Pall. var. *robustior* Hook.
Astragalus striatus Nutt.
Astragalus sulphurescens Rydb.

Astragalus leibergii M.E. Jones [HC, HC2]
Proc. Calif. Acad. Sci., ser. 2, 5(18): 663-664. 1895.
Leiberg's milk-vetch

Astragalus arrectus A. Gray var. *leibergii* (M.E. Jones) M.E. Jones

Astragalus lentiginosus Douglas ex Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(3): 151. 1831.
freckled milk-vetch, specklepod milk-vetch

var. *lentiginosus* [HC, HC2]
Fl. Bor.-Amer. 1(3): 151. 1831.
freckled milk-vetch, specklepod milk-vetch

Astragalus lentiginosus Douglas var. *carinatus* M.E. Jones

Astragalus lyallii A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 6: 195. 1864.
Lyall's milk-vetch

Astragalus microcystis A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 6: 220. 1864.
lesser-bladder milk-vetch

Rare in Washington.

Astragalus misellus S. Watson [HC, HC2]
Proc. Amer. Acad. Arts 21: 449. 1886.
pauper milk-vetch

var. *pauper* Barneby [HC, HC2]
Mem. New York Bot. Gard. 13: 458, map 52. 1964.
pauper milk-vetch

Astragalus howellii A. Gray var. *pauper* (Barneby) Isely

Endemic to Washington.

Astragalus miser Douglas ex Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(3): 152. 1831.
weedy milk-vetch

var. *miser* [HC, HC2]
Fl. Bor.-Amer. 1(3): 152. 1831.
weedy milk-vetch

Astragalus strigosus J.M. Coult. & Fisher

var. *serotinus* (A. Gray) Barneby [HC, HC2]
Amer. Midl. Naturalist 55: 481. 1956.
weedy milk-vetch

Astragalus decumbens (Nutt. ex Torr. & A. Gray) A. Gray var. *serotinus* (A. Gray) M.E. Jones
Astragalus serotinus A. Gray ex Cooper

Astragalus pulsiferae A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 10: 69. 1875.
Ames's milk-vetch

var. *suksdorfii* (Howell) Barneby [HC, HC2, JPM]
Aliso 4(1): 131. 1958.
Ames's milk-vetch

Rare.

Astragalus purshii Douglas [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(3): 152. 1831.
Pursh's milk-vetch, woolly-pod milk-vetch

var. *glareosus* (Douglas) Barneby [HC, HC2]
Amer. Midl. Naturalist 37(2): 503. 1947.
woolly-pod milk-vetch

Astragalus glareosus Douglas
Astragalus ventosus Suksd. ex Rydb., invalidly published, nomen nudum

var. *purshii* [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(3): 152. 1831.
Pursh's milk-vetch, woolly-pod milk-vetch

Astragalus incurvus (Rydb.) Abrams
Astragalus purshii Douglas var. *interior* M.E. Jones

Astragalus reventiformis (Rydb.) Barneby [HC, HC2]
Amer. Midl. Naturalist 55(2): 492. 1956.
Yakima milk-vetch

Astragalus reventus A. Gray var. *canbyi* M.E. Jones
Cnemidophacos reventiformis Rydb.

Astragalus reventus A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 15(1): 40. 1880.
Blue Mts. milk-vetch, longleaf milk-vetch

Astragalus riparius Barneby [HC, HC2]
American Midland Naturalist 55(2): 490-491. 1956.
Piper's milk-vetch

Rare.

Astragalus robbinsii (Oakes) A. Gray [HC, HC2]
Manual (Gray), ed. 2. 98 (1856). 1856.
Robbins's milk-vetch

var. *minor* (Hook.) Barneby [HC, HC2]
Mem. New York Bot. Gard. 13: 124-125. 1964.
Robbin's milk-vetch

Astragalus collieri (Rydb.) A.E. Porsild
Astragalus robbinsii (Oakes) A. Gray var. *blakei* (Eggl.) Barneby ex Gleason

Astragalus sclerocarpus A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 6: 225. 1864.
stalked-pod milk-vetch, The Dalles milk-vetch, woody-pod milk-vetch

Astragalus sheldonii (Rydb.) Barneby [HC, HC2]
Amer. Midl. Naturalist 55(2): 489. 1956.
Sheldon's milk-vetch

Astragalus conjunctus S. Watson var. *sheldonii* (Rydb.) M. Peck
Astragalus reventus A. Gray var. *sheldonii* (Rydb.) C.L. Hitchc.

Astragalus sinuatus Piper [HC, HC2]
Bulletin of the Torrey Botanical Club 28(1): 40. 1901.
Whited's milk-vetch

Rare.

Astragalus spaldingii A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 6: 524. 1865.
Spalding's milk-vetch

Astragalus speirocarpus A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 6: 225. 1864.
curve-pod milk-vetch, medic milk-vetch, spiral-pod milk-vetch

Astragalus succumbens Douglas [HC, HC2]
Rep. Colorado Riv. Bot. 10. 1860.
crouching milk-vetch, sprawling milk-vetch

Astragalus tenellus Pursh [Draft FNA, HC, HC2]
Fl. Amer. Sept. 2: 473. 1813.
pulse milkvetch

Astragalus tweedyi Canby [HC, HC2]
Bot. Gaz. 15: 150. 1890.
Tweedy's milk-vetch

Astragalus whitneyi A. Gray [HC, HC2]
Proc. Amer. Acad. Arts vi. 526. 1864.
balloon milk-vetch

var. *sonneanus* (Greene) Jeps. [HC, HC2]
Fl. Calif. 2(4): 347-348. 1936.
balloon milk-vetch

Astragalus whitneyi A. Gray ssp. *hookerianus* (Torr. & A. Gray) Abrams

*Caragana [HC2]
pea-tree

*Caragana arborescens Lam. [HC2, JPM2]
Encyclopédie Méthodique, Botanique 1(2): 615. 1785.
Siberian peashrub

*Cicer [HC2]

*Cicer arietinum L. [HC2, Stace 1997]
Sp. Pl. 2: 738. 1753.
chick-pea

*Colutea [HC2]
bladder-senna

*Colutea arborescens L. [HC2, Stace 1997]
Sp. Pl. 2: 723. 1753.
bladder senna

*Cytisus [HC, HC2]
broom
(see also *Genista*)

*Cytisus multiflorus (Aiton) Sweet [HC, HC2]
Hort. Brit. 112. 1826.
portuguese broom, white Spanish broom

*Cytisus scoparius (L.) Link [HC, HC2]
Enum. Hort. Berol. Alt. 2: 241. 1822.
Scot's broom

*Cytisus striatus (Hill) Rothm. [HC2]
Enum. Hort. Berol. Alt. 2: 241. 1822.
French broom

First collected in WA in Yakima County in 2013, but that is possibly an intentional planting. 2021 collection from Lower Columbia River is clearly a naturalized occurrence.

Dalea [HC2]
prairie-clover

Petalostemon [HC]

Dalea ornata (Douglas ex Hook.) Eaton & Wright [HC2, JPM]
Man. Bot. (ed. 8) 219. 1840.
Blue Mountain prairie-clover

Petalostemon ornatum Dougl. ex Hook. [HC]

*Galega [HC2]
goat's rue

*Galega officinalis L. [HC2, Stace 1997]
Species Plantarum 2: 714. 1753.
professor-weed

*Genista [HC2]
broom, greenwood

*Genista canariensis L. [HC2, JPM]
Sp. Pl. 2: 709-710. 1753.
Canary broom

Cytisus canariensis (L.) Kuntze
Cytisus ×*racemosus* Hort.-Cf. Marnock, misapplied

Teline canariensis (L.) Webb & Berthel.

**Genista tinctoria* L. [HC2, Stace 1997]
Sp. Pl. 2: 710. 1753.
dyer's greenweed

Genista multibracteata Tausch
Genista patula M. Bieb.

**Gleditsia* [HC2]

**Gleditsia triacanthos* L. [HC2, JPM2]
Sp. Pl. 2: 1056-1057. 1753.
honey locust

Gleditsia triacanthos L. var. *inermis* (L.) C.K. Schneid.

Glycyrrhiza [HC, HC2]
licorice

Glycyrrhiza lepidota Pursh [HC, HC2]
Fl. Amer. Sept. 2: 480 [1813]. 1814.
American licorice, wild licorice

Glycyrrhiza glutinosa Nutt.
Glycyrrhiza lepidota Pursh var. *glutinosa* (Nutt.) S. Watson [HC]
Glycyrrhiza lepidota Pursh var. *lepidota* [HC]

Hedysarum [HC, HC2]
hedysarum, sweetvetch

Hedysarum occidentale Greene [HC, HC2]
Pittonia 3(13): 19. 1896.
western sweet-vetch

var. *occidentale* [Draft FNA, HC2]
Pittonia 3(13): 19. 1896.
western sweet-vetch

Hedysarum uintahense A. Nelson

Hedysarum sulphurescens Rydb. [HC, HC2]
Bull. Torrey Bot. Club 24(5): 251. 1897.
yellow sweet-vetch

Hosackia [HC2]
birdsfoot-trefoil, deervetch, lotus

Hosackia crassifolia Benth. [HC2]
Trans. Linn. Soc. London 17(3): 365. 1836.
big deervetch
(see also *Hosackia rosea*)

Lotus crassifolius (Benth.) Greene [HC]

var. *crassifolia* [HC2]
big deervetch

Lotus crassifolius (Benth.) Greene var. *crassifolius* [HC]

Hosackia gracilis Benth. [HC2]
Trans. Linn. Soc. London 17(3): 365. 1836.
seaside bird's-foot-trefoil

Lotus formosissimus Greene [HC]

Hosackia pinnata (Hook.) Abrams [HC2]
Ill. Fl. Pacific States 2: 541. 1944.

meadow bird's-foot-trefoil, meadow deervetch

Lotus pinnatus Hook. [HC]

Hosackia rosea Eastw. [HC2]
Proc. Calif. Acad. Sci. ser. 2, 6: 424, tab. 55. 1896.
rosy bird's-foot-trefoil

Lotus aboriginus Jeps. [JPM]
Lotus crassifolius (Benth.) Greene var. *subglaber* (Ottley) C.L. Hitchc. [HC]
Lotus stipularis (Benth.) Greene var. *subglaber* Ottley

**Laburnum* [HC2]
golden-chain tree

**Laburnum anagyroidis* Medik. [HC2]
Vorles. Churpfälz. Phys.-Öcon. Ges. 2: 363. 1787.
golden chain-tree

Laburnum anagyroides Medik. [IFBC], orthographic variant

Ladeania [HC2]
scurf-pea

Laedeania, orthographic variant

Ladeania lanceolata (Pursh) A.N. Egan & Reveal [HC2]
Novon 19(3): 312. 2009.
wild lemonweed, lance-leaf scurfpea, lemon scurf-pea

Laedeania lanceolata (Pursh) A.N. Egan & Reveal [JPM2], orthographic variant
Psoralea lanceolata Pursh [HC]
Psoralea lanceolata Pursh ssp. *scabra* (Nutt.) Piper
Psoralea lanceolata Pursh var. *purshii* (Vail) Piper
Psoralea lanceolata Pursh var. *stenophylla* (Rydb.) Toft & S.L. Welsh
Psoralea lanceolata Pursh var. *stenostachys* (Rydb.) S.L. Welsh
Psoralea scabra Nutt.
Psoralea stenostachys Rydb.
Psoralidium lanceolatum (Pursh) Rydb. [IMF]
Psoralidium lanceolatum (Pursh) Rydb. var. *stenophyllum* (Rydb.) S.L. Welsh
Psoralidium lanceolatum (Pursh) Rydb. var. *stenostachys* (Rydb.) S.L. Welsh
Psoralidium stenophyllum (Rydb.) Rydb.

Lathyrus [HC, HC2]
peavine, sweet-pea, vetchling

**Lathyrus angulatus* L. [HC2]
Sp. Pl. 2: 731. 1753.
angled peavine

**Lathyrus aphaca* L. [HC, HC2]
Sp. Pl. 2: 729. 1753.
yellow vetchling

Lathyrus holochlorus (Piper) C.L. Hitchc. [HC, HC2]
Univ. Wash. Publ. Biol. 15: 31. 1952.
thin-leaf vetchling

Lathyrus japonicus Willd. [HC, HC2, JPM]
Sp. Pl., ed. 4 [Willdenow] 3(2): 1092. 1802.
beach pea

Lathyrus japonicus Willd. ssp. *maritimus* (L.) P.W. Ball
Lathyrus japonicus Willd. var. *glaber* (Ser.) Fernald
Lathyrus japonicus Willd. var. *maritimus* (L.) Kartesz & Gandhi [IFBC]
Lathyrus maritimus (L.) Bigelow

Lathyrus maritimus (L.) Bigelow var. *glaber* (Ser.) Eames
Pisum maritimum L.
Pisum maritimum L. var. *glaber* Ser.

Lathyrus lanszwertii Kellogg [HC, HC2]
Proc. Calif. Acad. Sci. 2: 150. 1863.
Nevada peavine, thick-leaved peavine

var. *aridus* (Piper) Jeps. [HC, HC2, JPM]
Fl. Calif. 2(4): 389-390. 1936.
pinewoods peavine

var. *bijugatus* (T.G. White) Broich [HC2]
Madroño 54(4): 371. 2008.
drypark pea

Lathyrus bijugatus T.G. White [HC, IFBC]
Lathyrus bijugatus T.G. White var. *sandbergii* T.G. White

var. *lanszwertii* [HC, HC2, JPM]
Proc. Calif. Acad. Sci. 2: 150. 1863.
thick-leaved peavine

**Lathyrus latifolius* L. [HC, HC2]
Sp. Pl. 2: 733. 1753.
everlasting peavine, perennial peavine

Lathyrus latifolius L. var. *splendens* Groenland & Rümpler

Lathyrus littoralis (Nutt.) Endl. ex Walp. [HC, HC2]
Repert. Bot. Syst. 1(4): 722. 1842.
beach peavine, silky beach vetchling

Lathyrus nevadensis S. Watson [HC, HC2]
Proc. Amer. Acad. Arts 11: 133 (-135). 1876.
Sierra peavine

var. *cusickii* (S. Watson) Broich [HC2]
Madroño 54(1): 64. 2007.
Cusick's pea

Lathyrus cusickii S. Watson
Lathyrus nevadensis S. Watson ssp. *cusickii* (S. Watson) C.L. Hitchc. [HC]

var. *nevadensis* [HC2, JPM]
Proc. Amer. Acad. Arts 11: 133-135. 1876.
Sierra pea

Lathyrus lanceolatus Howell
Lathyrus nevadensis S. Watson ssp. *lanceolatus* (Howell) C.L. Hitchc. [HC]
Lathyrus nevadensis S. Watson ssp. *nevadensis* [HC]
Lathyrus nevadensis S. Watson var. *nuttallii* (S. Watson) C.L. Hitchc.
Lathyrus nevadensis S. Watson var. *pilosellus* (M. Peck) C.L. Hitchc. [HC, IFBC]
Lathyrus nevadensis S. Watson var. *puniceus* C.L. Hitchc. [HC]
Lathyrus nuttallii S. Watson

var. *parkeri* (H. St. John) C.L. Hitchc. [HC, HC2]
Revis. N. Amer. Lathyrus 45. 1952.
Parker's Sierra peavine

Lathyrus ochroleucus Hook. [HC, HC2]
Fl. Bor.-Amer. 1(3): 159. 1831.
cream-flowered peavine

Lathyrus palustris L. [HC, HC2]
Sp. Pl. 2: 733-734. 1753.
marsh peavine

Lathyrus palustris L. ssp. *pilosus* (Cham.) Hultén
Lathyrus palustris L. var. *linearifolius* Ser.
Lathyrus palustris L. var. *macranthus* (T.G. White) Fernald
Lathyrus palustris L. var. *meridionalis* Butters & H. St. John
Lathyrus palustris L. var. *myrtifolius* (Muhl. ex Willd.) A. Gray
Lathyrus palustris L. var. *pilosus* (Cham.) Ledeb.
Lathyrus palustris L. var. *retusus* Fernald & H. St. John

Lathyrus pauciflorus Fernald [HC, HC2]
Bot. Gaz. 19: 335. 1894.
few-flowered peavine

var. *pauciflorus* [HC, HC2]
Bot. Gaz. 19(8): 335. 1894.
few-flowered pea

Lathyrus pauciflorus Fernald ssp. *pauciflorus* [HC]
Lathyrus pauciflorus Fernald var. *tenuior* (Piper) H. St. John

Lathyrus polyphyllus Nutt. [HC, HC2]
Fl. N. Amer. 1(2): 274. 1838.
leafy peavine

**Lathyrus sphaericus* Retz. [HC, HC2]
Observ. Bot. 3: 39. 1783.
grass peavine

**Lathyrus sylvestris* L. [HC, HC2]
Sp. Pl. 2: 733. 1753.
narrow-leaf peavine

Lathyrus torreyi A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 7(2): 337. 1868.
Torrey's peavine

**Lathyrus tuberosus* L. [HC, HC2]
Sp. Pl. 2: 732-733. 1753.
tuberous pea, earth-nut peavine

Known from a single collection in Okanogan County (as of 2020).

Lathyrus vestitus Nutt. [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(2): 276. 1838.
Pacific peavine

var. *ochropetalus* (Piper) Isely [HC2, JPM2]
Madroño 39(2): 96. 1992.
Pacific peavine

Lathyrus ochropetalus Piper
Lathyrus peckii Piper
Lathyrus vestitus Nutt. ssp. *ochropetalus* (Piper) C.L. Hitchc. [HC]

**Lotus* [HC, HC2]
lotus, trefoil
(see also *Acmispon*, *Hosackia*)

**Lotus corniculatus* L. [HC, HC2]
Sp. Pl. 2: 775-776. 1753.
bird's-foot trefoil, garden bird's-foot trefoil
(see also *Lotus tenuis*, *Lotus uliginosus*)

Lotus corniculatus L. var. *arvensis* (Pers.) Ser.

**Lotus tenuis* Waldst. & Kit. ex Willd. [Draft FNA, HC2]
Enum. Pl. 2: 797. 1809.
narrowleaf bird's-foot trefoil, narrowleaf trefoil, slender trefoil

Lotus corniculatus L. var. *tenuifolius* L.

Draft FNA: "The name Lotus glaber Miller, recently used in the literature for this taxon, is a rejected name."

**Lotus uliginosus* Schkuhr [HC2, JPM]
Handb. 2: 412, plate 211 [upper right center]. 1798.
large bird's-foot trefoil, big lotus, big trefoil

Lotus pedunculatus Cav. [KZ99]

Draft FNA: "The name Lotus pedunculatus Cavanilles has been misapplied to specimens of L. uliginosus in North America."

Lupinus [HC, HC2]
lupine

Lupinus albicaulis Douglas ex Hook. [HC, HC2]
Fl. Bor.-Amer. 1(4): 165. 1832.
sicklekeel lupine

Lupinus albicaulis Douglas ex Hook. var. *albicaulis* [KZ99]

**Lupinus arboreus* Sims [HC, HC2]
Bot. Mag. 18: pl. 682. 1803.
tree lupine, yellow bush lupine

Lupinus arbustus Douglas ex Lindl. [HC2]
Edwards\\'s Bot. Reg. 15: t. 1230. 1829.
longspur lupine, spurred lupine

Lupinus amniculi-putori C.P. Sm.
Lupinus arbustus Douglas ex Lindl. ssp. *arbustus*
Lupinus arbustus Douglas ex Lindl. ssp. *calcaratus* (Kellogg) D.B. Dunn
Lupinus arbustus Douglas ex Lindl. ssp. *neolaxiflorus* D.B. Dunn [IFBC]
Lupinus arbustus Douglas ex Lindl. ssp. *pseudoparviflorus* (Rydb.) D.B. Dunn [IFBC]
Lupinus arbustus Douglas ex Lindl. ssp. *silvicola* (A. Heller) D.B. Dunn
Lupinus arbustus Douglas ex Lindl. var. *calcaratus* (Kellogg) S.L. Welsh
Lupinus arbustus Douglas ex Lindl. var. *montanus* (Howell) D.B. Dunn
Lupinus argenteus Pursh var. *laxiflorus* (Douglas ex Lindl.) Dorn [IFBC]
Lupinus argenteus Pursh var. *stenophyllus* (Rydb.) R.J. Davis [HC]
Lupinus argenteus Pursh var. *tenellus* (Douglas ex G. Don) D.B. Dunn
Lupinus calcaratus Kellogg
Lupinus caudatus Kellogg var. *submanens* C.P. Sm.
Lupinus laxiflorus Douglas ex Lindl. [HC]
Lupinus laxiflorus Douglas ex Lindl. var. *arbustus* (Douglas ex Lindl.) M.E. Jones
Lupinus laxiflorus Douglas ex Lindl. var. *calcaratus* (Kellogg) C.P. Sm. [HC]
Lupinus laxiflorus Douglas ex Lindl. var. *cognatus* C.P. Sm.
Lupinus laxiflorus Douglas ex Lindl. var. *elmerianus* C.P. Sm.
Lupinus laxiflorus Douglas ex Lindl. var. *laxiflorus* [HC]
Lupinus laxiflorus Douglas ex Lindl. var. *lyleanus* C.P. Sm.
Lupinus laxiflorus Douglas ex Lindl. var. *pseudoparviflorus* (Rydb.) C.P. Sm. & H. St. John [HC]
Lupinus laxiflorus Douglas ex Lindl. var. *silvicola* (A. Heller) C.P. Sm.
Lupinus laxispicatus Rydb.
Lupinus mucronulatus Howell var. *umatillensis* C.P. Sm.
Lupinus wenachensis Eastw.
Lupinus yakimensis C.P. Sm.

Lupinus argenteus Pursh [HC, HC2]
Fl. Amer. Sept. (Pursh) 2: 468. 1813.
silvery lupine
(see also *Lupinus arbustus*)

var. *argenteus* [HC, HC2, IFBC, JPM]
Fl. Amer. Sept. 2: 468 [1813]. 1814.

silvery lupine

Lupinus bicolor Lindl. [HC, HC2, JPM]
Bot. Reg. 13: t. 1109. 1827.
field lupine, small-flowered lupine, two-color lupine

Lupinus bicolor Lindl. ssp. *bicolor* [IFBC]
Lupinus hirsutulus Greene
Lupinus micranthus Douglas [HC], homonym (illegitimate)
Lupinus micranthus Douglas var. *bicolor* (Lindl.) S. Watson
Lupinus polycarpus Greene [KZ99]
Lupinus strigulosus Gand.

Lupinus latifolius Lindl. ex J. Agardh [HC, HC2]
Syn. Lupini 18. 1835.
broadleaf lupine

var. *latifolius* [HC, HC2]
Syn. Gen. Lupini 18. 1835.
broadleaf lupine

Lupinus latifolius Lindl. ex J. Agardh ssp. *latifolius* [KZ99]
Lupinus latifolius Lindl. ex J. Agardh var. *thompsonianus* (C.P. Sm.) C.L. Hitchc. [HC]
Lupinus rivularis Douglas ex Lindl. var. *latifolius* (Lindl. ex J. Agardh) S. Watson
Lupinus sericeus Pursh var. *thompsonianus* C.P. Sm.

var. *subalpinus* (Piper & B.L. Rob.) C.P. Sm. [HC, HC2]
Bull. Torrey Bot. Club 51(7): 308. 1924.
broadleaf lupine

Lupinus arcticus S. Watson ssp. *subalpinus* (Piper & B.L. Rob.) D.B. Dunn [KZ99]

Lupinus lepidus Douglas ex Lindl. [HC, HC2]
Bot. Reg. 14: t. 1149. 1828.
prairie lupine

var. *aridus* (Douglas ex Lindl.) Jeps. [HC, HC2]
Fl. Calif. 2(3): 268. 1936.
prairie lupine

Lupinus aridus Douglas ssp. *aridus* [KZ99]

var. *lepidus* [HC, HC2]
Bot. Reg. 14: pl. 1149. 1828.
Pacific lupine

Lupinus lepidus Douglas ex Lindl. ssp. *lepidus*
Lupinus minimus Douglas ex Hook. [KZ99]

var. *lobbii* (S. Watson) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacific NW 3: 315. 1961.

Lupinus lyallii A. Gray var. *lyallii* [KZ99]
Lupinus lyallii A. Gray var. *macroflorus* B.J. Cox [KZ99]
Lupinus sellulus Kellogg var. *lobbii* (S. Watson) B.J. Cox

var. *utahensis* (S. Watson) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacif. N. W. [C.L. Hitchcock & al.] 3: 315. 1961.
prairie lupine

Lupinus leucophyllus Douglas ex Lindl. [HC, HC2, IFBC]
Bot. Reg. 13: pl. 1124. 1827.
velvet lupine

var. *leucophyllus* [HC, HC2, KZ99]
Bot. Reg. 13: pl. 1124. 1827.
velvet lupine

Lupinus cyaneus Rydb.
Lupinus enodatus C.P. Sm.
Lupinus forslingii C.P. Sm.
Lupinus holosericeus Nutt. var. *amblyophyllus* B.L. Rob.
Lupinus leucophyllus Douglas ex Lindl. ssp. *leucophyllus*
Lupinus leucophyllus Douglas ex Lindl. var. *belliae* C.P. Sm. [KZ99]
Lupinus leucophyllus Douglas ex Lindl. var. *plumosus* (Douglas ex Lindl.) B.L. Rob.
Lupinus leucophyllus Douglas ex Lindl. var. *retrorsus* (L.F. Hend.) C.P. Sm.
Lupinus macrostachys Rydb.
Lupinus plumosus Douglas ex Lindl.
Lupinus retrorsus L.F. Hend.

var. *tenuispicus* (A. Nelson) C.P. Sm. [HC, HC2]
Bull. Torrey Bot. Club 51(7): 306 1924.
velvet lupine

Lupinus erectus L.F. Hend.
Lupinus leucophyllus Douglas ex Lindl. ssp. *erectus* (L.F. Hend.) Harmon [KZ99]
Lupinus tenuispicus A. Nelson

Lupinus littoralis Douglas [HC, HC2]
Bot. Reg. 14: pl. 1198. 1828.
seashore lupine

var. *littoralis* [HC2]
Bot. Reg. 14: pl. 1198. 1828.
seashore lupine

Lupinus microcarpus Sims [HC, HC2]
Bot. Mag. 50: t. 2418. 1823.
chick lupine

var. *microcarpus* [HC, HC2]
Bot. Mag. 50: pl. 2413. 1823.
chick lupine

Lupinus microcarpus Sims ssp. *scopulorum* (C.P. Sm.) C.P. Sm.
Lupinus microcarpus Sims var. *scopulorum* Sm. [HC]
Lupinus subvexus C.P. Sm. [KZ99]

**Lupinus nootkatensis* Donn ex Sims [HC2]
Bot. Mag. 32: t. 1311. 1810.
Nootka lupine

Lupinus nootkatensis Donn ex Sims var. *nootkatensis* [IFBC]

Lupinus oreganus A. Heller [HC2, OFP]
Muhlenbergia 7(8): 89-91, f. 14. 1911.
Kincaid's lupine, Oregon lupine

var. *kincaidii* C.P. Sm. [HC2]
Bull. Torrey Bot. Club 51(7): 305. 1924.
Kincaid's lupine, Oregon lupine

Lupinus sulphureus Douglas ex Hook. ssp. *kincaidii* (C.P. Sm.) L.Ll. Phillips
Lupinus sulphureus Douglas ex Hook. var. *kincaidii* (C.P. Sm.) C.L. Hitchc. [HC]

Recent phylogenetic studies (completed but unpublished as of December, 2009) show that L. oreganus and L. sulphureus are not closely related.

Lupinus pachylobus Greene [HC2, JPM2]
Pittonia 1(4): 65?66. 1887.
big-pod lupine

Collected in San Juan County in 2006. Originally identified as L. bicolor. Native to California. If considered native, then disjunct in the San Juan Islands and adjacent Gulf Islands in Canada.

Lupinus polyphyllus Lindl. [HC, HC2]
Bot. Reg. 13: t. 1096. 1827.
bigleaf lupine, large-leaved lupine

var. *burkei* (S. Watson) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacific NW 3: 321. 1961.
large-leaved lupine, many-leaved lupine

Lupinus burkei S. Watson ssp. *burkei* [KZ99]

var. *humicola* (A. Nelson) Barneby [HC2]
Great Basin Naturalist 46: 257. 1986.
Wyeth's lupine

Lupinus arcticus S. Watson var. *humicola* (A. Nelson) C.P. Sm.
Lupinus humicola A. Nelson
Lupinus rydbergii Blank.
Lupinus wyethii S. Watson [HC]
Lupinus wyethii S. Watson ssp. *wyethii*

var. *pallidipes* (A. Heller) C.P. Sm. [HC, HC2, KZ99]
Contr. Dudley Herb. 1(1): 47. 1927.
large-leaved lupine

Lupinus pallidipes A. Heller

var. *polyphyllus* [HC, HC2, KZ99]
Bot. Reg. 13: pl. 1096. 1827.
large-leaved lupine

Lupinus matanuskensis C.P. Sm.
Lupinus pseudopolyphyllus C.P. Sm.
Lupinus stationis C.P. Sm.

var. *prunophilus* (M.E. Jones) L.Ll. Phillips [HC, HC2]
Res. Stud. State Coll. Wash. 23(3): 180. 1955.
large-leaved lupine

Lupinus arcticus S. Watson var. *prunophilus* (M.E. Jones) C.P. Sm.
Lupinus prunophilus M.E. Jones [KZ99]
Lupinus wyethii S. Watson var. *prunophilus* (M.E. Jones) C.P. Sm.

Lupinus pusillus Pursh [HC, HC2]
Fl. Amer. Sept. (Pursh) 2: 468. 1813.
low lupine, rusty lupine

var. *intermontanus* (A. Heller) C.P. Sm. [HC, HC2]
Bull. Torrey Bot. Club 46(10): 408. 1919.
low lupine, rusty lupine

Lupinus intermontanus A. Heller
Lupinus pusillus Pursh ssp. *intermontanus* (A. Heller) D.B. Dunn [KZ99]

Lupinus rivularis Douglas ex Lindl. [HC, HC2]
Edwards's Bot. Reg. 19: pl. 1595. 1833.
river bank lupine, stream bank lupine

Lupinus amphibius Suksd. [KZ99]
Lupinus lignipes A. Heller

Lupinus sabinianus Douglas ex Lindl. [HC2]
Edwards's Bot. Reg. 17: pl. 1435. 1831.
Sabin's lupine

Lupinus sabinii Douglas ex Hook. [HC, WNHP]
Lupinus sericeus Pursh ssp. *sabinei* (Dougl. ex Hook.) L. Phillips

Lupinus saxosus Howell [HC, HC2]

Erythea 1(5): 110. 1893.
rock lupine

Lupinus polyphyllus Lindl. var. *saxosus* (Howell) Barneby
Lupinus saxosus Howell var. *saxosus* [KZ99]
Lupinus saxosus Howell var. *subsericeus* (B.L. Rob. ex Piper) C.P. Sm. [KZ99]
Lupinus subsericeus B.L. Rob. ex Piper

Lupinus sericeus Pursh [HC, HC2]
Fl. Amer. Sept. (Pursh) 2: 468. 1813.
silky lupine

var. *asotinensis* (L.Ll. Phillips) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacific NW 3: 327. 1961.
Asotin silk lupine

Lupinus garfieldensis C.P. Sm.
Lupinus sericeus Pursh ssp. *asotinensis* L.Ll. Phillips

var. *sericeus* [HC, HC2]
Fl. Amer. Sept. 2: 468 [1813]. 1814.
silky lupine

Lupinus alpicola L.F. Hend. ex Piper [KZ99]
Lupinus buckinghamii C.P. Sm.
Lupinus fikeranus C.P. Sm.
Lupinus flavicaulis Rydb.
Lupinus flexuosus Lindl. ex J. Agardh
Lupinus huilcoflorus C.P. Sm.
Lupinus ramosus E.E. Nelson
Lupinus sericeus Pursh ssp. *sericeus*
Lupinus sericeus Pursh var. *fikeranus* (C.P. Sm.) C.L. Hitchc. [HC]
Lupinus sericeus Pursh var. *flexuosus* (Lindl. ex J. Agardh) C.P. Sm. [KZ99]
Lupinus sericeus Pursh var. *subflexuosus* H. St. John & Warren
Lupinus spiraeaphilus C.P. Sm.
Lupinus tuckerianus C.P. Sm.

Lupinus sulphureus Douglas ex Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(4): 166. 1832.
sulfur lupine
(see also *Lupinus oreganus*)

var. *bingenensis* (Suksd.) Gandhi & Vincent
Phytoneuron 2019-41: 2. 2019.
Bingen lupine

Lupinus sulphureus Douglas ex Hook. ssp. *subsaccatus* (Suksd.) L. Phillips
Lupinus sulphureus Douglas ex Hook. var. *subsaccatus* (Suksd.) C.L. Hitchc. [HC, HC2]

var. *sulphureus* [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(4): 166. 1832.
sulphur lupine

Lupinus sulphureus Dougl. ex Hook. ssp. *sulphureus*
Lupinus sulphureus Dougl. ex Hook. var. *applegateanus* C.P. Sm.
Lupinus sulphureus Dougl. ex Hook. var. *echleranus* C.P. Sm.

**Medicago* [HC, HC2]
alfalfa, bur-clover, medic

**Medicago arabica* (L.) Huds. [HC, HC2]
Fl. Angl. 288. 1762.
spotted medic

Medicago arabica (L.) Huds. ssp. *inermis* Ricker [HC]

Medicago lupulina L. [HC, HC2]
Fl. Carniol. (ed. 2) 2: 88. 1772.
hop clover, black medic

Medicago lupulina L. var. *cupaniana* (Guss.) Boiss.
Medicago lupulina L. var. *glandulosa* Neilr.

Medicago minima (L.) Bartal. [HC, HC2]
Cat. Piante Siena 60 (-61). 1776.
little bur-clover, bur medic

Medicago minima (L.) Bartal. var. *compacta* Neyraut
Medicago minima (L.) Bartal. var. *longiseta* DC.
Medicago minima (L.) Bartal. var. *pubescens* Webb

Medicago polymorpha L. [HC2, IFBC]
Fl. Carniol. (ed. 2) 2: 89. 1772.
bur-clover, toothed medic, smooth medic

Medicago apiculata Willd.
Medicago hispida Gaertn. [HC]
Medicago hispida Gaertn. var. *apiculata* (Willd.) Burnat
Medicago hispida Gaertn. var. *confinis* (W.D.J. Koch) Burnat
Medicago polymorpha L. var. *brevispina* (Benth.) Heyn
Medicago polymorpha L. var. *ciliaris* (Ser.) Shinners
Medicago polymorpha L. var. *polygyra* (Urb.) Shinners
Medicago polymorpha L. var. *tricycla* (Gren. & Godr.) Shinners
Medicago polymorpha L. var. *vulgaris* (Benth.) Shinners

Medicago sativa L. [HC, HC2]
Sp. Pl. 2: 778-779. 1753.
alfalfa, lucerne

*ssp. *falcata* (L.) Arcang. [HC2, KZ99]
Comp. Fl. Ital. [Arcangeli] 160. 1882.
yellow alfalfa

Medicago falcata L. [HC]

*ssp. *sativa* [HC2, KZ99]
Sp. Pl. 2: 778. 1753.
alfalfa, lucerne

*ssp. ×*varia* (Martyn) Arcang. [HC2]
Comp. Fl. Ital. [Arcangeli] 160. 1882.
alfalfa

Medicago ×*varia* Martyn

Melilotus [HC, HC2]
melilot, sweet-clover

Melilotus albus Medik. [HC2]
Vorles. Churpfälz. Phys.-Öcon. Ges. 2: 382. 1787.
white sweet-clover

Melilotus alba Medik. [HC], orthographic variant
Melilotus albus Medik. var. *annuus* H.S. Coe

Melilotus indicus (L.) All. [HC2, JPM]
Fl. Pedem. 1: 308. 1785.
annual yellow sweet-clover, small-flowered yellow sweet-clover

Melilotus indica (L.) All. [HC], orthographic variant

H&C uses the combination M. indica L.

Melilotus officinalis (L.) Lam. [HC, HC2]

Reise Russ. Reich. 3: 537. 1776.
yellow sweet-clover

*Onobrychis [HC, HC2]
sainfoin

*Onobrychis viciifolia Scop. [HC2]
Fl. Carniol. (ed. 2) 2: 76. 1772.
holy-clover, saintfoin, sandfain

Hedysarum onobrychis L.
Onobrychis sativa Lam.
Onobrychis viciaefolia Scop. [HC], orthographic variant

*Ononis [HC, HC2]

*Ononis spinosa L. [HC2]
Sp. Pl. 2: 716. 1753.
restharrow

*ssp. *maritima* (Dumort.) P. Fourn. [FNA Draft, HC2]
Les Quatre Flores de la France 540. 1936.
common restharrow

Ononis repens L. [HC]

Oxytropis [HC, HC2]
crazyweed, locoweed, oxytrope

Oxytropis borealis DC. [HC2]
Prodr. [A. P. de Candolle] 2: 275. 1825.
boreal crazyweed, boreal locoweed

var. *viscida* (Nutt.) S.L. Welsh [HC2, IFBC]
Great Basin Naturalist 50(4): 358 [1991]. 1990.
sticky boreal crazyweed, sticky boreal locoweed

Aragallus viscidulus Rydb.
Aragallus viscidulus Rydb. var. *depressus* Rydb.
Oxytropis gaspensis Fernald & S.L. Kelsey
Oxytropis ixodes Butters & Abbe
Oxytropis leucantha (Pall.) Pers. var. *depressus* (Rydb.) B. Boivin, orthographic variant
Oxytropis leucantha (Pall.) Pers. var. *gaspensis* (Fernald & S.L. Kelsey) B. Boivin
Oxytropis leucantha (Pall.) Pers. var. *ixodes* (Butters & Abbe) B. Boivin
Oxytropis leucantha (Pall.) Pers. var. *magnifica* B. Boivin
Oxytropis leucantha (Pall.) Pers. var. *viscida* (Nutt.) B. Boivin
Oxytropis viscida Nutt. [HC]

Oxytropis campestris (L.) DC. [HC, HC2]
Astragalogia 26, 74 (ed. qto.); 20, 59 (ed. fol.). 1802.
field locoweed, yellow locoweed

var. *columbiana* (H. St. John) Barneby [HC, HC2]
Leafl. W. Bot. 6(5): 111. 1951.
slender crazyweed

Oxytropis columbiana H. St. John

var. *cusickii* (Greenm.) Barneby [HC, HC2]
Leafl. W. Bot. 6(5): 111. 1951.
Cusick's field crazyweed, Cusick's field locoweed

Oxytropis alpicola (Rydb.) M.E. Jones
Oxytropis campestris (L.) DC. var. *rydbergii* (A. Nelson) R.J. Davis
Oxytropis cusickii Greenm.
Oxytropis rydbergii A. Nelson

var. *spicata* Hook. [HC2]
Fl. Bor.-Amer. (Hooker) 1(3): 147. 1831.
yellow-flowered crazyweed, yellow-flowered locoweed

Oxytropis campestris (L.) DC. ssp. *gracilis* (A. Nelson) Hultén
Oxytropis campestris (L.) DC. var. *cervinus* (Greene) B. Boivin
Oxytropis campestris (L.) DC. var. *gracilis* (A. Nelson) Barneby [HC]
Oxytropis gracilis (A. Nelson) K. Schum.
Oxytropis luteola (Greene) Piper & Beattie
Oxytropis monticola A. Gray [KZ99]
Oxytropis sericea Nutt. var. *spicata* (Hook.) Barneby [HC]
Oxytropis villosa (Rydb.) K. Schum.

var. *wanapum* Joyal [HC2]
Great Basin Naturalist 50(4): 373-376, f. 1-2. 1991.
Wanapum crazyweed, Wanapum locoweed

Not in H&C, rare.

Oxytropis deflexa (Pall.) DC. [HC, HC2]
Astragalogia 96 (ed. quarto), no. 32 1802.
pendent-pod crazyweed, pendent-pod locoweed

var. *sericea* Torr. & A. Gray [HC, HC2]
Fl. N. Amer. 1(2): 342. 1838.
pendent-pod crazyweed, pendent-pod locoweed

Oxytropis deflexa (Pall.) DC. ssp. *sericea* (Torr. & A. Gray) Cody
Oxytropis deflexa (Pall.) DC. var. *parviflora* B. Boivin

**Pisum* [HC, HC2]

**Pisum sativum* L. [HC, HC2, JPM2]
Sp. Pl. 2: 727. 1753.
garden pea

*var. *arvense* (L.) Poir. [HC2]

*var. *sativum* [HC2]

**Pueraria* [HC2]

**Pueraria montana* (Lour.) Merr. [HC2]
Trans. Amer. Philos. Soc. ser. 2, 24(2): 210. 1935.
kudzu

On the WA Noxious Weed List. No extant populations currently known.

*var. *lobata* (Willd.) Maesen & S.M. Almeida ex Sanjappa & Predeep [HC2]

**Robinia* [HC, HC2]
locust

**Robinia hispida* L. [HC2, JPM]
Mant. Pl. 1: 101-102. 1767.
bristly locust

**Robinia pseudoacacia* L. [HC2]
Sp. Pl. 2: 722. 1753.
black locust

Robinia pseudo-acacia L. [HC], orthographic variant
Robinia pseudoacacia L. var. *pyramidalis* (Pépin) C.K. Schneid.
Robinia pseudoacacia L. var. *rectissima* (L.) Raber

Rupertia [HC2]
scurfpea, California tea

Rupertia physodes (Douglas ex Hook.) J.W. Grimes [HC2, IFBC]
Memoirs of the New York Botanical Garden 61: 53. 1990.
forest scurfpea, California tea

Psoralea physodes Douglas ex Hook. [HC]

**Securigera* [HC2]
crown vetch

**Securigera varia* (L.) Lassen [Draft FNA, HC2]
Svensk Bot. Tidskr. 83: 86. 1989.
crown vetch, purple crown vetch

Coronilla varia L. [HC]

**Spartium* [HC2]
Spanish broom

**Spartium junceum* L. [HC2, JPM2]
Sp. Pl. 2: 708. 1753.
Spanish-broom

**Sphaerophysa* [HC2]
Austrian peaweed, swainsona

**Sphaerophysa salsula* (Pall.) DC. [HC2, JPM]
Prodr. 2: 271. 1825.
red bladder-vetch, alkali swainsonpea

Phaca salsula Pall.
Swainsona salsula (Pall.) Taub. [HC]

Thermopsis [HC, HC2]
buck-bean, golden-banner, golden-pea, thermopsis

Thermopsis montana Nutt. [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(3): 388. 1840.
mountain buck-bean, mountain golden-banner, mountain golden-pea, mountain thermopsis
(see also *Thermopsis gracilis*)

var. *ovata* (B.L. Rob. ex Piper) H. St. John [HC, HC2]
Torreya 41(4): 112. 1941.
slender goldenbanner

Thermopsis gracilis Howell var. *ovata* (B.L. Rob. ex Piper) M.G. Mendenh.
Thermopsis rhombifolia (Nutt. ex Pursh) Richardson var. *ovata* (B.L. Rob. ex Piper) Isely

Trifolium [HC, HC2]
clover, trefoil

Trifolium albopurpureum Torr. & A. Gray [HC2, JPM2]
Fl. N. Amer. (Torr. & A. Gray) 1(2): 313. 1838.
Rancheria clover

Trifolium albopurpureum Torr. & A. Gray var. *albopurpureum* [JPM]
Trifolium albopurpureum Torr. & A. Gray var. *neolagopus* (Lojac.) McDermott
Trifolium columbianum Greene
Trifolium columbianum Greene var. *argillorum* Jeps.
Trifolium helleri P.B. Kenn.
Trifolium macraei Hook. & Arn. var. *albopurpureum* (Torr. & A. Gray) Greene [HC]
Trifolium neolagopus Lojac.
Trifolium olivaceum Greene var. *columbianum* (Greene) Jeps.
Trifolium olivaceum Greene var. *griseum* Jeps.

**Trifolium arvense* L. [HC, HC2]

Sp. Pl. 2: 769. 1753.
rabbitfoot clover, hare's foot

*_Trifolium aureum_ Pollich [HC2, IFBC]
Hist. Pl. Palat. 2: 344 1777.
golden clover, greater hop clover, yellow clover

Trifolium agrarium L. [HC], rejected name

Trifolium bifidum A. Gray [HC, HC2]
Proc. Calif. Acad. Sci. 3(6): 102-103. 1864.
notch-leaf clover, Pinole clover

var. _decipiens_ Greene [HC, HC2]
Fl. Francisc. 24. 1891.
notchleaf clover, Pinole clover

*_Trifolium campestre_ Schreb. [HC2, IFBC]
Deutschl. Fl. 1: 16. 1804.
field clover, hop clover

Trifolium procumbens L. [HC], rejected name

*_Trifolium cernuum_ Brot. [HC2]
Phytogr. Lusit. Select. 1: 150?151, pl. 62. 1816.
nodding clover

Recently collected (May 2016) at Fort Worden, Jefferson County, Washington. Also known from one recent collection in Linn County, Oregon, and from California.

Trifolium ciliolatum Benth. [HC, HC2]
Pl. Hartw. 304 [1849]. 1848.
foothill clover, tree clover

Trifolium cyathiferum Lindl. [HC, HC2]
Bot. Reg. 13: pl. 1070. 1827.
bowl clover, cup clover

Trifolium depauperatum Desv. [HC, HC2]
J. Bot. Agric. 4: 69, t. 32, fig. 2. 1814.
poverty clover

var. _depauperatum_ [HC2, IFBC]
J. Bot. Agric. 4: 69. 1814.
poverty clover

Trifolium depauperatum Desv. var. _laciniatum_ (Greene) Jeps.

Trifolium dichotomum Hook. & Arn. [HC2, JPM2]
Bot. Beechey Voy. 330. 1838.
branched clover

Trifolium albopurpureum Torr. & A. Gray var. _dichotomum_ (Hook. & Arn.) Isely [JPM]
Trifolium dichotomum Hook. & Arn. var. _turbinatum_ Jeps.
Trifolium macraei Hook. & Arn. var. _dichotomum_ (Hook. & Arn.) W.H. Brewer ex S. Watson [HC]
Trifolium petrophilum Greene ex A. Heller

Trifolium douglasii House [HC, HC2]
Botanical Gazette 41(5): 335. 1906.
Douglas's clover

*_Trifolium dubium_ Sibth. [HC, HC2]
Fl. Oxon. 231. 1794.
least hop clover, suckling clover

Trifolium eriocephalum Nutt. [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(2): 313. 1838.
woolly-head clover

var. *arcuatum* McDermott [HC2]
An Illustrated Key to the North American Species of Trifolium 242. 1910.
woolly-head clover

Trifolium arcuatum Piper
Trifolium eriocephalum Nutt. ssp. *arcuatum* (Piper) J.M. Gillett [KZ99]
Trifolium eriocephalum Nutt. var. *piperi* J.S. Martin [HC]

var. *eriocephalum* [HC, HC2]
Fl. N. Amer. 1(2): 313. 1838.
woolly-head cloover

Trifolium eriocephalum Nutt. ssp. *eriocephalum* [KZ99]
Trifolium eriocephalum Nutt. var. *butleri* Jeps.

**Trifolium fragiferum* L. [HC, HC2]
Sp. Pl. 2: 772. 1753.
strawberry clover

Trifolium fragiferum L. ssp. *bonannii* (C. Presl) Soják

**Trifolium glomeratum* L. [HC2, JPM2]
Species Plantarum 2: 770. 1753.
clustered clover

Collected in Skagit and Jefferson counties.

**Trifolium gracilentum* Torr. & A. Gray [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(2): 316. 1838.
slender clover

Trifolium gracilentum Torr. & A. Gray var. *gracilentum* [JPM]
Trifolium gracilentum Torr. & A. Gray var. *inconspicuum* Fernald

**Trifolium hirtum* All. [HC2]
Auctuarium ad Floram Pedemontanam. 1789.
rose clover

Collected for first time in Washington in 2017 (Klickitat County).

**Trifolium hybridum* L. [HC, HC2]
Sp. Pl. 2: 766-767. 1753.
alsike clover

Trifolium elegans Savi
Trifolium hybridum L. ssp. *elegans* (Savi) Asch. & Graebn.
Trifolium hybridum L. var. *elegans* (Savi) Boiss.
Trifolium hybridum L. var. *pratense* Rabenh.

**Trifolium incarnatum* L. [HC, HC2]
Sp. Pl. 2: 769. 1753.
crimson clover

Trifolium incarnatum L. var. *elatius* Gibelli & Belli

Trifolium latifolium (Hook.) Greene [HC, HC2]
Pittonia 3(17B): 223. 1897.
twin clover

Trifolium aitonii Rydb.
Trifolium howellii S. Watson var. *latifolium* (Hook.) McDermott
Trifolium longipes Nutt. var. *latifolium* Hook.
Trifolium orbiculatum B.P. Kenn. & McDermott

Trifolium longipes Nutt. [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(2): 314. 1838.
long-stalked clover

var. *longipes* [HC, HC2]

Fl. N. Amer. 1(2): 314. 1838.
long-stalked clover

Trifolium longipes Nutt. ssp. *longipes* [KZ99]

var. *multiovulatum* (L.F. Hend.) C.L. Hitchc. [HC, HC2]
Fl. Pacific Northwest 277. 1973.
long-stalked clover

Trifolium caurinum Piper
Trifolium covillei House
Trifolium longipes Nutt. ssp. *caurinum* (Piper) J.M. Gillett [KZ99]
Trifolium oreganum Howell var. *multiovulatum* L.F. Hend.
Trifolium rusbyi Greene ssp. *caurinum* (Piper) D. Heller & Zohary

var. *multipedunculatum* (P.B. Kenn.) J.S. Martin ex Isely [HC2]
Brittonia 32(1): 56. 1980.
long-stalked clover

Trifolium longipes Nutt. ssp. *multipedunculatum* (P.B. Kenn.) J.M. Gillett
Trifolium multipedunculatum P.B. Kenn. [HC]
Trifolium rusbyi Greene ssp. *multipedunculatum* (P.B. Kenn.) D. Heller & Zohary

Trifolium macrocephalum (Pursh) Poir. [HC, HC2]
Encycl., Suppl. 5(1): 336. 1817.
big-head clover, large-head clover

Lupinaster macrocephalus Pursh
Trifolium macrocephalum (Pursh) Poir. var. *caeruleomontanum* H. St. John

Trifolium microcephalum Pursh [HC, HC2]
Fl. Amer. Sept. 2: 478 [1813]. 1814.
small-head clover

Trifolium microdon Hook. & Arn. [HC, HC2]
Bot. Misc. 3: 180. 1833.
thimble clover, Valparaiso clover

Trifolium microdon Hook. & Arn. var. *pilosum* Eastw.

Trifolium oliganthum Steud. [HC, HC2]
Nomencl. Bot. (ed. 2) 2(12-13): 707. 1841.
few-flowered clover

Trifolium pauciflorum Nutt.
Trifolium variegatum Nutt. var. *pauciflorum* (Nutt.) McDermott

Trifolium plumosum Douglas ex. Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(3): 130. 1831.
plumed clover

var. *amplifolium* J.S. Martin [HC, HC2]
Bull. Torrey Bot. Club 73(4): 369. 1946.
plumed clover

Trifolium plumosum Douglas ex. Hook. ssp. *amplifolium* (J.S. Martin) J.M. Gillett [KZ99]

var. *plumosum* [HC, HC2]
Fl. Bor.-Amer. 1(3): 130-131, pl. 49. 1831.
plumed clover

Trifolium plumosum Douglas ex. Hook. ssp. *plumosum*

**Trifolium pratense* L. [HC, HC2]
Sp. Pl. 2: 768. 1753.
red clover

Trifolium pratense L. var. *frigidum* Gaudin
Trifolium pratense L. var. *sativum* (Schreb.) Cincovic

*_Trifolium repens_ L. [HC, HC2]
Sp. Pl. 2: 767. 1753.
Dutch clover, white clover

*_Trifolium resupinatum_ L. [HC2, JPM2]
Sp. Pl. 2: 771. 1753.
reversed clover

Trifolium resupinatum L. var. _suaveolens_ (Willd.) Dinsm.

*_Trifolium retusum_ L. [HC2, JPM2]
Demonstrationes Plantarum 21. 1753.
teasel clover

Known from collections in San Juan County (1992), Skagit County (2012), and Jefferson County (2016).

*_Trifolium striatum_ L. [HC, HC2]
Sp. Pl. 2: 770. 1753.
knotted clover

Recently (2016, 2017) found in Jefferson and San Juan counties.

*_Trifolium subterraneum_ L. [HC, HC2]
Sp. Pl. 2: 767. 1753.
burrowing clover, subterranean clover, subterranean trefoil

*_Trifolium suffocatum_ L. [HC2]
Mant. Pl. Altera 276. 1771.
suffocated clover

Recently collected (May 2016) from Port Townsend, Jefferson County. Otherwise known in North America only from recent collections in Monterey County, CA. A distinctive small annual clover, nearly cespitose, with sessile flowering heads forming a dense cushion at summit of taproot.

Trifolium thompsonii C.V. Morton [HC, HC2]
J. Wash. Acad. Sci. 23: 270. 1933.
Thompson's clover

Trifolium variegatum Nutt. [HC, HC2]
Fl. N. Amer. 1(2): 317. 1838.
white-tip clover

Trifolium appendiculatum Lojac.
Trifolium geminiflorum Greene
Trifolium melananthum Hook. & Arn.
Trifolium polyodon Greene
Trifolium trilobatum Jeps.

*_Trifolium vesiculosum_ Savi [HC2, JPM]
Fl. Pis. 2: 165. 1798.
arrow-leaf clover

Trifolium willdenovii Spreng. [HC2, IFBC, JPM]
Syst. Veg. 3: 208. 1826.
sand clover, tomcat clover

Trifolium tridentatum Lindl. [HC]
Trifolium tridentatum Lindl. var. _aciculare_ (Nutt.) McDermott

Trifolium wormskioldii Lehm. [HC2]
Sem. Hort. Bot. Hamburg. 17. 1825.
cow clover, salt marsh clover

Lupinaster wormskioldii (Lehm.) C. Presl
Trifolium fendleri Greene
Trifolium fimbriatum Lindl.
Trifolium heterodon Torr. & A. Gray
Trifolium involucratum Ortega var. _fendleri_ (Greene) McDermott

Trifolium involucratum Ortega var. *fimbriatum* (Lindl.) McDermott
Trifolium involucratum Ortega var. *heterodon* (Torr. & A. Gray) S. Watson
Trifolium involucratum Ortega var. *kennedianum* McDermott
Trifolium kennedianum (McDermott) A. Nelson & J.F. Macbr.
Trifolium spinulosum Douglas ex Hook.
Trifolium willdenowii Spreng. var. *fimbriatum* (Lindl.) Ewan, orthographic variant
Trifolium willdenowii Spreng. var. *kennedianum* (McDermott) Ewan, orthographic variant
Trifolium wormskioldii Lehm. var. *fimbriatum* (Lindl.) Jeps.
Trifolium wormskioldii Lehm. var. *kennedianum* (McDermott) Jeps.
Trifolium wormskjoldii Lehm. [HC], orthographic variant

**Ulex* [HC, HC2]
furze, gorse

**Ulex europaeus* L. [HC, HC2]
Sp. Pl. 2: 741. 1753.
common gorse

Vicia [HC, HC2]
vetch

Vicia americana Muhl. ex Willd. [HC, HC2]
Sp. Pl., ed. 4 [Willdenow] 3(2): 1096. 1802.
American vetch

var. *americana* [HC2, JPM]
Sp. Pl. (ed. 4) 3(2): 1096. 1802.
American vetch

Vicia americana Muhl. ex Willd. ssp. *americana* [KZ99]
Vicia americana Muhl. ex Willd. ssp. *oregana* (Nutt.) Abrams
Vicia americana Muhl. ex Willd. var. *oregana* (Nutt.) A. Nelson
Vicia americana Muhl. ex Willd. var. *truncata* (Nutt.) W.H. Brewer [HC]
Vicia americana Muhl. ex Willd. var. *villosa* (Kellogg) F.J. Herm. [HC]
Vicia californica Greene
Vicia californica Greene var. *madrensis* Jeps.
Vicia oregana Nutt.
Vicia sparsifolia Nutt. ex Torr. & A. Gray var. *truncata* (Nutt.) S. Watson

**Vicia cracca* L. [HC, HC2]
Sp. Pl. 2: 735. 1753.
tufted vetch, bird vetch

Vicia cracca L. ssp. *cracca* [KZ99]
Vicia cracca L. ssp. *grossheimii* (Ekutim.) Hashimov, invalidly published
Vicia cracca L. ssp. *tenuifolia* (Roth) Bonnier & Layens [KZ99]
Vicia cracca L. var. *angustissima* Neilr.
Vicia cracca L. var. *tenuifolia* (Roth) Beck
Vicia semicincta Greene
Vicia tenuifolia Roth

**Vicia hirsuta* (L.) Gray [HC, HC2]
Nat. Arr. Brit. Pl. 2: 614-615. 1821.
hairy vetch, tiny vetch

**Vicia lathyroides* L. [HC2, IFBC]
Sp. Pl. 2: 736. 1753.
spring vetch

**Vicia lutea* L. [HC2]
Sp. Pl. 2: 736. 1753.
yellow vetch

A locally common weed along the Larry Scott Trail in Port Townsend, Jefferson County.

Vicia nigricans Hook. & Arn. [HC2]
Bot. Beechey Voy. 20. 1830.
giant vetch

var. *gigantea* (Hook.) Broich [HC2]
Madroño 54(1): 70. 2007.
giant vetch

Vicia gigantea Hook. [HC]
Vicia nigricans Hook. & Arn. ssp. *gigantea* (Hook.) Lassetter & C.R. Gunn [IFBC]

**Vicia pannonica* Crantz [HC, HC2, JPM2]
Stirp. Austr. Fasc., ed. 2. 2(5): 393. 1769.
Hungarian vetch

**Vicia sativa* L. [HC, HC2]
Sp. Pl. 2: 736. 1753.
tare, common vetch

*var. *angustifolia* (L.) Wahlenb. [HC, HC2]
Fl. Carpat. Princ. 218. 1814.
tare, common vetch

Vicia angustifolia L.
Vicia angustifolia L. var. *segetalis* (Thuill.) W.D.J. Koch
Vicia angustifolia L. var. *uncinata* (Desv.) Rouy
Vicia sativa L. ssp. *nigra* (L.) Ehrh. [KZ99]
Vicia sativa L. var. *nigra* L.
Vicia sativa L. var. *segetalis* (Thuill.) Ser.

*var. *sativa* [HC, HC2]
Sp. Pl. 2: 736. 1753.
common vetch

Vicia sativa L. ssp. *sativa* [KZ99]
Vicia sativa L. var. *linearis* Lange

**Vicia tetrasperma* (L.) Schreb. [HC, HC2]
Spic. Fl. Lips. 26. 1771.
smooth tare, lentil vetch, slender vetch

Vicia tetrasperma (L.) Schreb. var. *tenuissima* Druce

**Vicia villosa* Roth [HC, HC2]
Tent. Fl. Germ. 2(2): 182. 1793.
hairy vetch, winter vetch, woolly vetch

*var. *glabrescens* W.D.J. Koch [HC2]
Syn. Fl. Germ. Helv. 1: 194. 1835.
hairy vetch, winter vetch, woolly vetch

Vicia dasycarpa Ten.
Vicia villosa Roth ssp. *varia* (Host) Corb. [JPM2]

*var. *villosa* [HC2]
Tent. Fl. Germ. 2(2): 182. 1793.
hairy vetch, winter vetch, woolly vetch

Vicia villosa Roth ssp. *villosa* [JPM2]

Fagaceae [FNA3, HC, HC2] Beech Family

**Castanea* [FNA3, HC2]

Gard. Dict. Abr., ed. 4. 1754.

**Castanea sativa* Mill. [HC2, Stace 1997]
Gard. Dict. (ed. 8) no. 1. 1768.
European chestnut, Spanish chestnut, sweet chestnut

Chrysolepis [FNA3, HC2]
Bot. Not. 2(1): 117. 1948.
chinquapin

Chrysolepis chrysophylla (Douglas ex Hook.) Hjelmq. [FNA3, HC2]
Bot. Not. Suppl. 2(1): 117. 1948.
giant chinquapin, golden chinquapin

Castanopsis chrysophylla (Douglas ex Hook.) A. DC. [HC]

var. *chrysophylla* [FNA3, HC2]
Bot. Not. Suppl. 2(1): 117. 1948.
giant chinquapin, golden chinquapin

Quercus [FNA3, HC, HC2]
Sp. Pl. 2: 994. 1753; Gen. Pl. ed. 5, 431, 1754.
oak

Quercus garryana Douglas ex Hook. [FNA3, HC, HC2]
Fl. Bor.-Amer. 2: 159. 1838.
Garry oak, Oregon white oak

var. *garryana* [FNA3, HC2]
Fl. Bor.-Amer. 2: 159. 1838.
Garry oak, Oregon white oak

**Quercus palustris* Münchh. [FNA3, HC2]
Hausvater. 5(1): 253. 1770.

**Quercus robur* L. [FNA3, HC2]
Sp. Pl. 2: 996. 1753.
British oak, English oak

Arthur Lee Jacobson reports as commonly naturalized in Seattle area.

**Quercus rubra* L. [FNA3, HC2]
Sp. Pl. 2: 996. 1753.
red oak

Arthur Lee Jacobson reports as reseeding in Seattle area.

Fumariaceae: see Papaveraceae

Garryaceae [HC, HC2] Silktassel Family

**Aucuba* [HC2]

**Aucuba japonica* Thunb. [HC2]

Garrya [HC, HC2]
silk-tassel

Garrya fremontii Torr. [HC, HC2]

Pacif. Railr. Rep. 4(5): 136. 1857.
Fremont's silk tassel bearbrush

Garrya fremontii Torr. var. *laxa* Eastw.

Gentianaceae [HC, HC2] Gentian Family

**Centaurium* [HC, HC2]
centaury
(see also *Zeltnera*)

**Centaurium erythraea* Rafn [HC2, JPM2]
Danm. Holst. Fl. 2: 75-77. 1800.
common centaury, European centaury

Centaurium umbellatum Gilib. [HC], invalidly published

**Centaurium pulchellum* (Sw.) Hayek ex Hand.-Mazz., Stadlm., Janch. & Faltis [Draft FNA, HC2]
Oesterr. Bot. Z. 56: 70. 1906.
branching centaury, lesser centaury

Comastoma [HC2]

Comastoma tenellum (Rottb.) Toyok. [HC2, JPM2]
Botanical Magazine 74(874): 198. 1961.
Lapland gentian, Samiland gentian, slender gentian

Gentiana tenella Rottb. [HC]
Gentianella tenella (Rottb.) Börner
Gentianella tenella (Rottb.) Börner ssp. *tenella* [JPM]

Two specimens collected in 1987 in Okanogan County are housed at Western Washington University Herbarium.

Frasera [HC, HC2]
frasera

Frasera albicaulis Griseb. [HC, HC2]

var. *albicaulis* [HC, HC2]
Fl. Bor.-Amer. 2(8): 67, pl. 154. 1838.
white-stemmed frasera

Frasera albicaulis Griseb. ssp. *albicaulis* [KZ99, IMF4]
Swertia albicaulis (Griseb.) Kuntze ssp. *albicaulis* [JPM]

var. *columbiana* (H. St. John) C.L. Hitchc. [HC, HC2]
Fl. Bor.-Amer. 2(8): 67, pl. 154. 1838.
Columbia frasera

Frasera albicaulis Griseb. ssp. *columbiana* (St. John) Hitchc.

Near Columbia River in Klickitat and Yakima counties in WA.

Frasera fastigiata (Pursh) A. Heller [HC, HC2]
Bulletin of the Torrey Botanical Club 24(6): 312. 1897.
clustered frasera, Umpqua green-gentian

Swertia fastigata Pursh [JPM], orthographic variant

Frasera speciosa Douglas ex Griseb. [HC, HC2]
Fl. Bor.-Amer. 2(8): 66-67, pl. 153. 1838.
elkweed, giant frasera, monument plant

Swertia radiata (Kellogg) Kuntze [JPM]

var. *speciosa* [HC2]

Gentiana [HC, HC2]
gentian
(see also *Comastoma*, *Gentianella*)

Gentiana affinis Griseb. [HC, HC2]
Fl. Bor.-Amer. 2(8): 56-57. 1838.
pleated gentian, prairie gentian, Rocky Mtn. gentian

Gentiana affinis Griseb. ssp. *ovata* A. Gray [JPM]

Gentiana calycosa Griseb. [HC, HC2]
Fl. Bor.-Amer. 2(8): 58-59, pl. 146. 1838.
explorer's gentian, mt. bog gentian

Gentiana calycosa ssp. *calycosa*
Gentiana calycosa ssp. *obtusiloba* (Rydb.) C.L. Hitchc.
Gentiana calycosa ssp. *xantha* A. Nels.
Gentiana calycosa Griseb. var. *asepala* (Maguire) C.L. Hitchc. [HC]
Gentiana calycosa Griseb. var. *calycosa* [HC]
Gentiana calycosa Griseb. var. *obtusiloba* (Rydb.) C.L. Hitchc. [HC]

Gentiana douglasiana Bong. [HC, HC2]
Mém. Acad. Imp. Sci. Saint Pétersbourg (Sér. 7) 2(2): 156, pl. 6. 1832.
swamp gentian

Gentiana glauca Pall. [HC, HC2]
Fl. Ross. 2: 104, pl. 93, f. 4. 1790.
glaucous gentian

Dasystephana glauca (Pall.) Rydb.
Gentianodes glauca (Pall.) Á. Löve & D. Löve

Gentiana sceptrum Griseb. [HC, HC2]
King's gentian, staff gentian

Gentianella [HC2]
gentian

Gentianella amarella (L.) Börner [HC2, IMF4]
northern gentian

Gentiana amarella L. [HC]

ssp. *acuta* (Michx.) J.M. Gillett [HC2, JPM2]
Ann. Missouri Bot. Gard. 44(3): 253. 1957.
northern gentian

Gentianella amarella (L.) Börner var. *acuta* (Michx.) Herder [HC2]

Swertia [HC, HC2]
swertia

Swertia perennis L. [HC, HC2]
Sp. Pl. 1: 226. 1753.
also felwort, alpine bog swertia

Swertia perennis ssp. *obtusa* (Ledeb.)Ledeb.:Griseb.

Zeltnera [HC2]
centaury

Zeltnera exaltata (Griseb.) G. Mans. [HC2, JPM2]
Taxon 53(3): 731. 2004.

desert centaury, tall centaury

Centaurium exaltatum (Griseb.) W. Wight ex Piper [HC]

Zeltnera muehlenbergii (Griseb.) G. Mans. [HC2, JPM2]
Taxon 53(3): 731-732. 2004.
Muhlenberg`s centaury

Centaurium muehlenbergii (Griseb.) W. Wight ex Piper
Centaurium muehlenbergii (Griseb.) W. Wight ex Piper var. *albiflorum* Suks.
Centaurium muhlenbergii (Griseb.) W. Wight ex Piper [HC], orthographic variant

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Geraniaceae [HC, HC2] Geranium Family

**Erodium* [HC, HC2]
alfilaria, crane's-bill, filaree, stork's-bill

**Erodium botrys* (Cav.) Bertol. [HC2]
Amoen. Ital. 35. 1819.
longbeak stork's bill

Single collection (2013) from Klickitat County.

**Erodium cicutarium* (L.) L\\\'Hér. ex Aiton [HC, HC2]
Hort. Kew. 2: 414. 1789.
common stork's-bill, redstem

*ssp. *cicutarium* [HC2]
redstem stork's-bill

**Erodium moschatum* (L.) L\'Hér. [HC, HC2]
greenstem filaree

An occasional waif in Washington, more common in western Oregon and California.

Geranium [HC, HC2]
crane's-bill, geranium

Geranium bicknellii Britton [HC, HC2]
Bull. Torrey Bot. Club 24(2): 92-93 1897.
northern crane's-bill

Geranium nemorale Suksd.

Geranium carolinianum L. [HC, HC2]
Sp. Pl. 2: 682. 1753.
Carolina geranium

Geranium carolinianum L. var. *carolinianum* [KZ99]
Geranium carolinianum L. var. *sphaerospermum* (Fernald) Breitung [KZ99]
Geranium sphaerospermum Fernald

**Geranium columbinum* L. [HC, HC2]
Sp. Pl. 2: 682. 1753.
long-stalk crane's-bill

**Geranium dalmaticum* (Beck) Rech.f.
Magyar Bot. Lapok 1934, xxxiii. 28. 1934.
Dalmatian crane's-bill

First collected in WA in 2019 in Pierce County as trailside waif.

**Geranium dissectum* L. [HC, HC2]
Cent. Pl. I 21. 1755.

cut-leaf crane's-bill

Geranium laxum Hanks

**Geranium ibericum* Cav.
Diss. 4: 209. 1787.
montane crane's-bill, Spanish crane's-bill, montane geranium, Spanish geranium

Geranium montanum Hablitz ex Pall.

First collection in Washington (2018) from Kitsap County.

**Geranium lucidum* L. [HC, HC2, Stace 1997]
Sp. Pl. 682. 1753.
shining cranes-bill

**Geranium molle* L. [HC, HC2]
Sp. Pl. 2: 682. 1753.
dovefoot geranium

Geranium oreganum Howell [HC, HC2]
A Flora of Northwest America 1: 106-107. 1897.
sticky geranium, western geranium

Geranium albiflorum Hook. var. *incisum* Torr. & Gray [KZ99]
Geranium incisum Nutt.

**Geranium ×oxonianum* Yeo [HC2]
Hardy Geraniums 187, 65. 1985.
crane's-bill
(= *Geranium endressii x Geranium versicolor*)

**Geranium purpureum* Vill. [HC2]
Hist. Pl. Dauphiné 1: 272. 1786.
purple crane's-bill, purple geranium

Several collections from Klickitat County (1911, 1962, 1992), and recently (2018) from King County. Easily confused with G. robertianum, so possibly more widespread than the collecting record indicates.

**Geranium pusillum* L. [HC, HC2]
Syst. Nat. (ed. 10) 2: 1144. 1759.
small-flower crane's-bill

**Geranium pyrenaicum* Burm. f. [HC2]
Spec. Bot. Geran. 27?28. 1759.
hedgerow cranesbill

*ssp. *pyrenaicum* [FNA, HC2]

Geranium richardsonii Fisch. & Trautv. [HC, HC2]
white crane's-bill, white geranium

**Geranium robertianum* L. [HC, HC2]
Sp. Pl. 2: 681-682. 1753.
herb-Robert, stinky-Bob

**Geranium rotundifolium* L. [HC2]
Sp. Pl. 2: 683. 1753.
round-leaved geranium

Collected once (2016) in King County in wastelot.

Geranium viscosissimum Fisch. & C.A. Mey. [HC, HC2, JPM2]
Index Sem. (St. Petersburg) 11: Suppl. 18. 1846.
sticky purple crane's-bill, sticky purple geranium

Grossulariaceae [FNA8, HC, HC2] Currant Family

FNA8: "Weigend, M. 2007. Grossulariaceae. In: K. Kubitzki et al., eds. 1990+. The Families and Genera of Vascular Plants. 9+ vols. Berlin etc. Vol. 9, pp. 168-176."

Ribes [FNA8, HC, HC2]

Sp. Pl. 1: 200. 1753; Gen. Pl. ed. 5, 94. 1754.
currant, gooseberry

Ribes acerifolium Howell [FNA8, HC2]

Erythea. 3: 34. 1895.
maple-leaf currant

Ribes howellii Greene [HC], rejected name

FNA8: "Ribes acerifolium K. Koch (1869), which was believed to block the use of R. acerifolium Howell, was not validly published. Consequently, the name R. howellii Greene, proposed as a substitute name, is superfluous; it appears in many floras and on many herbarium specimens."

Ribes aureum Pursh [FNA8, HC, HC2]

Fl. Amer. Sept. 1: 164. 1813.
golden currant

var. *aureum* [FNA8, HC2]

Fl. Amer. Sept. 1: 164. 1813.
golden currant

Chrysobotrya aurea (Pursh) Rydb.

FNA8: "Ribes aureum was introduced into cultivation in Europe early in the nineteenth century (F. V. Coville 1903). It is a major host of pinyon blister rust in Arizona, Colorado, and Utah, and of pinyon leaf rust in New Mexico (E. P. Van Arsdel and B. W. Geils 2004). Ribes aureum is a variable complex and the varieties may seem to intergrade. In California, var. aureum occurs in sagebrush scrub or coniferous forests at higher elevations (800-2600 m) than var. gracillimum; the sepals of var. aureum are longer than those of var. gracillimum (5-8 mm versus 3-4 mm), and its hypanthium is noticeably shorter relative to the sepals. Leaves of var. aureum are more highly lobed and are sparsely glandular in the Pacific Northwest and less lobed and more densely glandular in the southwest (H. D. Hammond, pers. comm.). In most of its range, var. villosum is so conspicuously villous as to be unmistakable; in the west some plants with strikingly long hypanthia are scarcely villous."

Ribes bracteosum Douglas [FNA8, HC, HC2]

Fl. Bor.-Amer. 1: 233. 1832.
California black currant, stink currant

FNA8: "Ribes bracteosum occurs along the Pacific Coast from southeastern Alaska to northern California. Its thin leaves have a sweetish, disagreeable odor and the conspicuous bracts bear acicular, mostly persistent processes near the base along the slightly winged, stipular margins."

Ribes cereum Douglas [FNA8, HC, HC2]

Trans. Hort. Soc. London. 7: 512. 1830.
wax currant

var. *cereum* [FNA8, HC, HC2]

Trans. Hort. Soc. London 7(4): 512-514. 1830.
wax currant

Ribes cereum Douglas var. *inebrians* (Lindl.) C.L. Hitchc. [HC]
Ribes cereum Douglas var. *pedicellare* A. Gray
Ribes inebrians Lindl.
Ribes reniforme Nutt.
Ribes viscidulum A. Berger

var. *colubrinum* C.L. Hitchc. [FNA8, HC, HC2]

Vasc. Pl. Pacif. N.W. 3: 69, plate [p. 72], fig. s.n. [upper right center]. 1961.

wax currant

Ribes divaricatum Douglas [FNA8, HC, HC2]
Trans. Hort. Soc. London. 7: 515. 1830.
coast black gooseberry, straggly gooseberry

Grossularia divaricata (Douglas) Coville & Britton

var. *divaricatum* [FNA8, HC2]
Trans. Hort. Soc. London. 7: 515. 1830.
coast black gooseberry

Ribes divaricatum Douglas var. *glabriflorum* Koehne
Ribes divaricatum Douglas var. *rigidum* M. Peck
Ribes suksdorfii A. Heller

Ribes hudsonianum Richardson [FNA8, HC, HC2]
Narr. Journey Polar Sea (ed. 2). 734. 1823.
Hudson Bay currant, northern black currant, western black currant

Ribes hudsonianum Richardson var. *hudsonianum* [HC]
Ribes hudsonianum Richardson var. *petiolare* (Douglas) Janczewski [HC]
Ribes petiolare Douglas

FNA8: "Plants of Ribes hudsonianum with leaf blades that are pubescent abaxially and mostly lack sessile glands, and have ovaries with sessile glands, have been recognized as var. hudsonianum; those with leaf blades that are shaggy-hairy abaxially and sessile-glandular, and have ovaries lacking such glands, have been named var. petiolare. Variety hudsonianum has a more northern distribution; var. petiolare is western. Where their ranges overlap, for instance in Saskatoon, pubescence density varies continuously and does not correlate with presence or absence of glands (V. L. Harms, pers. comm.). Ribes hudsonianum is a major host of blister rust; in early literature it is referred to as R. petiolare (E. P. Van Arsdel and B. W. Geils 2004). It has a strong, sweetish, unpleasant odor, and bears its leaves on long shoots."

Ribes inerme Rydb. [FNA8, HC, HC2]
Mem. New York Bot. Gard. 1: 202. 1900.
whitestem gooseberry

Grossularia inermis (Rydb.) Coville & Britton

var. *inerme* [FNA8, HC2]
Mem. New York Bot. Gard. 1: 202. 1900.
whitestem gooseberry

Grossularia inermis (Rydb.) Coville & Britton var. *pubescens* A. Berger
Ribes divaricatum Douglas var. *inerme* (Rydb.) McMinn
Ribes inerme Rydb. var. *subarmatum* M. Peck
Ribes valicola Greene ex Rydb.

Ribes lacustre (Pers.) Poir. [FNA8, HC, HC2]
Encycl., Suppl. 2: 856. 1812.
swamp currant, bristly black gooseberry, swamp gooseberry

Limnobotrya lacustris (Pers.) Rydb.
Ribes lacustre (Pers.) Poir. var. *parvulum* A. Gray
Ribes oxyacanthoides L. var. *lacustre* Pers.

FNA8: "The petals and stamens are inserted on the rim of the pink nectary disc in Ribes lacustre."

Ribes laxiflorum Pursh [FNA8, HC, HC2]
Fl. Amer. Sept. 2: 731. 1813.
trailing black currant

Ribes coloradense Coville

FNA8: "Ribes laxiflorum flowers have stamens with reddish filaments."

Ribes lobbii A. Gray [FNA8, HC, HC2]
Amer. Naturalist. 10: 274. 1876.

gummy gooseberry, Lobb's gooseberry, Oregon gooseberry

Grossularia lobbii (A. Gray) Coville & Britton

FNA8: "Ribes lobbii occurs in mountains from southwestern British Columbia to northwestern California. It is unusual in having anthers that are warty or capitate-papillate with red glands abaxially."

Ribes montigenum McClatchie [FNA8, HC, HC2]
Erythea. 5: 38. 1897.
alpine prickly currant, mountain gooseberry, western prickly gooseberry

Limnobotrya montigena (McClatchie) Rydb.
Ribes lacustre (Pers.) Poir. var. *molle* A. Gray
Ribes lentum (M.E. Jones) Coville & Rose
Ribes nubigenum McClatchie

FNA8: "The lobed, yellowish, pinkish, or red nectary discs and purplish red filaments of Ribes montigenum are striking."

******Ribes nigrum* L. [FNA8, HC, HC2]
Sp. Pl. 1: 201. 1753.
cultivated black currant

FNA8: "Ribes nigrum is the source of the cultivated black currant. It has a strong, unpleasant odor."

Ribes niveum Lindl. [FNA8, HC, HC2]
Edwards?s Bot. Reg. 20: plate 1692. 1834.
Snake River gooseberry, snow gooseberry

Ribes oxyacanthoides L. [FNA8, HC, HC2]
Sp. Pl. 1: 201. 1753.
Canada gooseberry

var. *cognatum* (Greene) Morin [FNA8, HC2]
J. Bot. Res. Inst. Texas. 1: 1015. 2007.
northern gooseberry, umatilla gooseberry, Umatilla gooseberry

Grossularia cognata (Greene) Coville & Britton
Ribes cognatum Greene [HC]
Ribes oxyacanthoides L. ssp. *cognatum* (Greene) Q.P. Sinnott

var. *irriguum* (Douglas) Jancz. [FNA8, HC2]
Mém. Soc. Phys. Genève. 35: 388. 1907.
Idaho gooseberry

Grossularia irrigua (Douglas) Coville & Britton
Grossularia nonscripta A. Berger
Ribes divaricatum Douglas var. *irriguum* (Douglas) A. Gray
Ribes irriguum Douglas [HC]
Ribes leucoderme A. Heller
Ribes nonscripta (A. Berger) Standl.
Ribes oxyacanthoides L. ssp. *irriguum* (Douglas) Q.P. Sinnott [ILBC]
Ribes oxyacanthoides L. var. *leucoderme* (A. Heller) Jancz.

******Ribes rubrum* L. [FNA8, HC2]
Sp. Pl. 1: 200. 1753.
northern red currant

Ribes rubrum L. var. *sativum* Rchb.
Ribes sativum (Rchb.) Syme [HC]
Ribes sylvestre (Lam.) Mertens & Koch
Ribes vulgare Lam.

FNA8: "The leaves of Ribes rubrum are rather thick. Cultivated red currants may have originated from a cross between R. rubrum and R. spicatum E. Robson, a rare species native in northern Britain (R. Mabey 1996). Many of the state and province records of occurrence may be the result of repeated escape from cultivation rather than true naturalization."

Ribes sanguineum Pursh [FNA8, HC, HC2]
Fl. Amer. Sept. 1: 164. 1813.
blood currant, red currant, red flowering currant

var. *sanguineum* [FNA8, HC2]
Fl. Amer. Sept. 1: 164 [1813]. 1814.
blood currant, red currant, red flowering currant

Ribes sanguineum Pursh var. *deductum* Jeps.
Ribes sanguineum Pursh var. *melanocarpum* (Greene) Jeps.

FNA8: "Ribes sanguineum is widely cultivated. It begins to bloom very early in the season, providing a nectar source for pollinators when little else is available."

Ribes triste Pall. [FNA8, HC, HC2]
Nova Acta Acad. Sci. Imp. Petrop. Hist. Acad. 10: 378. 1797.
American red currant, swamp red currant, wild red currant

Ribes rubrum L. var. *alaskanum* (A. Berger) B. Boivin
Ribes rubrum L. var. *propinquum* (Turcz.) Trautv. & C.A. Mey.
Ribes triste Pall. var. *albinervium* (Michx.) Fernald

Ribes velutinum Greene [FNA8, HC, HC2]
Bull. Calif. Acad. Sci. 1: 83. 1885.
desert gooseberry, Goodding's gooseberry

Grossularia velutina (Greene) Coville & Britton
Ribes gooddingii M. Peck
Ribes velutinum Greene var. *glanduliferum* (A. Heller) Jeps.
Ribes velutinum Greene var. *gooddingii* (M. Peck) C.L. Hitchc. [HC]
Ribes velutinum Greene var. *velutinum* [HC]

Ribes viscosissimum Pursh [FNA8, HC, HC2]
Fl. Amer. Sept. 1: 163. 1813.
Hall's sticky currant, mountain currant

Ribes viscosissimum Pursh var. *hallii* (Janczewski) Janczewski [HC]
Ribes viscosissimum Pursh var. *viscosissimum* [HC]

FNA8: "All parts of Ribes viscosissimum are very fragrant. Its leaves are thick and rough. Plants with glabrous or sparsely stipitate-glandular ovaries have been recognized as var. hallii and are found only in California and Oregon. Plants with strongly stipitate-glandular and softly pubescent ovaries are var. viscosissimum and are more widespread. W. C. Martin and C. R. Hutchins (1980) indicated that R. viscosissimum is to be expected in New Mexico; no occurrence there has been confirmed."

Ribes watsonianum Koehne [FNA8, HC, HC2]
Deut. Dendrol. 197. 1893.
Mount Adams gooseberry, spring gooseberry, wastson gooseberry

Grossularia watsoniana (Koehne) Coville & Britton

FNA8: "Ribes watsonianum occurs in the Cascade Range of Oregon, Washington, and British Columbia, and in Alberta. Analysis of combined datasets of ITS, ETS, psbA-trnH, and chloroplast restriction sites placed R. watsonianum as sister to sect. Grossularia (L. M. Schultheis and M. J. Donoghue 2004)."

Ribes wolfii Rothr. [FNA8, HC, HC2]
Amer. Naturalist. 8: 358. 1874.
Winaha currant, Wolf's currant

Ribes mogollonicum Greene

FNA8: "Ribes mogollonicum is included here in R. wolfii because the two taxa, morphologically, seem to overlap completely. A. E. Senters and D. E. Soltis (2003) placed R. mogollonicum near R. viscosissimum and R. erythrocarpum."

Haloragaceae [HC, HC2] Water Milfoil Family

Synonyms:
Haloragidaceae [Abrams], orthographic variant

Myriophyllum [HC, HC2]
water-milfoil

**Myriophyllum aquaticum* (Vell.) Verdc. [HC2, JPM]
parrot's feather, water feather, South American water milfoil

Myriophyllum brasiliense Cambess. [HC]
Myriophyllum proserpinacoides Gillies ex Hook. & Arn.

**Myriophyllum heterophyllum* Michx. [Draft FNA, HC2]
Fl. Bor.-Amer. 2: 191. 1803.
two-leaf milfoil, various-leaved water-milfoil

Washington populations believed to result from introductions from northeastern U.S. (Thum et al., 2011).

Myriophyllum hippuroides Nutt. ex Torr. & A. Gray [HC, HC2]
western milfoil, western water milfoil

Myriophyllum pinnatum (Walter) Britton, Sterns & Poggenb. [HC2]
Preliminary Catalogue of Anthophyta and Pteridophyta Reported as Growing Spontaneously within One Hundred Miles of New York 19. 1888.
cutleaf water-milfoil

Collected once (2004) in Washington in Thurston County.

Myriophyllum quitense Kunth [HC2, ILBC3]
Andean water milfoil, waterwort water milfoil

Myriophyllum elatinoides Gaudich. [HC]

Myriophyllum sibiricum Komarov [HC2, ILBC3]
American milfoil, northern milfoil, Siberian water milfoil

Myriophyllum exalbescens Fernald [Abrams, Peck]
Myriophyllum spicatum L. var. *exalbescens* (Fernald) Jeps. [HC]

here we follow the taxonomy of Ceska & Ceska (1986), treating M. exalbescens as a synonym of M. sibiricum

**Myriophyllum sibiricum* Kom. × *Myriophyllum spicatum* L.
hybrid Eurasian milfoil

**Myriophyllum spicatum* L. [HC, HC2, JPM]
Eurasian water milfoil, spiked water milfoil
(see also *Myriophyllum sibiricum*)

Myriophyllum spicatum L. var. *spicatum* [HC]

Myriophyllum ussuriense (Regel) Maxim. [HC2]
terrestrial water milfoil, Ussurian milfoil

Myriophyllum verticillatum L. var. *ussuriense* Regel

recently collected in Wahkiakum Co. (Christy et al. 2001)

Myriophyllum verticillatum L. [HC2, JPM]
verticillate milfoil, whorled water milfoil

Myriophyllum verticillatum L. var. *pectinatum* Wallr. [Peck]

Haloragidaceae: see Haloragaceae

Heliotropiaceae [Draft FNA, HC2] Heliotrope Family

Recent molecular evidence indicates that Heliotropiaceae is distinct from Boraginaceae, the family in which it was formerly placed.

Heliotropium [HC, HC2]
heliotrope

Heliotropium curassavicum L. [HC, HC2, JPM]
Sp. Pl. 1: 130. 1753.
salt heliotrope, seaside heliotrope

Jepson Manual does not recognize vars.

var. *obovatum* DC. [HC, HC2]

Hippocastanaceae: see Sapindaceae

Hippuridaceae: see Plantaginaceae

Hydrangeaceae [HC, HC2] Hydrangea Family

Philadelphus [HC, HC2]
mockorange, syringa

Philadelphus lewisii Pursh [HC, HC2]
Fl. Amer. Sept. 1: 329 [1813]. 1814.
Lewis' mock orange

Philadelphus confusus Piper
Philadelphus trichothecus S.Y. Hu
Philadelphus zelleri S.Y. Hu

Whipplea [HC, HC2]
whipplevine, yerba de selva

Whipplea modesta Torr. [HC, HC2]
4(5): 90-91, pl. 7. 1857.
modesty, common whipplea

Hydrophyllaceae [Draft FNA, HC, HC2] Waterleaf Family

Placed in Boraginaceae by APG III system. We follow recent molecular studies showing Hydrophyllaceae as separate from Boraginaceae (see citations under Boraginaceae).

Hesperochiron [HC, HC2]
hesperochiron

Hesperochiron californicus (Benth.) S. Watson [HC, HC2]
Botany Fortieth Parallel 281. 1871.
California hesperochiron, California monkey-fiddle

Hesperochiron pumilus (Douglas ex Griseb.) Porter [HC, HC2]
Rep. U.S. Geol. Geogr. Surv. Territ. 1872: 778. 1873.
small hesperochiron, small monkey-fiddle

Hesperochiron villosulus (Greene) Suksd.

Hydrophyllum [HC, HC2]
waterleaf

Hydrophyllum capitatum Douglas ex Benth. [HC, HC2]
Trans. Linn. Soc. London 17(2): 273. 1835.
wool breeches, ballhead waterleaf

var. *capitatum* [HC, HC2]
Trans. Linn. Soc. London 17: 273. 1835.
wool breeches, ballhead waterleaf

var. *thompsonii* (M. Peck) Constance [HC, HC2]
Amer. Midl. Naturalist 27(3): 726. 1942.
Thompson's wool breeches, Thompson's ballhead waterleaf

Hydrophyllum fendleri (A. Gray) A. Heller [HC, HC2]
Pl. World 1: 23. 1897.
Fendler's waterleaf

var. *albifrons* (A. Heller) J.F. Macbr. [HC, HC2]
Contr. Gray Herb. 49: 23. 1917.
Fendler's waterleaf

Hydrophyllum congestum Wiegand

var. *fendleri* [HC, HC2]
Pl. World 1(2): 23. 1897.
Fendler's waterleaf

Hydrophyllum tenuipes A. Heller [HC, HC2]
Bull. Torrey Bot. Club 25(11): 582. 1898.
Pacific waterleaf

Hydrophyllum viridulum G.N. Jones

Nemophila [HC, HC2]
nemophila

Nemophila breviflora A. Gray [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 10: 315. 1875.
Great Basin baby-blue-eyes

Nemophila kirtleyi L.F. Hend. [HC, HC2]
Bulletin of the Torrey Botanical Club 27(5): 350-351. 1900.
Snake Canyon baby-blue-eyes

**Nemophila menziesii* Hook. & Arn. [HC, HC2]
Bot. Beechey Voy. 152. 1833.
baby blue-eyes

var. *menziesii* [HC2]
Bot. Beechey Voy. 152. 1833.
baby blue-eyes

Nemophila parviflora Douglas ex Benth. [HC, HC2]

Trans. Linn. Soc. London 17(2): 275. 1835.
small-flowered nemophila

var. *austiniae* (Eastw.) Brand [HC, HC2]
Pflanzenr. IV. 251(Heft 54): 55. 1913.
small-flowered nemophila

var. *parviflora* [HC, HC2]
Trans. Linn. Soc. London 17: 275. 1835.
small-flowered nemophila

Nemophila pedunculata Douglas ex Benth. [HC, HC2]
Trans. Linn. Soc. London 17: 275. 1835.
meadow baby-blue-eyes, spreading nemophila

Phacelia [HC, HC2]
phacelia

Phacelia bolanderi A. Gray [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 10: 322. 1875.
Bolander's phacelia, Bolander's scorpion-weed

Phacelia franklinii (R. Br.) A. Gray [HC, HC2]
Manual (ed. 2) 329. 1856.
Franklin's scorpion-weed

Phacelia glandulifera Piper [HC, HC2]
Contr. U.S. Natl. Herb. 11: 472. 1906.
sticky phacelia, glandular-hair scorpion-weed

Phacelia hastata Douglas ex Lehm. [HC, HC2]
silverleaf phacelia, whiteleaf phacelia

var. *compacta* (Brand) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 163. 1959.
silverleaf phacelia, whiteleaf phacelia

var. *hastata* [HC, HC2]
Nov. Stirp. Pug. 2: 20-21. 1830.
silverleaf phacelia, whiteleaf phacelia

Phacelia hastata Douglas ex Lehm. var. *leucophylla* (Torr.) Cronquist [HC]

var. *leptosepala* (Rydb.) Cronquist [HC, HC2]
Vasc. Pl. Pacif. N. W. [C.L. Hitchcock & al.] 4: 163. 1959.
narrow-sepal scorpion-weed

Phacelia leptosepala Rydb.

Phacelia heterophylla Pursh [HC, HC2]
Fl. Amer. Sept. (Pursh) 1: 140. 1813.
(see also *Phacelia mutabilis*)

Phacelia heterophylla Pursh var. *heterophylla* [HC, HC2]
Phacelia heterophylla Pursh var. *virgata* (Greene) Dorn [HC2]

Phacelia humilis Torr. & A. Gray [HC, HC2]
in Pacif. Rail. Rep. ii. 122. t. 7. 1857.
low phacelia

var. *humilis* [HC2, JPM]
Pacif. Railr. Rep. 2: 122. 1857.
low phacelia

Phacelia lenta Piper [HC2]
Bulletin of the Torrey Botanical Club 28(1): 44. 1901.
sticky scorpion-weed

Phacelia linearis (Pursh) Holz. [HC, HC2]
Contributions from the United States National Herbarium 3(4): 242. 1895.
thread-leaf phacelia, thread-leaf scorpion-weed

Phacelia minutissima L.F. Hend. [HC, HC2]
Bull. Torrey Bot. Club 27(6): 351. 1900.
least phacelia, dwarf scorpion-weed

Phacelia nemoralis Greene [HC, HC2]
ittonia 1(3): 141. 1887.
shade phacelia, woodland phacelia

var. *oregonensis* (Heckard) Walden & R. Patt. [HC2]
woodland phacelia

Phacelia nemoralis Greene ssp. *oregonensis* Heckard [HC]

Phacelia procera A. Gray [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 10: 323. 1875.
tall scorpion-weed

Phacelia ramosissima Douglas ex Lehm. [HC, HC2]
Nov. Stirp. Pug. [Lehmann] 2: 21. 1830.
branched phacelia

var. *ramosissima* [HC2, JPM]
Nov. Stirp. Pug. 2: 21. 1830.
branched phacelia

Phacelia sericea (Graham) A. Gray [HC, HC2]
Amer. J. Sci. Arts ser. 2, 34: 254. 1862.
silky phacelia

var. *sericea* [HC, HC2]
Fl. N. Amer. 1(2): 343. 1838.
silky phacelia

Phacelia sericea (Graham) A. Gray ssp. *sericea* [KZ99]
Phacelia sericea (Graham) A. Gray var. *caespitosa* Brand

Phacelia tetramera J.T. Howell [HC, HC2]
Leaflets of Western Botany 4(1): 16. 1944.
dwarf phacelia, four-part yellow scorpion-weed

Romanzoffia [HC, HC2]
mistmaiden, romanzoffia

Romanzoffia sitchensis Bong. [HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2(2): 158-159, pl. 4. 1832.
Sitka mistmaiden

Romanzoffia sitchensis Bong. f. *suksdorfii* (Greene) Brand

Romanzoffia tracyi Jeps. [HC, HC2]
A Flora of California 3: 296. 1943.
Tracy's mistmaiden

Hypericaceae [HC, HC2] St. John's Wort Family

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

Hypericum [HC, HC2]
St. John's-wort

Hypericum anagalloides Cham. & Schltdl. [HC, HC2]
Linnaea 3(2): 127. 1828.
bog John's-wort, creeping St. John's-wort, tinker's penny

**Hypericum androsaemum* L. [HC2, IFBC]
Sp. Pl. 2: 784. 1753.
tutsan

**Hypericum boreale* (Britton) E.P. Bicknell [HC2, IFBC]
Bull. Torrey Bot. Club 22(5): 213. 1895.
northern St. John's-wort

recently collected in Pacific Co., not in H&C

**Hypericum calycinum* L. [HC2]
Mantissa Plantarum 1: 106. 1767.
Aaron's beard, great St. John's-wort

**Hypericum canadense* L. [GC, HC2]
Sp. Pl. 2: 785. 1753.
Canadian St. John's-wort

Recently collected in Pacific Co., not in H&C

**Hypericum ellipticum* Hook. [GC, HC2]
Fl. Bor.-Amer. 1(3): 110-111. 1831.
pale St. John's-wort

recently collected in Pacific Co., not in H&C

**Hypericum maculatum* Crantz [HC2]
spotted St. John's-wort, streaked St. John's-wort

*ssp. *obtusiusculum* (Tourlet) Hayek [HC2, IFBC]
Sched. Fl. Stiriac. 23-24: 27. 1912.
dotted John's-wort, imperforate St. John's-wort

Recently collected in King Co., not in H&C

Hypericum majus (A. Gray) Britton [HC, HC2]
Memoirs of the Torrey Botanical Club 5(15): 225. 1894.
greater Canadian St. John's-wort

Hypericum canadense L. var. *majus* A. Gray

Inland populations are native, coastal populations associated with cranberry agriculture are introduced.

**Hypericum mutilum* L. [HC2, IFBC]
Sp. Pl. 2: 787. 1753.
dwarf St. John's-wort

Recently collected in Skagit Co.

**Hypericum perforatum* L. [HC, HC2, IFBC]
Sp. Pl. 2: 785. 1753.
common St. John's-wort, Klamath weed

*ssp. *perforatum* [HC2]

Hypericum scouleri Hook. [HC2]
Norton's St. John's-wort, Scouler's St. John's-wort, western John's-wort

Hypericum formosum Kunth var. *nortoniae* (M.E. Jones) C.L. Hitchc. [VPPNW, HC]
Hypericum formosum Kunth var. *scouleri* (Hook.) J.M. Coult. [VPPNW, HC]
Hypericum scouleri Hook. ssp. *nortoniae* (M.E. Jones) J.M. Gillett [IFBC]
Hypericum scouleri Hook. ssp. *scouleri* [IFBC]

**Hypericum tetrapterum* Fr. [HC2]
Novitiae Florae Suecicae 236. 1814.
square-stalked St. John's Wort

Triadenum [HC2]
marsh

Triadenum fraseri (Spach) Gleason [HC2, IFBC]
Phytologia 2(8): 289. (incorrectly citing "Hypericum fraseri" as the basionym). 1949.
marsh St. John's-wort

Recently collected in Pacific Co.

Juglandaceae [FNA3, HC2] Walnut Family

Juglans [FNA3, HC2]
Sp. Pl. 2: 997. 1753; Gen. Pl. ed. 5, 431, 1754.
walnut

Juglans ailantifolia Carrière [HC2]
Rev. Hort. [Paris]. 414. 1878.
Japanese walnut

Naturalized populations documented in Skamania and Skagit counties. Also frequently naturalized in the lower Fraser River valley of southwest British Columbia. Easily confused with Juglans cinerea.

Juglans hindsii Jeps. ex R.E. Sm. [FNA3, HC2]
Univ. Calif. Agric. Exp. Sta. Bull. 203: 27. 1909.
northern California walnut

Plants from one site in Yakima County that appear to be associated with homestead. Report of plants spreading from original planting. Also documented spreading downsteam from an old homestead and naturalizing along Rock Creek in Klickitat County.

Juglans nigra L. [FNA3, HC2]
Sp. Pl. 2: 997. 1753.
black walnut

Juglans regia L. [HC2, JPM2]
Sp. Pl. 2: 997. 1753.
English walnut

Reported as naturalized in WA by AJ and Naas, Naas, and Burnett.

Labiatae: see Lamiaceae

Lamiaceae [HC2] Mint Family

Synonyms:
Labiatae [HC]

Agastache [HC, HC2]
agastache, giant-hyssop, horse-mint

Agastache occidentalis (Piper) A. Heller [HC, HC2]
Muhlenbergia; a journal of botany 1(1): 4. 1900.
western giant-hyssop

Agastache urticifolia (Benth.) Kuntze [HC, HC2]
nettle-leaf giant-hyssop

var. *urticifolia* [HC2]
Revis. Gen. Pl. 2: 511. 1891.
nettle-leaf giant-hyssop

**Ajuga* [HC, HC2]
bugle

**Ajuga reptans* L. [HC, HC2]
Sp. Pl. 2: 561. 1753.
carpet bugle

**Ballota* [HC2]

**Ballota nigra* L. [HC2]

*ssp. *foetida* (Vis.) Hayek [HC2, Stace 1997]
Prodromus Florae Peninsulae Balcanicae 2. 1929.
black horehound

recently collected in King Co. (Jacobson et al. 2001)

Clinopodium [HC2]
clinopodium

Clinopodium douglasii (Benth.) Kuntze [HC2, IFBC]
Revisio Generum Plantarum 2: 515. 1891.
Oregon-tea, yerba buena

Micromeria chamissonis (Benth.) Greene
Satureja chamissonis (Benth.) Briq.
Satureja douglasii (Benth.) Briq. [HC]

**Clinopodium vulgare* L. [HC2, IFBC]
Sp. Pl. 2: 587-588. 1753.
wild basil

Satureja vulgaris (L.) Fritsch

Not in H&C.

Dracocephalum [HC, HC2]
dragonhead

Dracocephalum parviflorum Nutt. [HC, HC2]
Gen. N. Amer. Pl. 2: 35. 1818.
American dragonhead

**Galeopsis* [HC, HC2]
hemp nettle

**Galeopsis bifida* Boenn. [HC2, Stace 1997]
Prodr. Fl. Monast. Westphal. 178. 1824.
bifid hemp nettle

Recently (2011) collected in Kittitas County.

**Galeopsis tetrahit* L. [HC, HC2]
Sp. Pl. 2: 579-580 1753.
common hemp nettle

*var. *tetrahit* [HC2]

**Glechoma* [HC2]
ground ivy

Glecoma [HC], orthographic variant

**Glechoma hederacea* L. [HC2]
Sp. Pl. 2: 578. 1753.
field balm, creeping Charlie, gill over the ground, groundivy

Glecoma hederacea L. [HC], orthographic variant

Note that H&C use the spelling "Glecoma", which is invalid.

**Hyssopus* [HC2]
hyssop

**Lallemantia* [HC2]
lallemantia

**Lallemantia peltata* (L.) Fisch. & C.A. Mey. [HC2]
Index Seminum [St.Petersburg (Petropolitanus)] 6: 53. 1840.
lion's heart

Dracocephalum peltatum L.

Recently collected (2015) in Asotin County.

**Lamium* [HC, HC2]
yellow archangel

Lamiastrum [HC2]

**Lamium amplexicaule* L. [HC, HC2]
Sp. Pl. 2: 579. 1753.
common dead-nettle, giraffehead

**Lamium galeobdolon* (L.) L.
Amoen. Acad., Linnaeus ed. 4: 485. 1759.
yellow archangel, yellow dead-nettle

Lamiastrum galeobdolon (L.) Ehrend. & Polatschek [HC2, Stace 1997]
Lamiastrum galeobdolon (L.) Ehrend. & Polatschek ssp. *argentatum* (Smejkal) Stace [HC2]

**Lamium hybridum* Vill. [HC2, Stace 1997]
Hist. Pl. Dauphiné 1: 251. 1786.
cutleaf dead-nettle

Not in H&C.

**Lamium maculatum* L. [HC, HC2]
Sp. Pl. (ed. 2) 2: 809. 1763.
spotted hen-nettle, spotted henbit

**Lamium purpureum* L. [HC, HC2]
Sp. Pl. 2: 579. 1753.
red dead-nettle, henbit

Lamium purpureum L. var. *purpureum*

**Lavandula* [HC2]

**Lavandula ×intermedia* Emeric ex Loisel. [HC2]
Fl. Gall. ed. 2 2: 19 1828.
lavandin, lavender

**Leonurus* [HC, HC2]
motherwort

**Leonurus cardiaca* L. [HC, HC2, Stace 1997]
Sp. Pl. 2: 584. 1753.
motherwort, Lion's tail

Leonurus cardiaca L. ssp. *cardiaca* [Stace 1997]

Lycopus [HC, HC2]
bugleweed, water-horehound

Lycopus americanus Muhl. ex W.P.C. Bartr. [HC, HC2]
Fl. Philadelph. Prodr. 15. 1815.
cut-leaf water-horehound
(see also *Lycopus europaeus*)

Lycopus asper Greene [HC, HC2]
Pittonia 3(19C): 339. 1898.
rough water-horehound

**Lycopus europaeus* L. [HC2]
European water-horehound

Well established in the Puget Trough, where first collected in Seattle in 1935. Also known from northeast Washington (Stevens County), southwest and south-central British Columbia, the lower Columbia River of Oregon, and eastern North America. Previously confused with Lycopus americanus; L. europaeus has longer calyces (2.7-4 mm) with longer teeth (1.6-2.5 mm), and more conspicuously pubescent lower leaf surfaces especially along the veins.

Lycopus uniflorus Michx. [HC, HC2]
Fl. Bor.-Amer. 1: 14. 1803.
northern bugleweed

Lycopus uniflorus Michx. var. *uniflorus*
Lycopus virginicus L. var. *pauciflorus* Benth.

**Marrubium* [HC, HC2]
horehound

**Marrubium vulgare* L. [HC, HC2]
Sp. Pl. 2: 583. 1753.
white horehound

**Melissa* [HC, HC2]
balm

**Melissa officinalis* L. [HC, HC2]
Sp. Pl. 2: 592. 1753.
lemonbalm

Mentha [HC, HC2]
mint

**Mentha aquatica* L. [HC2, IFBC]
Sp. Pl. 2: 576. 1753.
bergamot mint, water mint

Mentha canadensis L. [HC2]
Sp. Pl. 2: 577. 1753.
wild mint

Mentha arvensis L. [HC], misapplied
Mentha arvensis L. var. *canadensis* (L.) Kuntze
Mentha arvensis L. var. *glabrata* (Benth.) Fernald [HC]

**Mentha ×piperita* L. [HC, HC2]
Sp. Pl. 2: 576-577. 1753.
peppermint

Mentha aquatica L. var. *crispa* (L.) Benth.
Mentha crispa L.
Mentha ×piperata L.

Not in HC

**Mentha pulegium* L. [HC, HC2]
Species Plantarum 2: 577. 1753.
pennyroyal

**Mentha spicata* L. [HC, HC2]
Sp. Pl. 2: 576. 1753.
spearmint

**Mentha suaveolens* Ehrh. [HC2, IFBC]
Beitr. Naturk. 7: 249-150. 1792.
apple mint

Mentha ×rotundifolia (L.) Huds. [HC, HC2], misapplied

Monarda [HC, HC2]
monarda

Monarda fistulosa L. [HC, HC2]
wild bergamot

var. *menthifolia* (Graham) Fernald [HC, HC2]

Monardella [HC, HC2]
monardella

Monardella odoratissima Benth. [HC, HC2]
mountain monardella

ssp. *discolor* (Greene) Epling [HC2, KZ99]
mountain monardella

Madronella nervosa (Greene) Greene
Monardella discolor Greene
Monardella nervosa Greene
Monardella odoratissima Benth. var. *discolor* (Greene) H. St. John [HC]

ssp. *odoratissima* [HC2, KZ99]
mountain monardella

Monardella odoratissima Benth. var. *odoratissima* [HC]

**Nepeta* [HC, HC2]

**Nepeta cataria* L. [HC, HC2]
Sp. Pl. 2: 570. 1753.
catnip

**Origanum* [HC, HC2]
wild marjoram

**Origanum vulgare* L. [HC, HC2]
Sp. Pl. 2: 590. 1753.
wild marjoram

**Perilla* [HC2]

**Perilla frutescens* (L.) Britton [HC2]

*var. *frutescens* [HC2]

**Perovskia* [HC2]

Physostegia [HC, HC2]
physostegia

Physostegia parviflora Nutt. ex A. Gray [HC, HC2]
Syn. Fl. N. Amer. 2(1): 383. 1878.
purple dragonhead, western false dragonhead

Prunella [HC, HC2]
all-heal, self-heal

Prunella vulgaris L. [HC, HC2]
self-heal

var. *lanceolata* (W.P.C. Barton) Fernald [HC, HC2]
Rhodora 15(178): 183. 1913.
heal-all, self-heal

Prunella vulgaris L. ssp. *lanceolata* (W.P.C. Barton) Hultén [KZ99], invalid name

*var. *vulgaris* [HC, HC2]
Sp. Pl. 2: 600. 1753.
heal-all, self-heal

Prunella vulgaris L. ssp. *vulgaris* [KZ99]

Salvia [HC, HC2]
sage

**Salvia aethiopis* L. [HC, HC2]
Sp. Pl. 1: 27. 1753.
African sage

Noxious

Salvia dorrii (Kellogg) Abrams [HC, HC2]
Ill. Fl. Pacific States 3: 639. 1951.
gray ball sage, purple sage

var. *incana* (Benth.) Strachan [HC2, JPM]
Brittonia 35(2): 170. 1983.
fleshy sage, gray-ball sage

Salvia carnosa Douglas ex Greene
Salvia dorrii (Kellogg) Abrams ssp. *carnosa* (Douglas ex Greene) Abrams
Salvia dorrii (Kellogg) Abrams var. *carnosa* (Douglas ex Greene) Cronquist [HC]

**Salvia nemorosa* L. [HC2]
Balkan clary

Known from one recent (2013) collection in King County, where a lawn weed, and likely also from Stevens County (Noxious Weed Control Board reports). More common in south-central British Columbia and western Montana.

**Salvia pratensis* L. [HC, HC2]
meadow clary, prairie-meadow sage

Noxious weed. Over-reported from our area; most collections are misidentifications of other species, especially Salvia nemorosa.

**Salvia sclarea* L. [HC, HC2]
Sp. Pl. 1: 27. 1753.
cleareye

Considered noxious in WA.

**Salvia virgata* Jacq. [HC2]
wand sage

Known from an old Suksdorf collection (1920) from the edge of an alfalfa field in Klickitat County. Also locally established in Idaho County, Idaho.

**Salvia yangii* B.T. Drew

Taxon 66(1): 141 2017.

Perovskia atriplicifolia Benth. [HC2]

Scutellaria [HC, HC2]
skullcap

Scutellaria angustifolia Pursh [HC, HC2]

ssp. *angustifolia* [HC2, IFBC]
Fl. Amer. Sept. 2: 412 [1813]. 1814.
narrow-leaved skullcap

Scutellaria veronicifolia Rydb.

ssp. *micrantha* Olmstead [HC2, IFBC]
Contr. Univ. Michigan Herb. 17: 240. 1990.
small-flowering narrow-leaved skullcap

Scutellaria galericulata L. [HC, HC2]
Sp. Pl. 2: 599. 1753.
hooded skullcap, marsh skullcapp

Scutellaria lateriflora L. [HC, HC2]
Sp. Pl. 2: 598-599. 1753.
madweed, mad-dog skullcap

Scutellaria lateriflora L. var. *lateriflora*

Stachys [HC, HC2]
betony, hedge-nettle, woundwort

**Stachys arvensis* (L.) L. [HC2, IFBC]
Sp. Pl. (ed. 2) 2: 814. 1763.
field hedge-nettle, staggerweed

**Stachys byzantina* K. Koch [HC2]

Stachys cooleyae A. Heller [HC, HC2]
Bull. Torrey Bot. Club 26(1): 590-591. 1899.
Cooley's hedge-nettle

Stachys chamissonis Benth. var. *cooleyae* (A. Heller) G.A. Mulligan & D.B. Munro [KZ99]

Stachys mexicana Benth. [HC, HC2]
Labiat. Gen. Spec. 541. 1834.
Mexican hedge-nettle

Stachys pilosa Nutt. [HC2]
marsh betony, swamp hedge-nettle

var. *pilosa* [HC2]
marsh betony, swamp hedge-nettle

Stachys palustris L. [HC], misapplied
Stachys palustris L. var. *homotricha* Fernald
Stachys palustris L. var. *pilosa* (Nutt.) Fernald [HC]

Stachys rigida Nutt. ex Benth. [HC, HC2]
rigid hedge-nettle

Stachys rigida Nutt. ex Benth. var. *rigida*

Teucrium [HC, HC2]
germander, wood sage

Teucrium canadense L. [HC, HC2]
Sp. Pl. [Linnaeus] 2: 564. 1753.
western germander

var. *occidentale* (A. Gray) E.M. McClint. & Epling [HC, HC2]
Brittonia 5(5): 499. 1946.
Canada germander

Teucrium boreale E.P. Bicknell
Teucrium canadense L. ssp. *occidentale* (A. Gray) W.A. Weber
Teucrium canadense L. ssp. *viscidum* (Piper) Roy L. Taylor & MacBryde
Teucrium canadense L. var. *boreale* (E.P. Bicknell) Shinners
Teucrium occidentale A. Gray

**Thymus* [HC, HC2]
thyme

**Thymus serpyllum* L. [HC, HC2]

Trichostema [HC, HC2]
blue-curls, trichostema

Trichostema oblongum Benth. [HC, HC2]
Labiat. Gen. Spec. 659. 1835.
mountain bluecurls

**Ziziphora* [HC2]

Acinos

**Ziziphora acinos* (L.) Melnikov [HC2]
basil-thyme

Acinos arvensis (Lam.) Dandy [IFBC]
Satureja acinos (L.) Scheele [HC]

Lauraceae [FNA3, HC2] Laurel Family

**Umbellularia* [FNA3, HC2]
N. Amer. Sylv. 1: 87. 1842.
California bay, California laurel

**Umbellularia californica* (Hook. & Arn.) Nutt. [FNA3, HC2]
N. Amer. Sylv. 1: 87. 1842.
California bay

Escaping cultivation in Pierce County.

Leguminosae: see Fabaceae

Leitneriaceae: see Simaroubaceae

Lentibulariaceae [HC, HC2] Bladderwort Family

Pinguicula [HC, HC2]
butterwort

Pinguicula vulgaris L. [HC, HC2]
Sp. Pl. 1: 17. 1753.
common butterwort

ssp. *macroceras* (Link) Calder & Roy L. Taylor [HC2, JPM]
Canad. J. Bot. 43: 1399. 1965.
horned butterwort

Pinguicula macroceras Link var. *macroceras* [KZ99]
Pinguicula vulgaris L. var. *macroceras* (Link) Herder

Utricularia [HC, HC2]
bladderwort

Utricularia gibba L. [HC, HC2]
Sp. Pl. 1: 18. 1753.
humped bladderwort, swollen-spurred bladderwort

Utricularia fibrosa Walter [Abrams]

Treated as "probably alien" in CA (JPM) but considered native in BC (BCIL3) and OR.

**Utricularia inflata* Walter [HC2]
Fl. Carol. 64. 1788.
swollen bladderwort

Utricularia intermedia Hayne [HC, HC2]
J. Bot. (Schrader) 1(1): 18. 1800.
flat-leaved bladderwort, mountain bladderwort

Utricularia minor L. [HC, HC2]
Sp. Pl. 1: 18. 1753.
lesser bladderwort

Utricularia ochroleuca R.W. Hartm. [HC2, IFBC]
Bot. Not. 1857: 30. 1857.
dwarf bladderwort

Utricularia occidentalis A. Gray [Abrams]

the taxonomy is disputed; we follow Crow & Hellquist (2000) and treat this as a hybrid

Utricularia vulgaris L. [HC, HC2, JPM]
common bladderwort, greater bladderwort

ssp. *macrorhiza* (Leconte) R.T. Clausen [Crow & Hellquist 2000, HC2]
Cornell Univ. Agric. Exp. Sta. Mem. 291: 9. 1949.
bladderwort, common bladderwort, greater bladderwort

Utricularia macrorhiza Leconte [JPM2]
Utricularia vulgaris L. var. *americana* A. Gray

The taxonomy is disputed, minor differences in spur shape separate European plants (ssp. vulgaris) from North American plants (ssp. macrorhiza), see JPM, Crow & Hellquist (2000) and Taylor (1989) for opposing points of view.

Limnanthaceae [FNA7, HC, HC2] Meadowfoam Family

Floerkea [FNA7, HC, HC2]
Ges. Naturf. Freunde Berlin Neue Schriften. 3: 448. 1801.
false-mermaid

Floerkea proserpinacoides Willd. [FNA7, HC, HC2]
Ges. Naturf. Freunde Berlin Neue Schriften. 3: 449. 1801.
false mermaidweed

Floerkea occidentalis Rydb.

FNA7: " A flower of F. proserpinacoides is the logo for the Flora of North America project."

Limnanthes [FNA7, HC, HC2]
London Edinburgh Philos. Mag. & J. Sci. 3: 71. 1833.
[name conserved]
meadow-foam

*ssp. *alba*

**Limnanthes douglasii* R. Br. [FNA7, HC, HC2]
London Edinburgh Philos. Mag. & J. Sci. 3: 71. 1833. (as douglassii).
Douglas's meadow-foam

Linaceae [HC, HC2] Flax Family

Linum [HC, HC2]
flax
(see also *Sclerolinon*)

Linum lewisii Pursh [HC2]
wild blue flax

Adenolinum lewisii (Pursh) Á. Löve & D. Löve

var. *lewisii* [HC2, JPM]
Fl. Amer. Sept. 1: 210 [1813]. 1814.
wild blue flax

Linum perenne L. ssp. *lewisii* (Pursh) Hultén
Linum perenne L. var. *lewisii* (Pursh) Eaton & J. Wright [HC]

**Linum perenne* L. [HC, HC2]
blue garden flax
(see also *Linum lewisii*)

Linum perenne L. var. *perenne* [HC]

**Linum usitatissimum* L. [HC, HC2]
Sp. Pl. 1: 277. 1753.
linseed

Linum humile Mill.

Sclerolinon [HC2]
hard flax

Sclerolinon digynum (A. Gray) C.M. Rogers [HC2, JPM2]
Madroño 18(6): 182. 1966.
northwestern yellow-flax

Linum digynum A. Gray [HC]

Linderniaceae [HC2] False Pimpernel Family

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

Lindernia [HC, HC2]
false-pimpernel, lindernia

Lindernia dubia (L.) Pennell [HC, HC2, JPM2]
false pimpernel

Lindernia anagallidea (Michx.) Pennell [HC]
Lindernia dubia (L.) Pennell var. *anagallidea* (Michx.) Cooperr. [JPM]
Lindernia dubia (L.) Pennell var. *dubia* [JPM]

Linnaeaceae [HC2] Twin Flower Family

Linnaea [HC, HC2]
twinflower

Linnaea borealis L. [HC, HC2]
Sp. Pl. 2: 631. 1753.
twinflower

ssp. *longiflora* (Torr.) Hultén [HC2, KZ99, VPBC1]
I. N.W. Coast [Piper & Beattie] 338. 1915.
longtube twinflower

Linnaea americana Forbes
Linnaea borealis L. ssp. *americana* (Forbes) Hultén ex R.T. Clausen [KZ99]
Linnaea borealis L. var. *americana* (Forbes) Rehder
Linnaea borealis L. var. *longiflora* Torr. [HC, JPM2]

Loasaceae [HC, HC2] Blazingstar Family

Mentzelia [HC, HC2]
blazing-star, mentzelia

Mentzelia albicaulis (Douglas ex Hook.) Douglas ex Torr. & A. Gray [HC, HC2]
Fl. N. Amer. 1(3): 534. 1840.
white-stem blazingstar

Mentzelia dispersa S. Watson [HC, HC2]
Proc. Amer. Acad. Arts 11: 115, 137. 1876.
bushy blazing star

Mentzelia dispersa S. Watson var. *compacta* (A. Nelson) J.F. Macbr. [KZ99]
Mentzelia dispersa S. Watson var. *dispersa* [KZ99]
Mentzelia dispersa S. Watson var. *latifolia* (Rydb.) J.F. Macbr. [KZ99]

Mentzelia laevicaulis (Douglas) Torr. & A. Gray [HC, HC2]
giant blazing-star

Nuttallia laevicaulis (Douglas) Greene

var. *laevicaulis* [HC, HC2]
Fl. N. Amer. 1(3): 535. 1840.
blazing star mentzelia, common blazing star

Mentzelia laevicaulis (Douglas) Torr. & A. Gray var. *acuminata* (Rydb.) A. Nelson & J.F. Macbr.

var. *parviflora* (Douglas ex Hook.) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacific NW 3: 455. 1961.

blazing star mentzelia, common blazing star

Mentzelia brandegeei S. Watson
Mentzelia douglasii H. St. John

Mentzelia montana (Davidson) Davidson [HC2]
mountain blazing-star

Lythraceae [HC, HC2] Loosestrife Family

Ammannia [HC, HC2]
ammannia, redstem, tooth-cup

**Ammannia coccinea* Rottb. [Draft FNA, HC, HC2]
Pl. Horti Univ. Rar. Progr. (Hafn.), 7. 1773.
valley redstem

Recently (2014) collected in King County at a restoration site where a large population is established.

Ammannia robusta Heer & Regel [HC2, IFBC]
Index Seminum [Zuerich] adn. 1. 1842.
western ammania, grand redstem

Ammannia coccinea Rottb. ssp. *robusta* (Heer & Regel) Koehne

**Lythrum* [HC, HC2]
loosestrife

**Lythrum hyssopifolia* L. [HC, HC2]
Sp. Pl. 1: 447. 1753.
hyssop loosestrife

**Lythrum portula* (L.) D.A. Webb [HC2, JPM]
Feddes Repertorium 74(1-2): 13. 1967.
spatula-leaf loosestrife

Peplis portula L.

Not in H&C but is common in wetlands.

**Lythrum salicaria* L. [HC, HC2]
Sp. Pl. 1: 446. 1753.
purple loosestrife, long purples

Rotala [HC, HC2]
rotala, toothcup

Rotala ramosior (L.) Koehne [HC, HC2]
Fl. Bras. 13(2): 194. 1877.
lowland toothcup

Rotala catholica (Cham. & Schltdl.) van Leeuwen
Rotala dentifera (A. Gray) Koehne
Rotala ramosior (L.) Koehne var. *interior* Fernald & Griscom
Rotala ramosior (L.) Koehne var. *typica* Fernald & Griscom

Malvaceae [HC, HC2] Mallow Family

*Abutilon [HC2]
Indian mallow

*Abutilon theophrasti Medik. [HC2, JPM]
Malvenfam. 28. 1787.
velvetleaf

Noxious.

*Alcea [HC2]
hollyhock

*Gossypium [HC2]

*Gossypium hirsutum L. [HC2]
cotton

*Hibiscus [HC, HC2]
rosemallow

Iliamna [HC, HC2]
globemallow

Iliamna longisepala (Torr.) Wiggins [HC, HC2]
Leafl. Bot. Observ. Crit. 1(15): 206. 1906.
long-sepal globemallow

Iliamna rivularis (Douglas) Greene [HC, HC2]
Leafl. Bot. Observ. Crit. 1: 206. 1906.
streambank globemallow

Iliamna rivularis (Douglas) Greene var. *diversa* (A. Nelson) Wiggins [HC]
Iliamna rivularis (Douglas) Greene var. *rivularis* [HC]
Sphaeralcea rivularis (Douglas) Torr.

*Malva [HC, HC2]
cheeses, cheeseweed, mallow

*Malva moschata L. [HC, HC2]
Sp. Pl. 2: 690. 1753.
musk mallow

*Malva neglecta Wallr. [HC, HC2]
Sylloge Plantarum Novarum 1: 140-142. 1824.
dwarf mallow

Malva rotundifolia L., misapplied

*Malva parviflora L. [HC, HC2]
Demonstr. Pl. 18. 1753.
cheeseweed, alkali mallow, small-whorl mallow

*Malva pusilla Sm. [HC2]
English Botany 4: pl. 241. 1795.
low mallow

*Malva sylvestris L. [HC, HC2]
Sp. Pl. 2: 689. 1753.
common mallow, high mallow

Malvella [HC2]
alkali-mallow

Malvella leprosa (Ortega) Krapov. [HC2, JPM]
Bonplandia (Corrientes) 3(5): 59. 1970.
alkali-mallow

Sida hederacea (Douglas ex Hook.) Torr. ex A. Gray [HC]
Sida leprosa (Ortega) K. Schum. var. *hederacea* (Douglas) K. Schum. ex Clement

Sidalcea [HC, HC2]
checker-mallow, sidalcea

**Sidalcea campestris* Greene [HC, HC2]
Bulletin of the California Academy of Sciences 1(3): 76-77. 1885.
meadow checker-mallow, meadow sidalcea

Sidalcea asplenifolia Greene
Sidalcea sylvestris A. Nelson

Native only to the Willamette Valley area (Multnomah and Washington to Benton and Linn counties). WA specimens were collected by Piper in late 1800s near Seattle. These specimens are considered likely introductions. Piper and Beattie's 1915 "Flora of the Northwest Coast contains this note for S. campestris: "In moist meadows, Willamette Valley, Oregon. S. asplenifolia Greene found at Seattle in hay meadows is apparently the same and perhaps was introduced with grass seed." The lack of specimens for this species from WA over the last 100 years strongly suggests that it is likely not part of the contemporary flora. The draft treatment for this species in the Flora of North America also does not consider it present in WA.

Sidalcea hendersonii S. Watson [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 23(2): 262. 1888.
Henderson's checker-mallow

Sidalcea hirtipes C.L. Hitchc. [HC, HC2]
Perenn. Sp. Sidalcea 42-44, map 2. 1957.
bristly-stem checker-mallow

Rare in Washington.

Sidalcea nelsoniana Piper [HC, HC2]
Proc. Biol. Soc. Wash. 32(12): 41. 1919.
Nelson's checker-mallow

Known from Cowlitz and Lewis counties.

Sidalcea oregana (Nutt. ex Torr. & A. Gray) A. Gray [HC, HC2]
Oregon checker-mallow

var. *calva* C.L. Hitchc. [HC, HC2]
Perenn. Sp. Sidalcea 61, map 3. 1957.
Oregon checkermallow

Listed as rare by WNHP.

var. *oregana* [FNA12, HC, HC2]
Memoirs of the American Academy of Arts and Science, new series 4(1): 20. 1849.
Oregon checkermallow

Sidalcea oregana (Nutt. ex Torr. & A. Gray) A. Gray ssp. *oregana*
Sidalcea oregana (Nutt. ex Torr. & A. Gray) A. Gray var. *maxima* (M. Peck) C.L. Hitchc. [HC]
Sidalcea oregana (Nutt. ex Torr. & A. Gray) A. Gray var. *procera* C.L. Hitchc. [HC]

FNA12: "Subspecies oregana is variable; it intergrades with subsp. spicata and Sidalcea setosa. C. L. Hitchcock (1957) accepted five varieties within the typical subspecies; morphological intergrades exist. A case can be made for recognition of var. calva C. L. Hitchcock, which has been listed as endangered both federally and in Washington, where it is endemic. These plants are generally robust, sparsely appressed-hairy with four-rayed hairs, the leaves are generally nearly glabrous and fleshy-textured, and the calyx lobes are subglabrous and ciliate. Found in the Wenatchee Mountains, an area of high endemism, var. calva does not appear to be much different from other, nearly glabrous populations elsewhere; it appears to be the only variety with a chromosome count of 2n = 60. This treatment does not accept both subspecies and varieties within Sidalcea; therefore, it has been placed here into synonymy with the wide-ranging, variable typical subspecies. Subspecies oregana can generally be distinguished from the other subspecies by its more-open inflorescences that are

elongated in fruit, its multistemmed clumps as much as 30 cm in diameter, its generally stellate-hairy to glabrescent stem bases, its generally uniformly stellate-hairy calyces, its somewhat reticulate-roughened mericarps, and its bracts that are generally equal to or shorter than the young flower buds. Subspecies oregana appears to be the source of commonly sold cultivars. It has been listed as sensitive in Montana and as rare in British Columbia."

Sidalcea virgata Howell [HC, HC2]
Fl. N.W. Amer. 1: 101. 1897.
virgate checkerbloom

Sidalcea malviflora (DC.) A. Gray ex Benth. ssp. *virgata* (Howell) C.L. Hitchc. [KZ99]
Sidalcea malviflora (DC.) A. Gray ex Benth. var. *virgata* (Howell) Dimling

Extirpated from Washington according to WNHP. One specimen (Ed Alverson, 1987) at WTU from a population in Thurston County. Otherwise only known from Oregon.

Sphaeralcea [HC, HC2]
globe-mallow

Sphaeralcea grossulariifolia (Hook. & Arn.) Rydb. [HC, HC2]
Bull. Torrey Bot. Club 40(2): 58. 1913.
gooseberry-leaved globemallow

Sphaeralcea grossulariaefolia (Hook. & Arn.) Rydb. [HC], orthographic variant
Sphaeralcea grossulariifolia (Hook. & Arn.) Rydb. ssp. *grossulariifolia* [KZ99]
Sphaeralcea grossulariifolia (Hook. & Arn.) Rydb. var. *moorei* S.L. Welsh

Sphaeralcea munroana (Douglas ex Lindl.) Spach [HC, HC2]
Proc. Amer. Acad. Arts 22(2): 292. 1887.
Munro's globemallow, white-stemmed globemallow

Sphaeralcea munroana (Douglas ex Lindl.) Spach ssp. *munroana* [JPM]

**Tilia* [HC2]
small-leaved linden

**Tilia cordata* Mill. [HC2]
small-leaved linden

Mazaceae [HC2] Mazus Family

**Mazus* [HC, HC2]
mazus

**Mazus pumilus* (Burm. f.) Steenis [Draft FNA, HC2]
Japanese mazus

*var. *pumilus* [HC2]

Menyanthaceae [HC, HC2] Buck-Bean Family

Menyanthes [HC, HC2]
bogbean, buckbean

Menyanthes trifoliata L. [HC, HC2]
Sp. Pl. 1: 145. 1753.
buck-bean

Menyanthes trifoliata L. var. *minor* Raf.

Nephrophyllidium [HC, HC2]
deer-cabbage

Fauria, homonym (illegitimate)

Nephrophyllidium crista-galli (Menzies ex Hook.) Gilg [HC, HC2]
Nat. Pflanzenfam. 4(2): 106. 1895.
deer cabbage, deer-cabbage

Fauria crista-galli (Menzies ex Hook.) Makino [IFBC]

ssp. *crista-galli* [HC, HC2]

**Nymphoides* [HC2]
floating-heart

**Nymphoides peltata* (S.G. Gmel.) Kuntze [HC2, JPM2]
Revis. Gen. Pl. 2: 429. 1891.
yellow floatingheart

Noxious and invasive.

Molluginaceae [FNA4, HC2] Carpetweed Family

Mollugo [FNA4, HC, HC2]
Sp. Pl. 1: 89. 1753; Gen. Pl. ed. 5, 39. 1754.
carpetweed

Mollugo verticillata L. [FNA4, HC, HC2]
Sp. Pl. 1: 89. 1753.
carpetweed, green carpetweed

FNA4: "Some authors consider Mollugo verticillata a native of the New World tropics that spread northward into subtropical and temperate regions (M. L. Fernald 1950; H. A. Gleason and A. Cronquist 1991). If so, the species apparently spread very rapidly, because herbarium specimens exist from Ohio in 1828, Michigan in 1837, and Maine in 1837. J. Chapman et al. (1974) presented archaeological evidence of pre-Columbian presence of M. verticillata at a site in Tennessee. Morphology and anatomy of the species are well studied. T. Holm (1911) investigated anisophyly in Mollugo verticillata and stated that the leaves are not "pseudo-verticillate," as described by some earlier authors, but are truly opposite. M. A. Payne (1933, 1935) conducted morphologic and anatomic analyses of the leaf, stem, root, flower, and seed of the species. Pollen morphology was examined by N. Mitroiu (1971). Several subspecific taxa have been described for Mollugo verticillata, but these are poorly understood; attempts to subdivide the species in North America for this treatment failed. The species is extremely morphologically variable, especially with regard to leaf shape, overall size, and habit. There seem to be no direct correlations between habitat type and morphology. Mollugo verticillata possesses intermediate C3-C4 photosynthetic pathway characteristics, such as well- defined bundle-sheaths with numerous C4-like chloroplasts, distinct palisade and spongy parenchyma as in C3 plants, and intermediate light to dark ratios of CO2 evolution, which have made the species of particular interest in studies of the evolution and biochemistry of both photosynthetic pathways (R. A. Kennedy et al. 1980)."

Monotropaceae: see Ericaceae

Montiaceae [HC2] Miner's Lettuce Family

Calandrinia [FNA4, HC, HC2]
Nov. Gen. Sp. 6: 77, plate 526. 1823.
calandrinia

Calandrinia menziesii (Hook.) Torr. & A.Gray
Fl. N. Amer. (Torr. & A. Gray) 1(2): 197. 1838.
fringed red maids

Calandrinia ciliata (Ruiz & Pav.) DC., misapplied

Calyptridium [HC, HC2]
calyptridium, pussypaws

Calyptridium roseum S. Watson [HC, HC2, JPM2]
Botany (Fortieth Parallel), 44, plate 6, figs. 6-8. 1871.
rosy pussypaws

Cistanthe rosea (S. Watson) Hershk. [FNA4]

Calyptridium umbellatum (Torr.) Greene [HC2, JPM2]
Bull. Torrey Bot. Club 13: 144. 1886.
pussypaws

Calyptridium umbellatum (Torr.) Greene var. *caudiciferum* (A. Gray) Jeps. [VPBC4, JPM]
Calyptridium umbellatum (Torr.) Greene var. *umbellatum*
Cistanthe umbellata (Torr.) Hershk. [FNA4]
Cistanthe umbellata (Torr.) Hershk. var. *caudicifera* (A. Gray) Kartesz & Gandhi [KZ99]
Cistanthe umbellata (Torr.) Hershk. var. *umbellata* [KZ99]
Spraguea umbellata Torr. [HC]
Spraguea umbellata Torr. var. *caudicifera* A. Gray [HC]
Spraguea umbellata Torr. var. *umbellata* [HC]

Claytonia [FNA4, HC, HC2]
Sp. Pl. 1: 204. 1753; Gen. Pl. ed. 5, 96. 1754.
claytonia, miner's lettuce, springbeauty

Claytonia arenicola L.F. Hend. [FNA4, HC2]
Bull. Torrey Bot. Club. 22: 49. 1895.
sand claytonia, sand springbeauty

Montia arenicola (L.F. Hend.) Howell [HC]

Claytonia cordifolia S. Watson [FNA4, HC2]
Proc. Amer. Acad. Arts. 17: 365. 1882.
broadleaf springbeauty, heart-leaf springbeauty

Claytonia sibirica L. var. *cordifolia* (S. Watson) R.J. Davis
Montia cordifolia (S. Watson) Pax & K. Hoffm. [HC]

Claytonia exigua Douglas ex Torr. & A. Gray [FNA4, HC2]
Fl. N. Amer. 1: 200. 1838.
pale claytonia

ssp. *exigua* [FNA4, HC2]
Fl. N. Amer. 1: 200. 1838.
Claytonia, pale springbeauty Claytonia

Montia spathulata (Douglas) Howell [HC]

ssp. *glauca* (Nutt. ex Torr. & A. Gray) John M. Mill. & K.L. Chambers [FNA4, HC2]
Novon. 3: 272. 1993.
pallid Claytonia

Claytonia parviflora Hook. var. *glauca* Nutt. ex Torr. & A. Gray
Montia perfoliata (Donn ex Willd.) Howell ssp. *glauca* (Nutt. ex Torr. & A. Gray) Ferris

Claytonia lanceolata Pursh [FNA4, HC, HC2]
Fl. Amer. Sept. 1: 175, plate 3. 1814.
lanceleaf springbeauty
(see also *Claytonia multiscapa*)

Claytonia caroliniana Michx. var. *piersonii* (Munz & I.M. Johnst.) B. Boivin
Claytonia lanceolata Pursh ssp. *chrysantha* (Greene) Ferris
Claytonia lanceolata Pursh var. *chrysantha* (Greene) C.L. Hitchc. [HC]
Claytonia lanceolata Pursh var. *idahoensis* R.J. Davis
Claytonia lanceolata Pursh var. *lanceolata* [HC]
Claytonia lanceolata Pursh var. *piersonii* Munz & I.M. Johnst.
Claytonia sessilifolia (Torr.) Henshaw

FNA5: "Some differences of opinion exist regarding the relationships of Claytonia lanceolata and C. rosea. The work of D. K. Halleck and D. Wiens (1966) and J. S. Shelly et al. (1998) provides ample justification for their recognition as distinct species."

Claytonia megarhiza (A. Gray) Parry ex S. Watson [FNA4, HC, HC2]
Smithsonian Misc. Collect. 258: 118. 1878 (as megarrhiza). 1878.
alpine springbeauty

Claytonia arctica Adams var. *megarhiza* A. Gray
Claytonia megarhiza (A. Gray) Parry ex S. Watson var. *bellidifolia* (Rydb.) C.L. Hitchc. [HC]
Claytonia megarhiza (A. Gray) Parry ex S. Watson var. *megarhiza* [HC]
Claytonia megarhiza (A. Gray) Parry ex S. Watson var. *nivalis* (English) C.L. Hitchc. [HC]

Claytonia multiscapa Rydb. [FNA4, HC2]
Fl. Rocky Mts. 263, 1061. 1917.
Rydberg's springbeauty

ssp. *pacifica* (McNeill) John M. Mill. & K.L. Chambers [HC2]
Syst. Bot. Monogr. 78: 59. 2006.
Pacific lanceleaf springbeauty

Claytonia lanceolata Pursh var. *pacifica* McNeill [KZ99]

Plants called Claytonia lanceolata var. pacifica (McNeill 1972) have been tracked as a rare taxon by the Washington Natural Heritage Program.

Claytonia parviflora Douglas ex Hook. [FNA4, HC2]
Fl. Bor.-Amer. 1: 225, plate 73. 1832.
small-flowered miner's lettuce, small-flowered springbeauty

Claytonia parviflora Douglas ex Hook. ssp. *grandiflora* John M. Mill. & K.L. Chambers [FNA4]
Claytonia parviflora Douglas ex Hook. ssp. *parviflora* [FNA4]
Claytonia parviflora Douglas ex Hook. ssp. *utahensis* (Rydb.) John M. Mill. & K.L. Chambers [FNA4]
Claytonia parviflora Douglas ex Hook. ssp. *viridis* (Davidson) John M. Mill. & K.L. Chambers [FNA4]
Claytonia perfoliata Donn ex Willd. var. *parviflora* (Douglas ex Hook.) Torr.
Montia perfoliata (Donn ex Willd.) Howell var. *parviflora* (Douglas ex Hook.) Jeps.

Claytonia perfoliata Donn ex Willd. [FNA4, HC2, VPBC4]
Sp. Pl. 2: 1186. 1798.
miner's-lettuce
(see also *Claytonia parviflora*, *Claytonia rubra*)

Claytonia perfoliata Donn ex Willd. ssp. *intermontana* John M. Mill. & K.L. Chambers [FNA4]
Claytonia perfoliata Donn ex Willd. ssp. *mexicana* (Rydb.) John M. Mill. & K.L. Chambers [FNA4]
Claytonia perfoliata Donn ex Willd. ssp. *perfoliata* [FNA4]
Montia perfoliata (Donn ex Willd.) Howell [HC]

Claytonia rubra (Howell) Tidestr. [FNA4, HC2]
Contr. U.S. Natl. Herb. 25: 188. 1925.
cushion miner's lettuce, red miners lettuce

Claytonia parviflora Douglas ex Hook. var. *depressa* A. Gray
Claytonia perfoliata Donn ex Willd. var. *depressa* (A. Gray) Poelln.
Claytonia rubra (Howell) Tidestr. ssp. *depressa* (A. Gray) John M. Mill. & K.L. Chambers [FNA4]
Claytonia rubra (Howell) Tidestr. ssp. *rubra* [FNA4]
Montia perfoliata (Donn ex Willd.) Howell var. *depressa* (A. Gray) Jeps.
Montia rubra Howell

Claytonia sibirica L. [FNA4, HC2]
Sp. Pl. 1: 204. 1753.
candyflower, Siberian springbeauty, western springbeauty

Claytonia heterophylla (Torr. & A. Gray) Swanson [KZ99]
Claytonia sibirica L. var. *bulbifera* A. Gray [KZ99]
Claytonia sibirica L. var. *heterophylla* (Torr. & A. Gray) A. Gray
Claytonia sibirica L. var. *sibirica* [KZ99]
Montia sibirica (L.) Howell [HC]
Montia sibirica (L.) Howell var. *bulbifera* (A. Gray) B.L. Rob. [HC]
Montia sibirica (L.) Howell var. *heterophylla* (Torr. & A. Gray) B.L. Rob. [HC]
Montia sibirica (L.) Howell var. *sibirica* [HC]

Claytonia umbellata S. Watson [FNA4, HC, HC2]
Botany (Fortieth Parallel). 43, plate 6, figs. 4, 5. 1871.
Great Basin springbeauty

Claytonia washingtoniana (Suksd.) Suksd. [FNA4, HC2]
Werdenda. 1: 10. 1923.
Lake Washington claytonia, Lake Washington miner's lettuce, Lake Washington springbeauty

Montia washingtoniana Suksd.

Fertile annual hybrid of Claytonia sibirica and C. perfoliata (Fellows 1971). Perhaps declining in western Washington due to loss of habitat and competition with weeds.

Lewisia [FNA4, HC, HC2]
Fl. Amer. Sept. 2: 360. 1814.
bitterroot, lewisia
(see also *Lewisiopsis*)

Lewisia columbiana (Howell ex A. Gray) B.L. Rob. [FNA4, HC, HC2]
Syn. Fl. N. Amer. 1: 269. 1897.
Columbia lewisia

Calandrinia columbiana Howell ex A. Gray
Oreobroma columbianum (Howell ex A. Gray) Howell
Talinum denticulatum Poelln.

var. *columbiana* [FNA4, HC, HC2]
In A. Gray et al., Syn. Fl. N. Amer. 1: 269. 1897.
Columbia lewisia

FNA reports Lewisia columbiana var. wallowensis C. L. Hitchc. from northwestern Washington, a surprising new location for the variety, and one that needs confirmation.

var. *rupicola* (English) C.L. Hitchc. [FNA4, HC, HC2]
Vasc. Pl. Pacif. N.W. 2: 232. 1964.
Columbia lewisia

Lewisia columbiana (Howell ex A. Gray) B.L. Rob. ssp. *rupicola* (English) Ferris
Lewisia rupicola English

FNA4: "B. Mathew (1989b) noted that the cultivated Lewisia columbiana "?Rosea\' is this variety. B. L. Davidson (2000) noted that the United States populations have pink to magenta petals, whereas the British Columbia populations have white to pale pink petals characteristic of the other varieties. Mathew questioned the assignment of the British Columbia plants to this variety."

**Lewisia cotyledon* (S. Watson) B.L. Rob. [FNA4, HC, HC2]

Syn. Fl. N. Amer. 1: 268. 1897.
Siskiyou lewisia

Recently (2017) observed growing in the Goat Rocks Wilderness Area. Originally reported in 1st edition Flora PNW as having been transplanted there. Apparently still persisting.

*var. *cotyledon* [FNA4, HC2]

Lewisia nevadensis (A. Gray) B.L. Rob. [FNA4, HC2]
Syn. Fl. N. Amer. 1: 268. 1897.
Nevada bitterroot

Calandrinia nevadensis A. Gray
Claytonia grayana Kuntze
Lewisia bernardina Davidson
Lewisia pygmaea (A. Gray) B.L. Rob. var. *nevadensis* (A. Gray) Fosberg [HC]
Oreobroma nevadensis (A. Gray) Howell

FNA4: "Lewisia nevadensis represents one extreme of the L. pygmaea complex (see discussion under 13. L. pygmaea). Questionable geographic occurrences reflect plants that have one or more features otherwise suggestive of L. pygmaea (e.g., more elongate roots, truncate and/or toothed sepals, and colored petals); such intermediates also occur in the range of "typical" L. nevadensis (relatively robust plants with napiform roots, solitary flowers, acute sepals with entire margins, and white petals). Uncertainty respecting the affinity of specimens prevails in those from Arizona, Colorado, Idaho, and Wyoming. There are no supporting specimens from Wyoming. The floral symmetry of Lewisia nevadensis may be somewhat elliptical, the two outer sepals and the remaining petals imbricate and opposite the sepals, giving the flowers a pinched appearance, a feature also reported for L. oppositifolia."

Lewisia pygmaea (A. Gray) B.L. Rob. [FNA4, HC, HC2]
Syn. Fl. N. Amer. 1: 268. 1897.
least, alpine lewisia, dwarf lewisia
(see also *Lewisia nevadensis*)

Calandrinia grayi Britton
Calandrinia pygmaea (A. Gray)A. Gray
Lewisia exarticulata H. St. John
Lewisia glandulosa (Rydb.) Clay
Lewisia minima (A. Nelson) A. Nelson
Lewisia pygmaea (A. Gray) B.L. Rob. var. *pygmaea* [HC]
Lewisia pygmaeum (A. Gray) B.L. Rob. var. *aridorum* Bartlett
Oreobroma aridorum (Bartlett) A. Heller
Oreobroma pygmaeum (A. Gray) Howell
Talinum pygmaeum A. Gray

FNA4: "The circumscription and diagnosis of Lewisia pygmaea is problematic because of morphologic variability, intermediacy, and/or hybridization with L. nevadensis (see L. T. Dempster 1990). In the range of typical forms of L. nevadensis (see discussion under 11. L. nevadensis), one or more forms of L. pygmaea will also occur, but at higher elevations. Segregates of L. pygmaea recognized elsewhere as species include L. glandulosa, which occurs in rocky substrates above 3000 m in the central and southern Sierra Nevada and is characterized by elongate, sinuous taproots (L. T. Dempster 1990); and L. sierrae, which occurs in moist flats above 2400 m in the central Sierra Nevada and includes diminutive plants with irregularly eglandular-toothed (occasionally entire) sepals (B. Mathew 1989b). Dempster postulated that the variable and widely distributed L. pygmaea represents a hybrid species derived from L. nevadensis and L. glandulosa."

Lewisia rediviva Pursh [FNA4, HC, HC2]
Fl. Amer. Sept. 2: 368. 1814.
bitterroot

var. *rediviva* [FNA4, HC2]
Fl. Amer. Sept. 2: 368. 1814.
bitterroot

Lewisia alba Kellogg

Lewisia triphylla (S. Watson) B.L. Rob. [FNA4, HC, HC2]
Syn. Fl. N. Amer. 1: 269. 1897.
three leaf bitterroot, three leaf lewisia

Claytonia triphylla S. Watson
Erocallis triphylla (S. Watson) Rydb.
Oreobroma triphylla (S. Watson) Howell

Lewisiopsis [HC2]
lewisia

Lewisiopsis tweedyi (A. Gray) Govaerts [HC2]
World Checkl. Seed Pl. 3(1): 21. 1999.
Tweedy's lewisia

Calandrinia tweedyi A. Gray
Cistanthe tweedyi (A. Gray) Hershk. [FNA4]
Lewisia tweedyi (A. Gray) B.L. Rob. [HC]

Montia [FNA4, HC, HC2]
Sp. Pl. 1: 87. 1753; Gen. Pl. ed. 5, 38. 1754.
water chickweed, montia
(see also *Claytonia*)

Montia chamissoi (Ledeb. ex Spreng.) Greene [FNA4, HC, HC2]
Fl. Francisc. 180. (as chamissonis). 1891.
Chamisso's montia, water montia

Claytonia chamissoi Ledeb. ex Spreng.
Crunocallis chamissoi (Ledeb. ex Spreng.) Rydb.

Montia dichotoma (Nutt.) Howell [FNA4, HC, HC2]
Erythea. 1: 36. 1893.
dwarf montia

Clatyonia dichotoma Nutt.
Montiastrum dichotomum (Nutt.) Rydb.

Montia diffusa (Nutt.) Greene [FNA4, HC, HC2]
Fl. Francisc. 181. 1891.
spreading candyflower, branching montia

Claytonia diffusa Nutt.
Limnalsine diffusa (Nutt.) Rydb.

Rare in Washington and Oregon. Some populations increase following fire.

Montia fontana L. [FNA4, HC, HC2]
Sp. Pl. 1: 87. 1753.
water blinks, water chickweed, annual water miner's lettuce

Claytonia hallii A. Gray
Montia clara Ö. Nilsson
Montia fontana L. ssp. *fontana* [KZ99]
Montia fontana L. var. *lamprosperma* (Cham.) Fenzl [HC]
Montia fontana L. var. *tenerrima* (A. Gray) Fernald & Wiegand [HC]
Montia funstonii Rydb.
Montia hallii (A. Gray) Greene
Montia minor C.C. Gmel.

FNA4: "Montia fontana displays a multitude of forms varying in stature, leaf shape, and seed size. Segregate species, varieties, and subspecies have been named. Based on my study of worldwide collections of the species, much variation in M. fontana is attributable to phenotypic differentiation of ramets produced by local environmental conditions and unrelated to genetic variation. Until macromolecular or other studies shed light on the variation in M. fontana, it seems pointless to recognize infraspecific taxa or segregate species."

Montia howellii S. Watson [FNA4, HC, HC2]
Proc. Amer. Acad. Arts. 18: 191. 1883.
Howell's montia

Claytonia howellii (S. Watson) Piper
Maxia howellii (S. Watson) Ö. Nilsson
Montiastrum howellii (S. Watson) Rydb.

An inconspicuous prostrate winter annual, flowering in March and April.

Montia linearis (Douglas) Greene [FNA4, HC, HC2]
Fl. Francisc. 181. 1891.
lineleaf miner's lettuce, narrow-leafed montia

Clatyonia linearis Douglas ex Hook.

FNA4: "Montia linearis is a highly uniform species."

Montia parvifolia (Moc. ex DC.) Greene [FNA4, HC, HC2]
Fl. Francisc. 181. 1891.
littleleaf miner's lettuce, streambank springbeauty

Claytonia parvifolia DC.
Montia parvifolia (Moc. ex DC.) Greene ssp. *flagellaris* (Bong.) Ferris [KZ99]
Montia parvifolia (Moc. ex DC.) Greene ssp. *parvifolia* [KZ99]
Montia parvifolia (Moc. ex DC.) Greene var. *flagellaris* (Bong.) C.L. Hitchc. [HC]
Montia parvifolia (Moc. ex DC.) Greene var. *parvifolia* [HC]
Naiocrene parvifolia (DC.) Rydb.

FNA4: "Montia parvifolia is a variable diploid and tetraploid species. Plants with larger flowers, leaves, and seeds have been treated as var. flagellaris (Bongard) C. L. Hitchcock or as the separate species M. sweetseri Henderson. Because the complex has not been studied using modern methods, and the variation observed in herbarium specimens has no correlated geographical base, I adopt the position of K. L. Chambers (1993) and do not recognize the two above-mentioned taxa at this time. I equate the species situation here to that of M. fontana and choose not to recognize infraspecific taxa."

Phemeranthus [FNA4, HC2]
Specchio Sci. 1: 86. 1814.
fameflower

Phemeranthus sediformis (Poelln.) Kiger [FNA4, HC2]
Novon. 11: 320. 2001.
Okanogan fameflower

Talinum okanoganense English [HC]
Talinum sediforme Poelln. [VPBC4]
Talinum wayae Eastw.

Poorly studied and similar to Phemeranthus spinescens, needs more study and collections.

Phemeranthus spinescens (Torr.) Hershk. [FNA4, HC2]
Taxon. 46: 222. 1997.
spinescent fameflower, spiny fameflower

Talinum spinescens Torr. [HC]

Moraceae [FNA3, HC, HC2] Mulberry Family

**Maclura* [FNA3, HC, HC2]
Gen. N. Amer. Pl. 2: 233. 1818, name conserved - Osage-orange, bois. 1763.
osage orange

*_Maclura pomifera_ C.K. Schneid. [FNA3, HC, HC2]
Ill. Handb. Laubholzk. 1: 806. 1906.
Osage-orange

Ioxylon aurantiacum (Nutt.) Raf.
Ioxylon pomiferum Raf., orthographic variant
Maclura aurantiaca Nutt.

*_Morus_ [FNA3, HC, HC2]
Sp. Pl. 2: 986. 1753; Gen. Pl. ed. 5, 424, 1754.
mulberry

*_Morus alba_ L. [FNA3, HC, HC2]
Sp. Pl. 2: 986. 1753.
white mulberry

Morus alba L. var. _tatarica_ (L.) Ser.
Morus tatarica L.

Myricaceae [FNA3, HC, HC2] Bayberry Family

Morella [HC2]
bayberry, wax myrtle

Morella californica (Cham.) Wilbur [HC2, JPM2]
Sida 16(1): 102. 1994.
Pacific bayberry, Pacific wax-myrtle

Gale californica (Cham.) Greene
Myrica californica Cham. [FNA3, HC]

FNA3: "On any one branchlet, staminate inflorescences are borne proximal to bisexual inflorescences; the most distal inflorescences may be completely pistillate. It is quite common for two or three pistillate or bisexual flowers to occur per bract and for the ovaries to fuse to form a syncarp. In the fruiting condition this can usually be detected by counting the number of style branches (two per ovary, therefore four for a syncarp derived from two fused ovaries). Many specimens apparently do not produce any wax, in which case the fruits appear purple-black rather than white."

Myrica [FNA3, HC, HC2]
Sp. Pl. 2: 1024. 1753; Gen. Pl. ed. 5, 449, 1754.
sweet gale
(see also *Morella*)

Myrica gale L. [FNA3, HC, HC2]
Sp. Pl. 2: 1024. 1753.
sweetgale

Gale palustris (Lam.) A. Chevalier
Myrica gale L. var. _subglabra_ (A. Chevalier) Fernald
Myrica gale L. var. _tomentosa_ C. DC.
Myrica palustris Lam.

Myrsinaceae: see Primulaceae

Namaceae [Draft FNA, HC2] Nama Family

See Boraginaceae for citations supporting recognition of this family.

Nama [HC, HC2]

fiddleleaf, nama, purplemat

Nama densa Lemmon [HC2]

Bull. Torrey Bot. Club 16(8): 222. 1889.
leafy nama, matted nama

Nama densum Lemmon [HC], orthographic variant

var. *parviflora* (Greenm.) C.L. Hitchc. [HC2]

Amer. J. Bot. 20: 420. 1933.
matted nama

Nama densum Lemmon var. *parviflorum* (Greenm.) C.L. Hitchc. [HC]

Nitrariaceae [HC2, JPM2] Harmal Family

Formerly included within Zygophyllaceae.

**Peganum* [HC, HC2]

harmal

**Peganum harmala* L. [HC, HC2]

Sp. Pl. 1: 444. 1753.
African rue

Occasionally introduced.

Nyctaginaceae [FNA4, HC, HC2] Four-O'clock Family

Abronia [FNA4, HC, HC2]

Gen. Pl. 448. 1789.
abronia, sandverbena

Abronia latifolia Eschsch. [FNA4, HC, HC2]

Mém. Acad. Imp. Sci. St. Pétersbourg Hist. Acad. 10: 281. 1826.
yellow sand verbena

FNA4: "S. S. Tillett (1967) considered plants of Abronia umbellata var. minor (Standley) Munz to be introgressants between A. latifolia and A. umbellata."

Abronia mellifera Douglas ex Hook. [FNA4, HC, HC2]

Bot. Mag. 56: plate 2879. 1829.
honey-scented sandverbena, white sand verbena

Reports of Abronia fragrans in Washington are believed to be a misidentification of A. mellifera.

var. *mellifera* [HC2]

Abronia umbellata Lam. [FNA4, HC, HC2]

Tabl. Encycl. 1: 469, plate 105. 1791.
pink sandverbena

var. *acutalata* (Standl.) C.L. Hitchc. [FNA4, HC, HC2]

Vasc. Pl. Pacific N. W. 2: 22. 1964.
sand verbena

Abronia umbellata Lam. ssp. *acutalata* (Standl.) Tillett [VPBC]

FNA4: "Closely related to inland Abronia villosa. Hybridizes with coastal A. maritima of coastal California and Baja. The variety acutalata is endemic to Washington and adjacent British Columbia. The taxonomy of the varieties is confused and controversial, and has led to reports [KZ] of Abronia umbellata var. breviflora (as subsp. breviflora) from WA, but FNA treats that plant as endemic to southwestern Oregon and the adjacent CA coast. The illustrated BC flora (Douglas et al. 1999) gives var. acutalata (as subsp. acutalata) a mere footnote, assuming it is extirpated from the province, and considers it an "excluded species."

var. *breviflora* (Standl.) L.A. Galloway [FNA4, HC2]
Sida. 20: 888. 2003.
sand verbena

This taxon is known from southern Oregon and California, but was recently (2020) observed in Pacific County. As of 2020, only images of the plants exist, which can be found here:

Mirabilis [FNA4, HC, HC2]
Sp. Pl. 1: 177. 1753; Gen. Pl. ed. 5, 82. 1754.
four-o'clock, umbrellawort

**Mirabilis nyctaginea* (Michx.) MacMill. [FNA4, HC, HC2]
Metasp. Minnesota Valley. 217. 1892 (as nyctagineus). 1892.
four-o'clock, heartleaf umbrellawort four-o'clock

Allonia nyctaginea Michx.
Oxybaphus nyctagineus (Michx.) Sweet

Reported by Richard Old, and considered a noxious weed in WA. FNA4: "Mirabilis nyctaginea is considered a noxious weed in some states. The holotype of Mirabilis ×collina Shinners is a hybrid between M. nyctaginea and M. albida. On the Great Plains, M. nyctaginea also appears to intergrade with M. albida. Prominence of the tubercles and redness of the fruits decreases in western populations. Near the Great Lakes, comparatively narrow-leaved plants with sparsely hirsute stems seem to be intergrades between M. nyctaginea and more or less hirsute M. albida. Mirabilis ×serotina Shinners is a hybrid between M. nyctaginea and M. glabra."

Nymphaeaceae [FNA3, HC, HC2] Water-Lily Family

Nuphar [FNA3, HC, HC2]
Fl. Graec. Prodr. 1: 361. 1809.
cow-lily, yellow water-lily

Nuphar polysepala Engelm. [FNA3, HC2]
Trans. Acad. Sci. St. Louis. 2: 282. 1865.
yellow pond lily, spatterdock

Nuphar lutea (L.) Sm., misapplied
Nuphar lutea (L.) Sm. ssp. *polysepala* (Endelmann) E.O. Beal [KZ99]
Nuphar polysepalum Engelm. [HC]

FNA3:Plants intermediate between Nuphar polysepala and N . variegata occur in eastern British Columbia."

Nymphaea [FNA3, HC, HC2]
Sp. Pl. 1: 510. 1753; Gen. Pl. ed. 5, 227, 1754.
water-lily

**Nymphaea odorata* Aiton [FNA3, HC, HC2]

Hort. Kew. 2: 227. 1789.
American water-lily, fragrant water-lily

Nymphaea tetragona Georgi [FNA3, HC, HC2]
Bemerk. Reise Russ. Reich. 1: 220. 1775.
pygmy water-lily

Possibly extirpated. FNA3: "Although broadly distributed in the northwest part of the flora, Nymphaea tetragona is apparently not common over the Canadian portion of its range. It was collected once in extreme northwestern Washington but is believed to be extirpated there. True N . tetragona is absent from northeastern North America and, now, from the conterminous United States, where this name has usually been applied to what is here segregated as N . leibergii . In size and shape of leaves and flowers the two taxa are very similar. They differ in the leaf mottling often present in developing leaves of N . tetragona but absent in N . leibergii ; the distinctly tetragonal appearance of the receptacle in N . tetragona ; and in the longer carpellary appendages, the presence usually of more stamens, and purple-colored stamens and pistils in N . tetragona . Only in living plants is it apparent that leaves of N . leibergii are thicker with impressed veins abaxially compared to the relatively thin leaves with raised veins in N . tetragona . Although distinctions in sepal and petal apices (often acute in N . tetragona and often rounded in N . leibergii) were the basis for the establishment of Castalia leibergii , the characters are variable in both taxa and thus of limited utility in distinguishing them."

Oleaceae [HC, HC2] Olive Family

Fraxinus [HC, HC2]
ash

Fraxinus latifolia Benth. [HC, HC2]
Bot. Voy. Sulphur 33. 1844.
Oregon ash

Fraxinus americana L. ssp. *oregona* (Nutt.) Wesm.
Fraxinus oregona Nutt.
Fraxinus oregona Nutt. var. *latifolia* (Benth.) Lingelsh.

**Fraxinus pennsylvanica* Marshall [Gray\'s Manual, HC2]
Arbust. Amer. 51-52. 1785.
green ash

**Ligustrum* [HC2]
privet

**Ligustrum ovalifolium* Hassk. [HC2]
California privet

**Ligustrum vulgare* L. [HC2, Stace 1997]
Sp. Pl. 1: 7. 1753.
common privet

Occasionally escaped into natural areas, but often found as escape near residential areas where cultivated locally.

**Syringa* [HC2]
lilac

**Syringa vulgaris* L. [HC2]
Sp. Pl. 1: 9. 1753.
common lilac

Onagraceae [HC, HC2, JPM, JPM2] Evening-Primrose Family

Some genera in the Onagraceae have undergone significant taxonomic revision since publication of Flora PNW, 1st edition. For example, the genus Oenothera as circumscribed in H&C has been split into several segregate genera. Species level changes are extensive in the genus Epilobium.

Camissonia [HC2]
sun cup

Camissonia contorta (Douglas) Kearney [HC2, JPM2]
Trans. New York Acad. Sci. 14(3): 37. 1895.
contorted pod suncup, twisted suncup
(see also *Camissonia parvula*, *Camissonia pusilla*)

Oenothera contorta Douglas [HC]
Sphaerostigma contortum (Douglas) Walp.

Camissonia parvula (Nutt. ex Torr. & A. Gray) P.H. Raven [HC2, JPM2]
Brittonia 16(3): 284. 1964.
Lewis river suncup

Oenothera parvula Nutt. ex Torr. & A. Gray
Sphaerostigma flexuosum (A. Nelson) Rydb.
Sphaerostigma parvulum (Nutt. ex Torr. & A. Gray) Walp.

Camissonia pusilla P.H. Raven [HC2, JPM2]
Contributions from the United States National Herbarium 37(5): 312?316, f. 53, 56 [map]. 1969.
little sun cup

Oenothera contorta Douglas var. *flexuosa* (A. Nelson) Munz

Chamaenerion [HC2]
fireweed

Chamaenerion angustifolium (L.) Scop. [HC2]
Fl. Carniol. (ed. 2) 1: 271. 1771.
fireweed

Chamerion angustifolium (L.) Holub [JPM]
Epilobium angustifolium L. [HC]

Chamaenerion latifolium (L.) Sweet [HC2]
Hort. Brit. (ed. 2) 198. 1830.
alpine fireweed, broad-leaf fireweed

Chamerion latifolium (L.) Holub [JPM2]
Epilobium latifolium L. [HC]

Chylismia [HC2]
beeblossom

Chylismia scapoidea (Torr. & A. Gray) Raim. [HC2]
Bull. Torrey Bot. Club 23(5): 193. 1896.
naked-stemmed beeblossom

Camissonia scapoidea (Nutt. ex Torr. & A. Gray) P.H. Raven
Oenothera scapoidea Nutt. ex Torr. & A. Gray [HC]

ssp. *brachycarpa* (P.H. Raven) W.L. Wagner & Hoch [HC2]
Syst. Bot. Monogr. 83: 208. 2007.
short-fruited beeblossom

Oenothera scapoidea Nutt. ex Torr. & A. Gray ssp. *brachycarpa* P.H. Raven [HC]

Circaea [HC, HC2]

circaea, enchanter's nightshade

Circaea alpina L. [HC, HC2]
Sp. Pl. 1: 9. 1753.
enchanter's nightshade

ssp. *alpina* [HC2, KZ99]
dwarf enchanter's nightshade

ssp. *pacifica* (Asch. & Magnus) P.H. Raven [HC2, KZ99]
Canad. J. Bot. 43: 1396. 1965.
Pacific enchanter's nightshade

Circaea alpina L. var. *pacifica* (Asch. & Magnus) M.E. Jones

Clarkia [HC, HC2]
clarkia, godetia

Clarkia amoena (Lehm.) A. Nelson & J.F. Macbr. [HC, HC2]
Bot. Gaz. 65(1): 62. 1918.
yellow clarkia, arewell-to-spring, farewell-to-spring

Clarkia amoena (Lehm.) A. Nelson & J.F. Macbr. ssp. *caurina* (Abrams ex Piper) F.H. Lewis & M.E. Lewis [KZ99]
Clarkia amoena (Lehm.) A. Nelson & J.F. Macbr. ssp. *lindleyi* (Douglas) F.H. Lewis & M.E. Lewis [KZ99]
Clarkia amoena (Lehm.) A. Nelson & J.F. Macbr. var. *caurina* (Abrams ex Piper) C.L. Hitchc. [HC]
Clarkia amoena (Lehm.) A. Nelson & J.F. Macbr. var. *lindleyi* (Douglas) C.L. Hitchc. [HC]
Clarkia amoena (Lehm.) A. Nelson & J.F. Macbr. var. *pacifica* (M. Peck) C.L. Hitchc. [HC]
Godetia pacifica M. Peck

Clarkia gracilis (Piper) A. Nelson & J.F. Macbr. [HC, HC2]
Bot. Gaz. 65: 63. 1918.
slender godetia

ssp. *gracilis* [HC2, JPM2]
Bot. Gaz. 65(1): 63. 1918.
slender godetia

Godetia amoena (Lehm.) G. Don var. *concolor* Jeps.
Godetia amoena (Lehm.) G. Don var. *gracilis* C.L. Hitchc.

Clarkia pulchella Pursh [HC, HC2]
Flora Americae Septentrionalis; or, . . . 1: 260-261, pl. 11 [1813]. 1814.
deer horn, pinkfairies, ragged robin

Clarkia quadrivulnera (Douglas) A. Nelson & J.F. Macbr. [HC, HC2]
Bot. Gaz. 65: 63. 1918.
four-spot

Clarkia purpurea (W. Curtis) A. Nelson & J.F. Macbr. ssp. *quadrivulnera* (Douglas) F.H. Lewis & M.E. Lewis [JPM2]
Godetia purpurea (Curtis) G. Don var. *parviflora* (S. Watson) C.L. Hitchc.
Godetia quadrivulnera (Douglas) Spach

Clarkia rhomboidea Douglas ex Hook. [HC, HC2]
Fl. Bor.-Amer. 1: 214. 1833.
common clarkia, diamond fairyfan

Clarkia viminea (Douglas) A. Nelson & J.F. Macbr. [HC, HC2]
Bot. Gaz. 65: 64. 1918.
twiggy clarkia

Epilobium [HC, HC2]
spike-primrose, willow-herb, willow-weed
(see also *Chamaenerion*)

Boisduvalia [HC]

Epilobium anagallidifolium Lam. [HC2, JPM2]
Encycl. 2(1): 376. 1786.
alpine willow-herb, pimpernel willow-herb

Epilobium alpinum L. var. *alpinum* [HC]

Epilobium brachycarpum C. Presl [HC2, JPM2]
Reliq. Haenk. 2(1): 30. 1831.
autumn willowherb, tall annual willowherb

Epilobium paniculatum Nutt. ex Torr. & A. Gray [HC]
Epilobium paniculatum Nutt. var. *jucundum* (A. Gray) Trel. [HC]
Epilobium paniculatum Nutt. ex Torr. & A. Gray var. *juncundum* (A. Gray) Trel.
Epilobium paniculatum Nutt. ex Torr. & A. Gray var. *paniculatum* [HC]
Epilobium paniculatum Nutt. ex Torr. & A. Gray var. *subulatum* (Hausskn.) Fernald

Epilobium campestre (Jeps.) Hoch & W.L. Wagner [HC2, JPM2]
Systematic Botany Monographs 83: 208. 2007.
smooth willowherb

Boisduvalia glabella (Nutt.) Walp. [HC]
Epilobium pygmaeum (Speg.) Hoch & P.H. Raven [JPM]

Epilobium ciliatum Raf. [HC2]
Med. Repos. New York II. v. 361. 1808.
ciliate willowherb, Watson's willowherb

Epilobium adenocaulon Hausskn.
Epilobium adenocaulon Hausskn. var. *holosericeum* (Trel.) Munz
Epilobium adenocaulon Hausskn. var. *parishii* (Trel.) Munz
Epilobium brevistylum Barbey var. *ursinum* (Parish ex Trel.) Jeps.
Epilobium ciliatum Raf. ssp. *ciliatum* [JPM2]
Epilobium ciliatum Raf. ssp. *watsonii* (Barbey) Hoch & P.H. Raven [JPM2]
Epilobium glandulosum Lehm. var. *macounii* (Trel.) C.L. Hitchc. [HC]
Epilobium watsonii Barbey [HC]
Epilobium watsonii Barbey var. *parishii* (Trel.) C.L. Hitchc. [HC]
Epilobium watsonii Barbey var. *watsonii* [HC]

Epilobium clavatum Trel. [HC2, JPM]
Rep. (Annual) Missouri Bot. Gard. 2: 111, pl. 48. 1891.
talus willowherb

Epilobium alpinum L. var. *albiflorum* (Suksd.) C.L. Hitchc. [HC]
Epilobium alpinum L. var. *clavatum* (Trel.) C.L. Hitchc. [HC]

Epilobium densiflorum (Lindl.) Hoch & P.H. Raven [HC2, JPM2]
Phytologia 73(6): 457 [1993]. 1992.
dense-flower willowherb

Boisduvalia densiflora (Lindl.) S. Watson [HC]
Boisduvalia densiflora (Lindl.) S. Watson ssp. *pallescens* Suskd.
Boisduvalia densiflora (Lindl.) S. Watson var. *densiflora* [HC]
Boisduvalia densiflora (Lindl.) S. Watson var. *salicina* (Rydb.) Munz
Boisduvalia densiflora (Lindl.) S. Watson var. *salina* (Rydb.) Munz [HC], orthographic variant
Oenothera densiflorum Lindl.

Epilobium glaberrimum Barbey [HC, HC2]
Bot. California [W.H.Brewer] i. 220. 1876.
smooth willowherb

Epilobium glaberrimum Barbey ssp. *fastigiatum* (Nutt.) Hoch & P.H. Raven [JPM2]
Epilobium glaberrimum Barbey ssp. *glaberrimum* [JPM2]
Epilobium glaberrimum Barbey var. *fastigatum* (Nutt.) Trel. [HC], orthographic variant
Epilobium glaberrimum Barbey var. *fastigiatum* (Nutt.) Trel.
Epilobium glaberrimum Barbey var. *glaberrimum* [HC]

Epilobium glandulosum Lehm. [HC, HC2]
in W.J.Hooker, Fl. Bor.-Amer. 1: 206. 1832.
ciliate willowherb
(see also *Epilobium hallianum*, *Epilobium mirabile*)

Epilobium adenocaulon Hausskn. var. *occidentale* Trel.
Epilobium brevistylum Barbey var. *brevistylum*
Epilobium ciliatum Raf. ssp. *glandulosum* (Lehm.) Hoch & P.H. Raven [JPM2]
Epilobium glandulosum Lehm. var. *glandulosum* [HC]
Epilobium watsonii Barbey var. *occidentale* (Trel.) C.L. Hitchc. [HC]

Epilobium hallianum Hausskn. [HC2, JPM2]
Monogr. Epilobium 261. 1884.
glandular willowherb, Hall's willowherb

Epilobium glandulosum Lehm. var. *tenue* (Trel.) C.L. Hitchc. [HC]
Epilobium halleanum Hausskn. [JPM], orthographic variant
Epilobium pringleanum Hausskn.
Epilobium pringleanum Hausskn. var. *tenue* (Trel.) Munz

**Epilobium hirsutum* L. [HC, HC2]
Sp. Pl. 1: 347-348. 1753.
codlins-and-cream, fiddle grass

Epilobium hornemannii Rchb. [HC2]
Iconogr. Bot. Pl. Crit. 2: 73. 1824.
Hornemann's willow-herb

ssp. *hornemannii* [HC2, JPM2]
Iconogr. Bot. Pl. Crit. 2: 73, pl. 313. 1824.
alpine willowherb

Epilobium alpinum L. var. *nutans* Hornem. [HC]
Epilobium anagallidifolium Lam. [HC2, JPM2], misapplied

**Epilobium komarovianum* H. Lév. [HC2]
bronzy willow-herb

Epilobium lactiflorum Hausskn. [HC2, JPM2]
Oesterreichische Botanische Zeitschrift 29: 89. 1879.
white-flower willow-herb

Epilobium alpinum L. var. *lactiflorum* (Hausskn.) C.L. Hitchc. [HC]
Epilobium hornemannii Rchb. var. *lactiflorum* (Hausskn.) D. Löve

Epilobium leptocarpum Hausskn. [HC2, IFBC]
Monogr. Epilobium 258, pl. 14, f. 67. 1884.
slender-fruit willowherb

**Epilobium leptophyllum* Raf. [HC2, JPM2]
Precis Decouv. Somiol. 41. 1814.
bog willowherb

Epilobium luteum Pursh [HC, HC2, JPM2]
Fl. Amer. Sept. 1: 259 [1813]. 1814.
yellow willow-herb

Epilobium minutum Lindl. [HC, HC2, JPM2]
Fl. Bor.-Amer. 1: 207. 1833.
California willow-herb, chaparral willow-herb, small-flowered willow-herb

Epilobium foliosum (Torr. & A. Gray) Suksd. [JPM2]
Epilobium minutum Lindl. var. *foliosum* Torr. & A. Gray

Epilobium mirabile Trel. ex Piper [HC2, IFBC]
Contributions from the United States National Herbarium 11: 404. 1906.
Olympic Mountain willow-herb

*_Epilobium montanum_ L. [HC2]
broad-leaved willow-herb

Epilobium oregonense Hausskn. [HC2, JPM2]
Monogr. Epilobium 276, f. 66. 1884.
Oregon willow-herb

Epilobium alpinum L. var. _gracillimum_ (Trel.) C.L. Hitchc. [HC]

Epilobium palustre L. [HC, HC2, JPM2]
Sp. Pl. 1: 348. 1753.
marsh willow-herb

Epilobium ×pulchrum Suksd. [HC2, KZ99]
(= _Epilobium luteum_ × _Epilobium hornemannii_)

Epilobium torreyi (S. Watson) Hoch & P.H. Raven [HC2, JPM2]
Phytologia 73(6): 458 [1993]. 1992.
brook willow-herb

Boisduvalia stricta (A. Gray) Greene [HC]

Epilobium ×treleasianum H. Lév. [HC2]

Eremothera [HC2]
evening primrose, mooncup

Eremothera boothii (Douglas) W.L. Wagner & Hoch [HC2]
Syst. Bot. Monogr. 83: 209. 2007.
Booth's evening primrose, Booth's mooncup

Camissonia boothii (Douglas) P.H. Raven [JPM]
Oenothera boothii Douglas [HC]

ssp. *boothii* [HC2, JPM2]
Syst. Bot. Monogr. 83: 209. 2007.
Booth's evening primrose, Booth's mooncup

Camissonia boothii (Douglas) P.H. Raven ssp. _boothii_
Oenothera boothii Douglas ssp. _alyssoides_ (Hook. & Arn.) Munz [HC]
Oenothera boothii Dougl. ex Lehm. ssp. _boothii_ [HC]

Eremothera minor (A. Nelson) W.L. Wagner & Hoch [HC2, JPM2]
Systematic Botany Monographs 83: 210. 2007.
small-flowered, green river suncup

Camissonia minor (A. Nelson) P.H. Raven [JPM]
Oenothera minor (A. Nelson) Munz [HC]
Oenothera minor (A. Nelson) Munz var. _cusickii_ Munz
Sphaerostigma minor A. Nelson

Eremothera pygmaea (Douglas) W.L. Wagner & Hoch [HC2, JPM2]
Syst. Bot. Monogr. 83: 210. 2007.
dwarf suncup

Camissonia pygmaea (Douglas ex Lehm.) P.H. Raven [JPM]
Oenothera boothii Douglas var. _pygmaea_ (Douglas ex Lehm.) Torr. & A. Gray
Oenothera pygmaea Douglas ex Lehm. [HC]

Gayophytum [HC, HC2]
gayophytum, groundsmoke

Gayophytum decipiens F.H. Lewis & Szweyk. [HC, HC2, JPM]
Brittonia 16(4): 368-371, f. 5H, 6C, 10. 1964.
deceptive groundsmoke

Gayophytum diffusum Torr. & A. Gray [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(3): 513. 1840.

spreading groundsmoke

Gayophytum diffusum Torr. & A. Gray ssp. *diffusum* [JPM]
Gayophytum diffusum Torr. & A. Gray ssp. *parviflorum* F.H. Lewis & Szweyk. [JPM]

Gayophytum heterozygum F.H. Lewis & Szweyk. [HC2, JPM]
Brittonia 16(4): 377-380, f. 5C, 5K, 13B, 15. 1964.
zigzag groundsmoke

Gayophytum diffusum Torr. & A. Gray var. *villosum* Munz

Not included in H&C.

Gayophytum humile Juss. [HC, HC2, JPM]
Ann. Sci. Nat. (Paris) 25: 18. 1832.
dwarf groundsmoke

Gayophytum nuttallii Torr. & A. Gray

Gayophytum racemosum Torr. & A. Gray [HC, HC2, JPM]
Fl. N. Amer. 1(3): 514. 1840.
black-foot groundsmoke, racemose groundsmoke

Gayophytum caesium Torr. & A. Gray
Gayophytum helleri Rydb.
Gayophytum racemosum Torr. & A. Gray var. *caesium* (Torr. & A. Gray) Munz

Gayophytum ramosissimum Torr. & A. Gray [HC, HC2, JPM]
Fl. N. Amer. 1(3): 513-514. 1840.
pinyon groundsmoke

Ludwigia [HC, HC2]
primrose-willow, water purslane

Jussiaea [HC]

**Ludwigia hexapetala* (Hook. & Arn.) Zardini, H.Y. Gu & P.H. Raven [HC2, JPM]
Syst. Bot. 16(2): 243-244. 1991.
false loosestrife, water primrose

Ludwigia palustris (L.) Elliott [HC, HC2, JPM]
Sketch Bot. S. Carolina 1(3): 211. 1817.
marsh primrose-willow, water purslane

Ludwigia palustris (L.) Elliott var. *americana* (DC.) Fernald & Griscom [HC]
Ludwigia palustris (L.) Elliott var. *pacifica* Fernald & Griscom [HC]

**Ludwigia peploides* (Kunth) P.H. Raven [HC2]
Reinwardtia 6: 393. 1964.
floating primrose-willow

Noxious.

*ssp. *montevidensis* (Spreng.) P.H. Raven [HC2]
Reinwardtia 6(4): 395. 1963.
floating primrose-willow

Jussiaea repens L. var. *montevidensis* (Spreng.) Munz

Noxious; currently (2016) known from a single population in King County.

Neoholmgrenia [HC2]
lemondrops

Neoholmgrenia andina (Nutt.) W.L. Wagner & Hoch [HC2, JPM2]
Novon 19(1): 131. 2009.
blackfoot river suncup, obscure suncup

Camissonia andina (Nutt.) P.H. Raven [JPM]

Holmgrenia andina (Nutt.) W.L. Wagner & Hoch
Oenothera andina Nutt. [HC]

Neoholmgrenia hilgardii (Greene) W.L. Wagner & Hoch [HC2, JPM2]
Novon 19: 132. 2009.
Hilgard's suncup

Camissonia hilgardii (Greene) P.H. Raven
Holmgrenia hilgardii (Greene) W.L. Wagner & Hoch
Oenothera andina Nutt. var. *hilgardii* (Greene) Munz
Oenothera hilgardii Greene [HC]

Endemic to Washington.

Oenothera [HC, HC2]
evening-primrose, gaura, oenothera
(see also *Camissonia*, *Chylismia*, *Eremothera*, *Neoholmgrenia*, *Taraxia*)

Gaura [HC]

**Oenothera biennis* L. [HC2, JPM2]
Sp. Pl. 1: 346. 1753.
King's-cureall, common evening primrose

Oenothera biennis L. ssp. *centralis* Munz
Oenothera biennis L. var. *pycnocarpa* (Atk. & Bartlett) Wiegand
Oenothera muricata L.
Oenothera strigosa (Rydb.) Mack. & Bush [HC]
Oenothera villosa Thunb.
Oenothera villosa Thunb. ssp. *strigosa* (Rydb.) W. Dietr. & P.H. Raven [JPM2]

Oenothera cespitosa Nutt. [HC2]

Oenothera caespitosa Nutt. [HC], orthographic variant

ssp. *cespitosa* [HC2, JPM2]
Cat. Pl. Upper Louisiana no. 53 [pre-Aug 1813]. 1813.
butte primrose, fragrant evening primrose, rock rose

Oenothera caespitosa Nutt. ssp. *caespitosa*, orthographic variant
Oenothera caespitosa Nutt. var. *caespitosa* [HC], orthographic variant
Oenothera caespitosa Nutt. var. *montana* (Nutt.) Durand [HC], orthographic variant
Oenothera caespitosa Nutt. var. *purpurea* (S. Watson) Munz [HC], orthographic variant
Oenothera cespitosa Nutt. ssp. *montana* (Nutt.) Munz
Oenothera cespitosa Nutt. ssp. *purpurea* (S. Watson) Munz

ssp. *marginata* (Nutt. ex Hook. & Arn.) Munz [HC2, JPM2]
N. Amer. Fl., ser. 2, 5: 101. 1965.
fragrant evening-primrose

Oenothera caespitosa Nutt. ssp. *marginata* (Nutt. ex Hook. & Arn.) Munz, orthographic variant
Oenothera caespitosa Nutt. var. *marginata* (Nutt. ex Hook. & Arn.) Munz [HC], orthographic variant

rare

**Oenothera curtiflora* W.L. Wagner & Hoch [HC2, JPM2]
Syst. Bot. Monogr. 83: 211. 2007.
small-flowered gaura, velvet weed, velvetweed

Gaura mollis James
Gaura parviflora Douglas ex Lehm. [HC]

Online Jepson Manual: "Correspondence 1 indicates that rejection of Gaura mollis James in favor of Gaura parviflora Dougl. ex Lehm. is recommended. [Action based on fact Gaura mollis remained in complete obscurity for nearly all of its existence, and that it would displace a name that has long and consistently been used for a well known plant. Correction in author citation based on International Plant Names Index, "In the past, this name was ascribed to Douglas ex Hook. (Fl. Bor.-Amer. 1: 208. 1832). The type

information is from Raven &Gregory (Mem. Torrey Bot. Club 23: 23. 1972)".]"

Oenothera elata Kunth [HC2]
Nova Genera et Species Plantarum (quarto ed.) 6: 90. 1823.
Hooker's evening primrose

Oenothera elata Kunth ssp. *hirsutissima* (A. Gray ex S. Watson) W. Dietr. [JPM]
Oenothera hookeri Torr. & A. Gray [HC]
Oenothera hookeri Torr. & A. Gray ssp. *grisea* (Bartlett) Munz
Oenothera hookeri Torr. & A. Gray ssp. *venusta* (Bartlett) Munz
Oenothera hookeri Torr. & A. Gray var. *angustifolia* R.R. Gates [HC]
Oenothera hookeri Torr. & A. Gray var. *ornata* (A. Nelson) Munz [HC]
Oenothera ornata (A. Nelson) Rydb.

Oenothera flava (A. Nelson) Garrett [HC, HC2]
Spring Fl. Wasatch (ed. 4) 106. 1927.
long-tubed evening primrose

Oenothera flava (A. Nelson) Garrett ssp. *flava* [JPM]

Apparently extirpated from WA - known from historic locality.

**Oenothera glazioviana* Micheli [HC2, JPM2]
Flora Brasiliensis 13(2): 178. 1875.
red-sepal evening-primrose

Oenothera erythrosepala Borbás

Oenothera pallida Lindl. [HC, HC2]
Bot. Reg. 14: t. 1142. 1828.
pale evening-primrose

ssp. *pallida* [HC2, IFBC]
Bot. Reg. 14: pl. 1142. 1828.
pale evening primrose

Oenothera pallida Lindl. var. *idahoensis* Munz [HC]
Oenothera pallida Lindl. var. *pallida* [HC]
Oenothera pallida Lindl. var. *typica* Munz

Taraxia [HC2]
goldeneggs

Taraxia subacaulis (Pursh) Rydb. [HC2, JPM2]
Mem. New York Bot. Gard. 1: 281. 1900.
long-leaf evening primrose

Camissonia subacaulis (Pursh) P.H. Raven [JPM2]
Oenothera heterantha Nutt. [VPPNW3]
Oenothera subacaulis (Pursh) Garrett [HC]

Taraxia tanacetifolia (Torr. & A. Gray) Piper [HC2, JMP2]
Contr. U.S. Natl. Herb. 11: 405. 1906.
tansy-leaf evening primrose

Camissonia tanacetifolia (Torr. & A. Gray) P.H. Raven
Camissonia tanacetifolia (Torr. & A. Gray) P.H. Raven ssp. *tanacetifolia* [JPM2]
Oenothera tanacetifolia Torr. & A. Gray [HC]

Orobanchaceae [HC, HC2] Broom-Rape Family

Castilleja, Cordylanthus, Orthocarpus, and Triphysaria edited and annotated by Mark Egger (m.egger@comcast.net). For the genus Castilleja, only basionyms and synonyms based on material collected in WA and/or historically treated as occurring in WA in the literature are included in the present synonomy.

Aphyllon [HC2]
broomrape

Aphyllon californicum (Cham. & Schltdl.) A. Gray [HC2]
Bot. California [W.H.Brewer] i. 584. 1876.
California broomrape

Myzorrhiza californica (Cham. & Schltdl.) Rydb.
Orobanche californica Cham. & Schltdl. [HC]

ssp. *californicum* [HC2]
Bot. California 1: 584. 1876.
California broomrape

Orobanche californica Cham. & Schltdl. ssp. *californica* [JPM]
Orobanche californica Cham. & Schlecht. var. *californica* [HC]

ssp. *grayanum* (Beck) A.C. Schneid. [HC2]
PhytoKeys 75: 113. 2016.
Gray's California broomrape

Orobanche californica Cham. & Schltdl. ssp. *grayana* (Beck) Heckard [JPM]
Orobanche californica Cham. & Schltdl. var. *grayana* (Beck) Cronquist [HC]
Orobanche grayana Beck
Orobanche grayana G. Beck var. *grayana* [JPM]

Aphyllon corymbosum (Rydb.) A.C. Schneid. [HC2]
PhytoKeys 75: 113. 2016.
flat-topped broomrape

Myzorrhiza corymbosa Rydb.
Orobanche corymbosa (Rydb.) Ferris [HC, JPM]

ssp. *corymbosum* [HC2]
PhytoKeys 75: 114. 2016.
flat-topped broomrape

Orobanche californica Cham. & Schltdl. var. *corymbosa* (Rydb.) Munz [JPM]
Orobanche corymbosa (Rydb.) Ferris ssp. *corymbosa*

ssp. *mutabile* (Heckard) A.C. Schneid. [HC2]
PhytoKeys 75: 114. 2016.
flat-topped broomrape

Orobanche corymbosa (Rydb.) Ferris ssp. *mutabilis* Heckard [HC, KZ99, VPBC2]

Aphyllon fasciculatum (Nutt.) Torr. & A. Gray [HC2]
Manual (Gray), ed. 2. 281. 1856.
clustered broomrape

Anoplanthus fasciculatus (Nutt.) Walp.
Orobanche fasciculata Nutt. [HC, JPM]
Orobanche fasciculata Nutt. var. *fasciculata* [VPBC2]
Orobanche fasciculata Nutt. var. *lutea* (Parry) Achey [JPM]
Orobanche fasciculata Nutt. var. *subulata* Goodman
Orobanche fasciculata Nutt. var. *typica* Achey
Thalesia fasciculata (Nutt.) Britton
Thalesia lutea (Parry) Rydb.

Aphyllon franciscanum (Achey)A.C.Schneid.
Systematic Botany 46(2): pp. 446?455. 2021.
clustered broomrape

Orobanche fasciculata Nutt. var. *franciscana* Achey [JPM]

Close in appearance to A. fasciculatum.

Aphyllon ludovicianum (Nutt.) A. Gray [HC2]

Bot. California [W.H.Brewer] 1. 585. 1876.
Louisiana broomrape, Suksdorf's broomrape

Aphyllon arenosum Suksd.
Conopholis ludoviciana (Nutt.) Alph. Wood
Myzorrhiza ludoviciana (Nutt.) Rydb.
Orobanche ludoviciana Nutt. [HC]
Orobanche ludoviciana Nutt. ssp. *ludoviciana* [IFBC]
Orobanche ludoviciana Nutt. var. *arenosa* (Suksd.) Cronquist
Orobanche ludoviciana Nutt. var. *genuina* Beck
Orobanche multiflora Nutt. var. *arenosa* (Suksd.) Munz

Aphyllon pinorum (Geyer ex Hook.) A. Gray [HC2]
Bot. California 1: 585. 1876.
pine broomrape, pinewoods broomrape

Myzorrhiza pinorum (Geyer ex Hook.) Rydb.
Orobanche pinorum Geyer ex Hook. [HC, JPM]
Phelipaea pinorum (Geyer ex Hook.) A. Gray

Aphyllon purpureum (A. Heller) Holub [HC2]
Preslia 70(2): 100. 1998.

Orobanche porphyrantha Beck
Orobanche sedii (Suksd.) Fernald
Orobanche uniflora L. [HC, IFBC]
Orobanche uniflora L. ssp. *occidentalis* (Greene) Abrams ex Ferris [JPM]
Orobanche uniflora L. var. *minuta* (Suksd.) Beck [HC, JPM]
Orobanche uniflora L. var. *occidentalis* (Greene) Roy L. Taylor & MacBryde [VPBC2, JPM]
Orobanche uniflora L. var. *purpurea* (A. Heller) Achey [HC, VPBC2]
Orobanche uniflora L. var. *sedi* (Suksd.) Achey [JPM]

**Bellardia* [HC2]
bellardia, glandweed

**Bellardia viscosa* (L.) Fisch. & C.A. Mey. [Draft FNA, HC2]
Index Seminum [St. Petersburg] 2: 4. 1836.
yellow glandweed

Parentucellia viscosa (L.) Caruel [HC]

Castilleja [HC, HC2]
Indian-paintbrush, owl-clover

Castilleja ambigua Hook. & Arn. [HC2]
Bot. Beechey Voy. 154-155. 1833.
paint-brush owl-clover

var. *ambigua* [HC2]
salt-marsh paintbrush

Castilleja ambigua Hook. & Arn. ssp. *ambigua* [IFBC, JPM2]
Orthocarpus castillejoides Benth. [HC, VPPNW4]

Castilleja attenuata (A. Gray) T.I. Chuang & Heckard [HC2, JPM]
Systematic Botany 16(4): 656. 1991.
attenuate paintbrush, valley-tassels

Orthocarpus attenuatus A. Gray [HC, VPPNW4]

Castilleja cervina Greenm. [HC, HC2]
Botanical Gazette 25(4): 269. 1898.
deer paintbrush

Castilleja chambersii M. Egger & Meinke [HC2]
Brittonia 51(4): 445?450, f. 1. 1999.

Chambers's Indian paintbrush

Recently (2015) collected in southwestern Washington.

Castilleja cryptantha Pennell & G.N. Jones [HC, HC2]
Proc. Biol. Soc. Wash. 50(56): 208-209. 1937.
obscure paintbrush

Endemic to subalpine meadows in and immediately adjacent to Mt. Rainier National Park.

Castilleja cusickii Greenm. [HC, HC2]
Botanical Gazette 25(4): 267-268. 1898.
Cusick's paintbrush

Castilleja camporum (Greenm.) Howell
Castilleja lutea A. Heller
Castilleja pallida (L.) Spreng. var. *camporum* Greenm.
Castilleja pannosa Eastw.

Castilleja elmeri Fernald [HC, HC2]
Erythea 6(5): 51. 1898.
Elmer's paintbrush

Castilleja angustifolia (Nutt.) G. Don var. *whitedii* Piper

Listings by various authors (e.g. KZ) of C. sulphurea Rydb. for WA are attributable to yellow forms of C. elmeri; there is no convincing evidence that C. sulphurea, which is primarily a Rocky Mountain species, occurs in WA.

Castilleja hispida Benth. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 2(9): 105. 1838.
harsh paintbrush

var. *acuta* (Pennell) Ownbey [HC, HC2]
Vasc. Pl. Pacific NW 4: 309. 1959.
acute paintbrush, harsh paintbrush

Castilleja hispida Benth. ssp. *acuta* Pennell
Castilleja taedifera Pennell

var. *hispida* [HC, HC2]
Fl. Bor.-Amer. 2: 105. 1838.
harsh paintbrush

Castilleja angustifolia (Nutt.) G. Don var. *abbreviata* Fern.
Castilleja angustifolia (Nutt.) G. Don var. *hispida* (Benth.) Fernald
Castilleja hispida Benth. ssp. *abbreviata* (Fernald) Pennell

Castilleja levisecta Greenm. [HC, HC2]
Botanical Gazette 25(4): 268-269. 1898.
golden paintbrush

Rare and declining species, listed as Endangered in WA and extirpated from many historical sites.

Castilleja litoralis Pennell [HC, HC2]
coast paintbrush, Pacific paintbrush

Castilleja affinis Hook. & Arn. ssp. *litoralis* (Pennell) T.I. Chuang & Heckard

Castilleja lutescens (Greenm.) Rydb. [HC, HC2]
Mem. New York Bot. Gard. 1: 359. 1900.
yellow paintbrush

Castilleja pallida (L.) Spreng. var. *lutescens* Greenm.

Castilleja miniata Douglas ex Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 2(9): 106. 1838.
common paintbrush, scarlet paintbrush

var. *dixonii* (Fernald) A. Nelson & J.F. Macbr. [HC, HC2]

Bot. Gaz. 65(1): 70. 1918.
Dixon's paintbrush

Castilleja dixonii Fernald
Castilleja miniata Douglas ex Hook. ssp. *dixonii* (Fernald) Kartesz

var. *miniata* [HC, HC2]
Fl. Bor.-Amer. 2: 106. 1838.
scarlet paintbrush

Castilleja crispula Piper
Castilleja pallida (L.) Spreng. var. *miniata* (Dougl. ex Hook.) A. Gray

Castilleja minor (A. Gray) A. Gray [HC2, JPM]
Bot. California [W.H.Brewer] i. 573.
annual paintbrush

var. *exilis* (A. Gray) J.M. Egger [HC2]
Phytologia 90(1): 72-73. 2008.
seep paintbrush

Castilleja exilis A. Nelson [HC]

This taxon is treated as a synonym of C. minor ssp. minor in JPM, but recent field work indicates that it is best treated as a distinct variety of that species.

Castilleja parviflora Bong. [HC, HC2]
small-flowered paintbrush

var. *albida* (Pennell) Ownbey [HC, HC2]
mountain Indian paintbrush

Castilleja oreopola Greenm. ssp. *albida* Pennell

var. *olympica* (G.N. Jones) Ownbey [HC, HC2]
Vasc. Pl. Pacific NW 4: 317. 1959.
Olympic paintbrush

Castilleja olympica G.N. Jones
Castilleja oreopola Greenm. ssp. *olympica* (G.N. Jones) Pennell

var. *oreopola* (Greenm.) Ownbey [HC, HC2]
Vasc. Pl. Pacific NW 4: 317. 1959.
magenta paintbrush

Castilleja miniata Doug. ex Hook var. *alpina* Suksd.
Castilleja oreopola Greenm.

Castilleja rupicola Piper ex Fernald [HC, HC2]
Erythea 6(5): 45-46. 1898.
cliff paintbrush

Castilleja suksdorfii A. Gray [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 22(2): 311. 1887.
Suksdorf's paintbrush

Castilleja tenuis (A. Heller) T.I. Chuang & Heckard [HC2, JPM]
Syst. Bot. 16(4): 658. 1991.
thin paintbrush

Orthocarpus hispidus Benth. [HC]
Orthocarpus rarior Suksd.
Orthocarpus tenuis Heller
Triphysaria hispida (Benth.) Rydb.

Castilleja thompsonii Pennell [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 99(7): 178-179. 1947.
Thompson's paintbrush

Castilleja villicaulis Pennell & Ownbey

Castilleja victoriae Fairbarns & J.M. Egger [HC2]
Madrono 54(4): 334?342. 2007.
Victoria's paintbrush

Cordylanthus [HC, HC2]
birdbeak

Cordylanthus capitatus Nutt. ex Benth. [HC, HC2]
Prodr. 10: 597. 1846.
Yakima bird's-beak

C. ramosus Nutt. ex Benth. has not been recorded in WA but should be looked for in sagebrush flats in SE corner of state.

Euphrasia [HC, HC2]
euphrasia, eyebright

**Euphrasia nemorosa* (Pers.) Wallr. [HC2, IFBC]
Ann. Bot. (London) 82. 1815.
common eyebright, hairy eyebright

Euphrasia americana Wetts.
Euphrasia arctica Lange ex Rostr. ssp. *borealis* (F. Towns.) Yeo
Euphrasia canadensis F. Towns., misapplied
Euphrasia officinalis L. [HC], misapplied
Euphrasia pectinata Ten., misapplied
Euphrasia tatarica Fisch. ex Spreng., misapplied

Kopsiopsis [HC2]
ground-cone

Kopsiopsis hookeri (Walp.) Govaerts [HC2, JPM2]
World Checkl. Seed Pl. 2(1): 14. 1996.
small groundcone, Vancouver groundcone, poque

Boschniakia hookeri Walp. [HC]

Melampyrum [HC, HC2]
cow-wheat

Melampyrum lineare Desr. [Draft FNA, HC, HC2]
Sp. Pl. 2: 605. 1753.
narrow-leaved cow wheat

**Odontites* [HC2]

**Odontites vulgaris* Moench [Draft FNA, HC2]
red bartsia

Odontites vernus (Bellardi) Dumort., misapplied

Odontites vulgaris is sparingly established in the northeastern U.S. and eastern Canada, and may be rapidly spreading. A collection was made in 2015 along a bike trail in Bellingham, Whatcom County, Washington, where plants formed weedy patches in grassy areas along and near the trail.

**Orobanche* [HC, HC2]
broomrape
(see also *Aphyllon*)

**Orobanche minor* Sm. [HC, HC2]
Engl. Bot. 6: pl. 422. 1797.
hellroot

Orobanche columbiana

FNA17: "Orobanche minor has been documented most frequently parasitizing introduced clovers (mainly Trifolium arvense and T. repens), and collected rarely on Crotalaria (J. W. Thieret 1971) and Vicia. It also has been recorded, at least historically, on a variety of cultivated hosts in the region, including hemp, carrots (Daucus carota), tobacco, geraniums (Pelargonium spp.), and Petunia spp. Allegedly, the species is toxic to livestock (Thieret). The sole specimen from Idaho (J. A. Allen s.n., 1875, NY) lacks locality data; if the provenance is correct, the elevational range would be extended upward.

European authors have recognized a number of infrataxa and segregates; for example, F. J. Rumsey and S. L. Jury (1991) provisionally accepted four varieties of Orobanche minor as occurring in the British Isles. However, they noted that little is known about cytological and morphological variation within the complex. Thus, it seems inappropriate to apply an infraspecific classification to the North American plants.

A single historical specimen (J. C. Nelson 3337, 25 August 1920, GH) collected from ship?s ballast in the Linnton area of Portland, Oregon, is an unusually stout plant with apparently pale corollas and filaments relatively densely pubescent toward their bases. This plant may represent a record of Orobanche loricata Reichenbach, a European species that parasitizes mainly Picris and other Asteraceae, and does not affect any crop plants. However, specimen condition precludes definitive determination, and the label does not list a host species. Other materials from Oregon have the typical morphology of O. minor."

Orthocarpus [HC, HC2]
owl-clover
(see also *Castilleja*, *Triphysaria*)

Orthocarpus barbatus J.S. Cotton [HC, HC2]
Bull. Torrey Bot. Club 29(9): 574. 1902.
Grand Coulee owl-clover

Orthocarpus bracteosus Benth. [HC, HC2]
Scroph. Ind. 13. 1835.
rosy owl-clover

Orthocarpus bracteosus Benth. var. *albus* D.D. Keck

Listed as Threatened in WA; known in state from a single extant population, extirpated from several historic sites in WA.

Orthocarpus imbricatus Torr. ex S. Watson [HC, HC2]
Botany Fortieth Parallel 458. 1871.
mountain owl-clover

Orthocarpus luteus Nutt. [HC, HC2]
Gen. N. Amer. Pl. 2: 57-58. 1818.
golden-tongue owl-clover

Orthocarpus tenuifolius (Pursh) Benth. [HC, HC2]
Scroph. Ind. 12. 1835.
narrow-leaved owl-clover, thin-leaved owl-clover

Pedicularis [HC, HC2]
lousewort, pedicularis

Pedicularis bracteosa Benth. [HC, HC2]
bracted lousewort

var. *atrosanguinea* (Pennell & J.W. Thomp.) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 356. 1959.
bracted lousewort

var. *bracteosa* [HC, HC2]
Fl. Bor.-Amer. 2: 110. 1838.
bracted lousewort

Pedicularis montanensis Rydb.

var. *flavida* (Pennell) Cronquist [HC, HC2]

Vasc. Pl. Pacific NW 4: 356. 1959.
bracted lousewort

var. *latifolia* (Pennell) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 358. 1959.
bracted lousewort

Pedicularis paddoensis Pennell
Pedicularis thompsonii Pennell

var. *pachyrhiza* (Pennell) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 356. 1959.
bracted lousewort

Occurs in southeastern WA.

var. *siifolia* (Rydb.) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 356. 1959.
bracted lousewort

Specimen at WS from southeastern WA, though identification has not been confirmed by authors of this list or author of upcoming FNA treatment.

Pedicularis contorta Benth. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 2(pt. 9): 108. 1838.
white coiled-beak lousewort

var. *contorta* [HC, HC2]
Fl. Bor.-Amer. 2: 108. 1838.
white-coiled beak lousewort

Pedicularis groenlandica Retz. [HC, HC2]
Fl. Scand. Prodr. (ed. 2) 145. 1795.
elephant's head, bull elephant's-head

Elephantella groenlandica (Retz.) Rydb.
Pedicularis groenlandica Retz. var. *surrecta* (Benth.) A. Gray

Pedicularis ornithorhynchos Benth. [HC2]
Flora Boreali-Americana 2: 108. 1838.
duck's-bill, bird's-beak lousewort

Pedicularis ornithorhyncha Benth. [HC], orthographic variant

Pedicularis pulchella Pennell [Draft FNA, HC, HC2, Montana Flora]
Notulae Naturae of the Academy of Natural Sciences of Philadelphia 95: 7?10, f. [p. 9 (right)]. 1942.
pretty lousewort

This population represents a significant disjunction of this narrowly endemic species from southwestern Montana.

Pedicularis racemosa Douglas ex Benth. [HC, HC2]
leafy lousewort, sickletop lousewort

var. *alba* (Pennell) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 363. 1959.
sickletop lousewort

Pedicularis racemosa Douglas ex Benth. ssp. *alba* Pennell [KZ99]

var. *racemosa* [HC, HC2]
Fl. Bor.-Amer. 2(9): 108. 1838.
sickletop lousewort

Pedicularis racemosa Douglas ex Benth. ssp. *racemosa* [KZ99]

Pedicularis rainierensis Pennell & F.A. Warren [HC, HC2]
Bulletin of the Torrey Botanical Club 55(6): 317-318. 1928.
Mt. Rainier lousewort

Endemic to Mount Rainier.

Rhinanthus [HC, HC2]
rattle-box, yellow rattle

Rhinanthus minor L. [HC2, IFBC]
Amoen. Acad., Linnaeus ed. 3: 54. 1756.
little yellow rattle

Alectorolophus minor (L.) Wimm. & Grab.
Rhinanthus crista-galli L. [HC], misapplied

ssp. groenlandicus is native, ssp. minor is introduced from Europe.

ssp. *groenlandicus* (Chabert) Neum. [HC2]

*ssp. *minor* [HC2]

Triphysaria [HC2]
false owl-clover

**Triphysaria eriantha* (Benth.) T.I. Chuang & Heckard [HC2]
butter-and-eggs, Johnny-tuck owl-clover

Orthocarpus erianthus Benth. [HC]

*ssp. *eriantha* [HC2, JPM, KZ99]
butter and eggs, johnny turk

Triphysaria pusilla (Benth.) T.I. Chuang & Heckard [HC2, JPM]
Syst. Bot. 16(4): 661. 1991.
dwarf owl-clover

Orthocarpus pusillus Benth. [HC]

Oxalidaceae [HC, HC2] Wood-Sorrel Family

Oxalis [HC, HC2]
lady's-sorrel, oxalis, wood-sorrel

**Oxalis corniculata* L. [HC, HC2]
Sp. Pl. 1: 435. 1753.
creeping yellow wood-sorrel

**Oxalis dillenii* Jacq. [HC, HC2]
Oxalis 28. 1794.
slender yellow wood-sorrel

Oxalis corniculata L. var. *dillenii* (Jacq.) Trel.

**Oxalis exilis* A. Dunn [HC2]

Oxalis oregana Nutt. [HC, HC2]
Fl. N. Amer. 1(2): 211. 1838.
redwood-sorrel, Oregon wood-sorrel

**Oxalis stricta* L. [HC, HC2]
Sp. Pl. 1: 435. 1753.
upright yellow wood-sorrel

Oxalis ambigua Jacq.
Oxalis bushii Small
Oxalis coloradensis Rydb.
Oxalis cymosa Small

Oxalis europaea Jord.
Oxalis fontana Bunge
Oxalis interior (Small) Fedde
Oxalis rufa Small

Oxalis suksdorfii Trel. [HC, HC2]
Memoirs of the Boston Society of Natural History 4: 89. 1888.
western yellow wood-sorrel

Oxalis corniculata L. var. *macrantha* Trel., misapplied
Oxalis pumila Nutt.
Xanthoxalis suksdorfii (Trel.) Small

Rare.

Oxalis trilliifolia Hook. [HC, HC2]
Flora Boreali-Americana 1(3): 118. (as trilliifolium). 1831.
great wood-sorrel, trillium-leaf wood-sorrel

Hesperoxalis trilliifolia (Hook.) Small

Paeoniaceae [FNA8, HC, HC2] Peony Family

FNA8: "Paeonia was long included in Ranunculaceae or was associated with Dilleniaceae. Angiosperm Phylogeny Group (2003) placed Paeoniaceae in Saxifragales."

Paeonia [FNA8, HC, HC2]
Sp. Pl. 1: 530. 1753; Gen. Pl. ed. 5, 235. 1754.
peony

Paeonia brownii Douglas ex Hook. [FNA8, HC, HC2]
Fl. Bor.-Amer. 1: 27. 1829.
brown's peony, western peony

FNA8: "Paeonia was long included in Ranunculaceae or was associated with Dilleniaceae. Angiosperm Phylogeny Group (2003) placed Paeoniaceae in Saxifragales. Reports of Paeonia brownii from Canada evidently stem from early confusion between Vancouver, British Columbia, and Vancouver, Washington (H. J. Scoggan 1978-1979, vol. 3). The type of P. brownii was collected on Mount Hood in Oregon, about 75 kilometers from Fort Vancouver (now Vancouver), Washington, which was a base for the collector, David Douglas."

Papaveraceae [FNA3, HC, HC2] Poppy Family

Synonyms:
Fumariaceae [FNA3, HC] (Fumitory Family)

**Chelidonium* [FNA3, HC2]
Sp. Pl. 1: 505. 1753; Gen. Pl. ed. 5, 224, 1754.
greater celandine

**Chelidonium majus* L. [FNA3, HC2]
Sp. Pl. 1: 505. 1753.
devil's milk, swallow wort

Chelidonium majus L. var. *majus* [FNA, KZ99, AJ]

Not in H&C; escaped from gardens but questionably naturalized in WA

Corydalis [FNA3, HC, HC2]
Fl. France, ed. 3. 4: 637. 1805.
corydalis

Corydalis aquae-gelidae M. Peck & W.C. Wilson [FNA3, HC, HC2]
Leafl. W. Bot. 8(2): 39-40. 1956.
marsh corydalis

Corydalis aqua-gelidae M. Peck & W.C. Wilson ex M. Peck [FNA3], orthographic variant
Corydalis caseana A. Gray ssp. *aquae-gelidae* (M. Peck & W.C. Wilson) Zetterl. & Lidén [KZ99]

Corydalis aurea Willd. [FNA3, HC, HC2]
Enum. Pl. 2: 740. 1809.
golden corydalis, scrambled eggs

Capnoides aureum (Willd.) Kuntze

ssp. *aurea* [FNA3, HC2]
Enum. Pl. 2: 740. 1809.
golden corydalis, scrambled eggs

FNA3: "Corydalis aurea subsp. aurea intergrades at times with C . aurea subsp. occidentalis , but usually the two can be distinguished readily when fruiting." C. aurea ssp. occidentalis is not reported from WA by FNA3.

**Corydalis lutea* (L.) DC. [HC, HC2]
yellow corydalis

Corydalis scouleri Hook. [FNA3, HC, HC2]
Fl. Bor.-Amer. 1: 36, plate 14. 1829.
Scouler's fumewort

FNA3: "Corydalis scouleri is restricted to cool, wet habitats from northwestern Oregon northward to Vancouver Island. It is most easily distinguished from Corydalis caseana by the usually highly developed crests and absence of wings on its outer petals. The stigma is essentially triangular (versus rectangular in C . caseana), and the capsule shape (typically obovoid) is rarely approached in C . caseana."

Dicentra [FNA3, HC, HC2]
Linnaea. 8: 457, 468. 1833.
bleedingheart

Dicentra cucullaria (L.) Bernh. [FNA3, HC, HC2]
Linnaea. 8: 457, 468. 1833.
Dutchman's-breeches

Dicentra cucullaria (L.) Bernh. var. *occidentalis* (Rydb.) M. Peck
Dicentra occidentalis (Rydb.) Fedde
Fumaria cucullaria L.

FNA3: "The western populations of Dicentra cucullaria appear to have been separated from the eastern ones for at least a thousand years. The western plants are generally somewhat coarser, which apparently led Rydberg to designate the western populations as a separate species. Plants from the Blue Ridge Mountains of Virginia, however, are virtually indistinguishable from those of the West, and much of the variation (which is considerable) within the species probably involves phenotypic response to the environment, or represents ecotypes within the species."

Dicentra formosa (Haw.) Walp. [FNA3, HC, HC2]
Repert. Bot. Syst. 1: 118. 1842.
Pacific bleedingheart

Dicentra saccata (Nutt. ex Torr. & A. Gray) Walp.
Fumaria formosa Haw.

ssp. *formosa* [FNA3, HC2]
Repert. Bot. Syst. 1: 118. 1842.
Pacific bleedingheart

H&C does not recognize subspecific taxa. FNA3: "Andrews has been cited almost universally as the author of Fumaria formosa . However, Haworth\\\\\'s authorship of the sixth volume of Andrews\\\\\' Botanists\\\\\' Repository (in which this species was originally described) generally has been overlooked, and it was actually Haworth who first delineated F . formosa (W. T. Stearn 1944). Early attempts to cross Dicentra formosa with D . eximia (2 n = 16) failed, possibly because the D . formosa parents were tetraploids. Several later hybrids between the two species received plant patents and have become widely marketed throughout the flora area and elsewhere (K. R. Stern 1961, 1968; K. R. Stern and M. Ownbey 1971). Both subspecies, as well as hybrids between them and Dicentra eximia , are widely cultivated."

Dicentra uniflora Kellogg [FNA3, HC, HC2]
Proc. Calif. Acad. Sci. 4: 141. 1871.
long-horn steer's-head

**Eschscholzia* [FNA3, HC, HC2]
Horae Phys. Berol. 73. 1820 - [For Johann F. G. von Eschscholtz,. 1793.
poppy

**Eschscholzia californica* Cham. [FNA3, HC, HC2]
Horae Phys. Berol. 73, plate 15. 1820.
California poppy

Eschscholzia californica is native in Oregon.

*ssp. *californica* [FNA3, HC2]
Horae Phys. Berol. 73, plate 15. 1820.
California poppy

Eschscholzia californica Cham. var. *peninsularis* (Greene) Munz
Eschscholzia californica Cham. var. *scrocea* (Benth.) Jeps.
Eschscholzia procera Greene

FNA3: "Widely planted in North America and elsewhere as an ornamental, roadside, and reclamation plant, with many color forms in the horticultural trade, it often escapes but usually does not persist. This species is highly variable (more than 90 infraspecific taxa have been described), not only among different plants and locations but also within individual plants over the course of the growing season, especially in petal size and color (see W. L. Jepson 1909-1943, vol. 1, part 7, pp. 564-569)."

**Fumaria* [FNA3, HC, HC2]
Sp. Pl. 2: 699. 1753; Gen. Pl. ed. 5, 314, 1754.
fumitory, ramping-fumitory

**Fumaria muralis* Sond. ex W.D.J. Koch [HC2]
Syn. Fl. Germ. Helv., ed. 2. 1017. 1845.
common fumitory, wall fumitory

Urban weed known from Whatcom, King, and Pacific Counties, as well as Vancouver, BC. Specimens from our area were misidentified as F. officinalis, a species with smaller flowers and rugose fruits.

**Fumaria officinalis* L. [FNA3, HC, HC2]
Sp. Pl. 2: 700. 1753.
common fumitory

Fumaria officinalis L. ssp. *officinalis*

**Fumaria reuteri* Boiss. [HC2]
Diagn. Pl. Orient. ser. 1, 8: 13. 1849.
few-flower fumitory, Martin's fumitory

Two records from King County, Washington, as an urban weed.

Meconella [FNA3, HC, HC2]
Fl. N. Amer. 1: 64. 1838.
meconella

Meconella oregana Nutt. [FNA3, HC, HC2]

Fl. N. Amer. 1: 64. 1838.
white fairy-poppy

Listed as threatened in WA. FNA3: "Flowers of Meconella oregana often display irregularities such as fusion, loss, or addition of parts (W. R. Ernst 1962)."

Papaver [FNA3, HC, HC2]
Sp. Pl. 1: 506. 1753; Gen. Pl. ed. 5, 224, 1754.
poppy

Stylomecon [FNA3]

**Papaver argemone* L. [FNA3, HC, HC2]
Sp. Pl. 1: 506. 1753.
long prickly-head poppy

**Papaver dubium* L. [FNA3, HC2]
Sp. Pl. 2: 1196. 1753.

FNA3: "n its native range, Papaver dubium is a tetraploid complex of five subspecies whose morphologies and distributions intersect to a considerable degree (J. W. Kadereit 1989, 1990). Probably several, if not all, of these entities have been introduced in North America, but it is fruitless to try to distinguish them here, where the species has arrived as a crop weed and the subspecies have no geographic integrity. Papaver dubium sometimes seems to intergrade with P . rhoeas , at least in North America. The most readily evident character for distinguishing them reliably is the nature of the distal pubescence on the peduncles--whether spreading or appressed."

**Papaver rhoeas* L. [FNA3, HC, HC2]
Sp. Pl. 1: 507. 1753.
corn poppy

FNA3: "J. W. Kadereit (1990) suggested that Papaver rhoeas originated on the east coast of the Mediterranean, probably derived from one or more of the other species of the section that are native in that region, and only after (and because) "suitable habitats in sufficient extent were provided by man." Various forms with pale pink or white, unspotted, sometimes doubled petals are grown for ornament, notably the Shirley poppies. In North America, the species escapes from cultivation fairly readily and has been introduced also as a crop weed. Excluded species: Papaver dahlianum Nordhagen, Bergens Mus. Årbok 2: 46. 1931 Papaver radicatum Rottbfll subsp. dahlianum (Nordhagen) Rändel We regard this species as being restricted to arctic Europe, a narrower circumscription than U. Rändel's (1977). Papaver microcarpum de Candolle, Syst. Nat. 2: 71. 1821"

**Papaver somniferum* L. [FNA3, HC, HC2]
Sp. Pl. 1: 508. 1753.
opium poppy

FNA3: "Unknown in the wild, Papaver somniferum probably came originally from southeastern Europe and/or southwestern Asia. It has been cultivated for centuries as the source of opium (and its modern derivatives heroin, morphine, and codeine), and also for edible seeds and oil. Various color forms with laciniate and/or doubled petals are grown for ornament. Widely introduced from cultivation and also as a crop weed, it should be expected elsewhere in the flora."

**Parameconopsis*

**Parameconopsis cambrica* (L.) Grey-Wilson [WTU]
Gen. Meconopsis 367. 2014.
Welsh poppy

Meconopsis cambrica (L.) Vig.

Parnassiaceae: see Celastraceae

Paulowniaceae [HC2] Princess Tree Family

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

**Paulownia* [HC2]
princess tree

**Paulownia tomentosa* (Thunb.) Steud. [HC2, Stace 1997]
Nomenclator Botanicus. 1841.
princess tree

Penthoraceae [FNA8, HC2] Penthorum Family

FNA8:"The position of Penthorum within Rosales has been disputed extensively. A. Cronquist (1981) considered it to be transitional between Crassulaceae and Saxifragaceae. He included it in Saxifragaceae, stating that Penthorum was not distinct enough from Crassulaceae and Saxifragaceae to warrant being treated as a distinct family. Placement of the genus by others has depended on the morphological, anatomical, and embryological traits emphasized. Molecular studies suggest that the genus is sister to Haloragaceae (D. R. Morgan and D. E. Soltis 1993; D. E. Soltis and P. S. Soltis 1997). Recent authors often have placed it in the monogeneric Penthoraceae."

**Penthorum* [FNA8, HC2]
Sp. Pl. 1: 432. 1753; Gen. Pl. ed. 5, 197. 1754.
ditch stonecrop

**Penthorum sedoides* L. [FNA8, HC2]
Sp. Pl. 1: 432. 1753.
ditch stonecrop

FNA8: "The species is introduced in southern British Columbia, Oregon, and Washington, where it grows in cranberry bogs."

Phrymaceae [HC2] Lopseed Family

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

Diplacus [HC2]
monkey-flower

Diplacus cusickioides G.L. Nesom [HC2]
Phytoneuron 2013-65: 1?18. 2013.
Nesom's monkey-flower

Diplacus cusickii (Greene) G.L. Nesom [HC2], misapplied

Nesom: "Diplacus cusickii proves to be narrowly endemic to northern Malheur Co., Oregon, and a few localities in immediately adjacent Idaho along the Snake River; populations outside of this area previously identified as Mimulus cusickii are described here as Diplacus cusickioides Nesom.."

Diplacus nanus (Hook. & Arn.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
dwarf purple monkey-flower

Mimulus nanus Hook. & Arn. [HC]
Mimulus nanus Hook. & Arn. ssp. *nanus*
Mimulus nanus Hook. & Arn. var. *nanus* [JPM2]

Erythranthe [HC2]
monkey-flower

Erythranthe alsinoides (Douglas ex Benth.) G.L. Nesom & N.S. Fraga [HC2]
Phytoneuron 2012-39: 1?60. 2012.
chickweed monkey-flower, wing-stem monkey-flower

Mimulus alsinoides Douglas ex Benth. [HC]

Erythranthe ampliata (A.L. Grant) G.L. Nesom [HC2]
Phytoneuron 2012?39: 38. 2012.
Nez Perce monkey-flower

Known from Asotin County based on a single collection (1949).

Erythranthe arvensis (Greene) G.L. Nesom [HC2]
Phytoneuron 2012?39: 43. 2012.
field monkey-flower

Mimulus arvensis Greene

Erythranthe breviflora (Piper) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
short-flowered monkey-flower

Mimulus breviflorus Piper [HC]

Erythranthe breweri (Greene) G.L. Nesom & N.S. Fraga [HC2]
Phytoneuron 2012-39: 1?60. 2012.
Brewer's monkey-flower

Mimulus breweri (Greene) Coville [HC, JPM]
Mimulus rubellus A. Gray var. *breweri* (Greene) Jeps.

Erythranthe caespitosa (Greene) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
large mountain monkey-flower

Mimulus tilingii Regel var. *caespitosus* (Greene) A.L. Grant [HC]

**Erythranthe cardinalis* (Douglas ex Benth.) Spach [HC2]
Phytoneuron 2012-39: 1?60. 2012.
scarlet monkey-flower

Diplacus cardinalis (Douglas ex Benth.) Groenland
Mimulus cardinalis Douglas ex Benth. [JPM]

The occurrences in WA are localized in Yakima County near the confluence of Oak Creek and the Tieton River. It is likely that there were homesteads historically in the Oak Creek drainage and that the persistent populations represent naturalized escapes from prior cultivation.

Erythranthe decora (A.L. Grant) G.L. Nesom [HC2]
Phytoneuron 2012?39: 43. 2012.
sharp-leaved monkey-flower, showy monkey-flower

Mimulus decorus (A.L. Grant) Suksd.
Mimulus guttatus DC. var. *decorus* A.L. Grant

Nesom: "Erythranthe decora is distinct in its uniformly ovate to ovate-lanceolate leaf blades with truncate bases and regularly toothed margins, relatively long internodes, rhizomatous habit, mostly unbranched stems, often with with leafy runners from basal nodes, large corollas, hairy styles, and minutely hirtellous stems, pedicels, calyces, and leaf surfaces. The thin, densely produced rhizomes suggest a relationship with the E. tilingii group."

Erythranthe dentata (Nutt. ex Benth.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
coastal monkey-flower, tooth-leaved monkey-flower

Mimulus dentatus Nutt. ex Benth. [HC]

Erythranthe floribunda (Douglas ex Lindl.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
purple-stem monkey-flower

Mimulus deltoides Gand.
Mimulus floribundus Lindl. [HC]
Mimulus floribundus Lindl. var. *membranaceus* (A. Nelson) A.L. Grant [HC]
Mimulus membranaceus A. Nelson
Mimulus peduncularis Douglas ex Benth.
Mimulus peduncularis A. Gray
Mimulus pubescens Benth.
Mimulus serotinus Suksd.

Erythranthe grandis (Greene) G.L. Nesom [HC2]
Phytoneuron 2012-39: 43. 2012.
large monkey-flower

Mimulus guttatus DC. var. *grandis* Greene [HC]

Erythranthe guttata (Fisch. ex DC.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
seep monkey-flower, yellow monkey-flower
(see also *Erythranthe arvensis*, *Erythranthe grandis*, *Erythranthe microphylla*, *Erythranthe nasuta*)

Mimulus guttatus DC. [HC]
Mimulus guttatus DC. var. *guttatus* [HC]

Erythranthe inflatula (Suksd.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 38. 2012.
disappearing monkey-flower

Mimulus inflatulus Suksd.

Erythranthe jungermannioides (Suksd.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
liverwort monkey-flower

Mimulus jungermannioides Suksd. [HC]

Considered extirpated from Washington.

Erythranthe lewisii (Pursh) G.L. Nesom & N.S. Fraga [HC2]
Phytoneuron 2012-39: 1?60. 2012.
great purple monkey-flower

Mimulus lewisii Pursh [HC]

Erythranthe microphylla (Benth.) G.L. Nesom [HC2]
Phytoneuron 40: 1?123. 2012.
small-leaved monkey-flower

Mimulus guttatus DC. var. *depauperatus* (A. Gray) A.L. Grant [HC]

From Phytoneuron 40: 1?123. "In rupibus ad flum. Oregon, (Douglas!)" (holotype: K). Pennell (1951, p. 710) noted that the locality visited by Douglas is "Tongue Point, in the present Wahkiakum County, Washington." Treated as a distinct species by Pennell (1951), who noted that its range is "Cascade Mountains and coastal forests from northern Washington to northern California, east to central Idaho."

Erythranthe moschata (Douglas ex Lindl.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
musk-flower, musk-plant

Erythranthe moniliformis (Greene) G.L. Nesom
Mimulus moniliformis Greene
Mimulus moschatus Douglas ex Lindl. [HC]
Mimulus moschatus Douglas ex Lindl. var. *longiflorus* A. Gray [KZ99]
Mimulus moschatus Douglas ex Lindl. var. *moniliformis* (Greene) Munz
Mimulus moschatus Douglas ex Lindl. var. *moschatus* [HC]

Mimulus moschatus Douglas ex Lindl. var. *sessilifolius* A. Gray [HC]

Populations west of the Cascades crest previously assigned to this species are likely referable to E. ptilota.

Erythranthe nasuta (Greene) G.L. Nesom [HC2]
Phytoneuron 2012-40: 44. 2012.
large-nose monkey-flower, snouted monkey-flower

Mimulus guttatus DC. var. *nasutus* (Greene) Jeps.
Mimulus nasutus Greene
Mimulus puncticalyx Gand.

Nesom, Phytoneuron 40: 1?123: "Erythranthe nasuta is characterized by its annual duration (fibrous-rooted), 4-angled stems, broadly ovate leaves commonly with irregularly toothed margins, calyces with longish, protruding upper lobe, short corollas (autogamous ?? chasmogamous or cleistogamous), and glandular vestiture only in the axils. At least the distal and bracteal leaves consistently have hirtellous to hirsutulous adaxial surfaces, even in the smallest of plants."

Erythranthe patula (Pennell) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
stalk-leaved monkey-flower

Mimulus patulus Pennell

Erythranthe primuloides (Benth.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
primrose monkey-flower

Mimulus primuloides Benth. [HC]

Erythranthe ptilota G.L. Nesom [HC2]
Phytoneuron 2017-17: 4. 2017.
sessile-leaved monkey-flower

Mimulus moschatus Douglas ex Lindl. var. *pallidiflorus* Suksd.

Erythranthe pulsiferae (A. Gray) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
candelabrum monkey-flower, Pulsifer's monkey-flower

Mimulus pulsiferae A. Gray [HC]

Erythranthe scouleri (Hook.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 44. 2012.
Scouler's monkey-flower

Erythranthe suksdorfii (A. Gray) N.S. Fraga [HC2]
Phytoneuron 2012-39: 1?60. 2012.
miniature monkey-flower

Mimulus suksdorfii A. Gray [HC]

Erythranthe washingtonensis (Gand.) G.L. Nesom [HC2]
Phytoneuron 2012-39: 1?60. 2012.
Washington monkey-flower

Mimulus washingtonensis Gand. [HC]

Mimetanthe [HC, HC2]
mimetanthe

Mimetanthe pilosa (Benth.) Greene [HC, HC2]
Bulletin of the California Academy of Sciences 1(4A): 181 [1885]. 1886.
downy monkey-flower, false monkey-flower

Mimulus pilosus (Benth.) S. Watson

**Mimulus* [HC, HC2]
monkey-flower

Mimulus ringens L. [HC2, JPM2]
Sp. Pl. 2: 634. 1753.
Allegheny monkeyflower, square-stemmed monkeyflower

*var. *ringens* [HC2, JPM]
Sp. Pl. 2: 634. 1753.
Allegheny monkey-flower, square-stemmed monkeyflower

Phytolaccaceae [FNA4, HC, HC2] Pokeweed Family

Phytolacca [FNA4, HC, HC2]
Sp. Pl. 1: 441. 1753; Gen. Pl. ed. 5, 200. 1754.
pokeberry

**Phytolacca americana* L. [FNA4, HC, HC2]
Sp. Pl. 1: 441. 1753.
pigeonberry, pokeberry, pokeweed

*var. *americana* [FNA4, HC2]
Sp. Pl. 1: 441. 1753.
pigeonberry, pokeberry, pokeweed

Taxonomy follows FNA.

Plantaginaceae [HC, HC2] Plantain Family

Synonyms:
Callitrichaceae [HC] (Water-Starwort Family)
Hippuridaceae [HC] (Mare's-Tail Family)

Synthyris here is synonymized within Veronica based on Albach et al., Taxon, 53(2); 429-452.

**Antirrhinum majus* L. [HC, HC2, Stace 1997]
Sp. Pl. 2: 617. 1753.
garden snapdragon, greater snapdragon

Becoming naturalized in Seattle area per AJ

Bacopa [HC, HC2]
water-hyssop

**Bacopa rotundifolia* (Michx.) Wettst. [HC, HC2, JPM2]
Nat. Pflanzenfam. [Engler & Prantl] IV. 3 b. 1891.
disk water-hyssop, round-leaved water-hyssop

First collected in Washington in 2018 in Benton County.

Callitriche [HC, HC2]
water-starwort

Callitriche brutia Pentagna [HC2]
narrow-leaf water-starwort

var. *hamulata* (Kutz. apud Reichenb.) Lansdown [HC2]

Callitriche hermaphroditica L. [HC, HC2]
autumn water-starwort, northern water-starwort

Callitriche autumnalis L. [Abrams], superfluous renaming (illegitimate)

Callitriche heterophylla Pursh [HC, HC2]
different-leaved water-starwort

we follow Crow and Hellquist (2000) in not recognizing varieties, noting the range of var. bolanderi is completely enclosed within the range of var. heterophylla, and that the vars. seem to be defined arbitrarily and intergrade morphologically

var. *bolanderi* (Hegelm.) Fassett [HC, HC2, JPM]
Bolander's different-leaved water-starwort

Callitriche bolanderi Hegelm. [Abrams]
Callitriche heterophylla Pursh ssp. *bolanderi* (Hegelm.) Calder & Roy L. Taylor [ILBC2]

var. *heterophylla* [HC, HC2, JPM]

Callitriche anceps Fernald [HC]
Callitriche heterophylla Pursh ssp. *heterophylla* [ILBC2]

Callitriche marginata Torr. [HC, HC2]
winged water-starwort

recently collected in several counties in eastern WA

Callitriche palustris L. [HC2, ILBC2]
spring water-starwort, vernal water-starwort

Callitriche verna L. [HC]

KZ99 considers C. anceps a synonym of C. heterophylla, but here we follow Philbrick (1989) who called it an ecological variant of C. verna C. verna was published in 1755 and C. palustris in 1753, here we use the earlier name

**Callitriche stagnalis* Scop. [HC, HC2]
pond water-starwort

**Chaenorhinum* [HC2]
dwarf snapdragon

**Chaenorhinum minus* (L.) Lange [HC2, IFBC]
Prodr. Fl. Hispan. 2: 577-578. 1870.
dwarf-snapdragon

Noxious; Original Wa. record based on Madrono 1983 and Weed Board.

Collinsia [HC, HC2]
collinsia, blue-eyed Mary

Collinsia grandiflora Lindl. [HC, HC2]
Bot. Reg. 13: pl. 1107. 1827.
large-flowered blue-eyed Mary, blue-lips blue-eyed Mary

Collinsia parviflora Lindl. var. *grandiflora* (Lindl.) Ganders & G.R. Krause

Collinsia parviflora Lindl. [HC, HC2]
Bot. Reg. 13: pl. 1082. 1827.
small-flowered blue-eyed Mary, collinsia

Collinsia grandiflora Lindl. var. *pusilla* A. Gray

Collinsia rattanii A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 15(1): 50. 1880.
Rattan collinsia

Collinsia rattanii A. Gray ssp. *glandulosa* (Howell) Pennell [HC]
Collinsia rattanii A. Gray ssp. *rattanii*

Collinsia sparsiflora Fisch. & C.A. Mey. [HC, HC2]
Index Seminum [St.Petersburg (Petropolitanus)] ii. 33. 1836.

few-flowered blue-eyed Mary, few-flowered collinsia

var. *sparsiflora* [HC2]
few-flowered blue-eyed Mary

Collinsia bruceae M.E. Jones
Collinsia sparsiflora Fisch. & C.A. Mey. var. *bruceae* (M.E. Jones) Newsom
Collinsia sparsiflora Fisch. & C.A. Mey. var. *bruciae* (M.E. Jones) Newsom [HC], orthographic variant

**Cymbalaria* [HC, HC2]

**Cymbalaria muralis* G. Gaertn., B. Mey. & Scherb. [HC, HC2]
Oekon. Fl. Wetterau 2: 397. 1800.
Kenilworth-ivy, ivy-leaved toadflax

Linaria cymbalaria (L.) Mill.

**Digitalis* [HC, HC2]
foxglove

**Digitalis purpurea* L. [HC, HC2]
Sp. Pl. 2: 621-622. 1753.
purple foxglove

FNA17: "Digitalis purpurea was once used as a commercial source of digitalin, is widely cultivated, and has many cultivars. Some plants have been identified as European subspecies; all variability in the flora area appears to be from cultivars of subsp. purpurea. Digitalis ×mertonensis B. H. Buxton & C. D. Darlington (strawberry or giant foxglove) is a hybrid of D. purpurea with D. grandiflora that is sometimes cultivated."

**ssp. purpurea*
purple foxglove

Digitalis purpurea L. var. *purpurea*

Gratiola [HC, HC2]
hedge-hyssop

Gratiola ebracteata Benth. ex A. DC. [HC, HC2]
Prodromus Systematis Naturalis Regni Vegetabilis 10: 595. 1846.
bractless hedge-hyssop

Gratiola neglecta Torr. [HC, HC2]
Cat. Pl. New York 89. 1819.
American hedge-hyssop, clammy hedge-hyssop

Hippuris [HC, HC2]
mare's-tail

Hippuris montana Ledeb. ex Rchb. [HC, HC2]
Iconographia Botanica seu Plantae Criticae 1: 71, pl. 86, f. 181. 1823.
mountain mare's-tail

Hippuris vulgaris L. [HC, HC2]
Sp. Pl. 1: 4. 1753.
common mare's-tail

**Kickxia* [HC, HC2]
cancerwort, fluellin

**Kickxia elatine* (L.) Dumort. [HC, HC2]
Fl. Belg. (Dumortier) 35. 1827.
sharpleaf cancerwort

**Linaria* [HC, HC2]
toadflax
(see also *Nuttallanthus*)

*_Linaria dalmatica_ (L.) Mill. [HC, HC2]
dalmation toadflax
(see also _Linaria grandiflora_)

Noxious

*ssp. _dalmatica_ [HC2, JPM2]
Gard. Dict. (ed. 8) Linaria no. 13. 1768.
brown-leaved toadflax, Dalmatian toadflax, dalmatian toadflax

Linaria genistifolia (L.) Mill. ssp. _dalmatica_ (L.) Maire & Petitm. [JPM]

Noxious weed.

*ssp. _macedonica_ (Griseb.) D.A. Sutton [HC2]

*_Linaria genistifolia_ (L.) Mill. [HC, HC2]
broomleaf toadflax

*ssp. _genistifolia_ [HC2]

*_Linaria grandiflora_ Desf. [HC2]
large-flowered linaria

Well established in central Washington adjacent to east base Cascades, where plants were formerly misidentified as Linaria dalmatica.

*_Linaria purpurea_ (L.) Mill. [HC2, JPM]
Gard. Dict. (ed. 8) Linaria no. 5. 1768.
purple toadflax

Not in H&C.

*_Linaria vulgaris_ Mill. [HC, HC2]
Gard. Dict. (ed. 8) no. 1. 1768.
greater butter-and-eggs

Linaria linaria (L.) H. Karst.

*_Misopates_ [HC2]
weasel's snout

*_Misopates orontium_ (L.) Raf. [HC2, KZ99]
lesser snapdragon, weasel's snout

Antirrhinum orontium L. [HC]

Nothochelone [HC, HC2]

Nothochelone nemorosa (Douglas ex Lindl.) Straw [HC, HC2]
Brittonia 18(1): 85. 1966.
woodland beardtongue

Penstemon nemorosus (Douglas ex Lindl.) Trautv. [VPPNW4]

Nuttallanthus [HC2]
blue toadflax

Nuttallanthus canadensis (L.) D.A. Sutton [HC2, JPM2]
Revis. Antirrhineae 457. 1988.
Canada toadflax, old field toadflax
(see also _Nuttallanthus texanus_)

Linaria canadensis (L.) Dum. Cours. [HC]
Linaria canadensis (L.) Dumont var. _canadensis_ [HC]

Difficult to distinguish from N. texanus on flower size. Seed characters are most reliable for identification.

Nuttallanthus texanus (Scheele) D.A. Sutton [HC2, JPM2]
Revis. Antirrhineae 460. 1988.

blue toadflax, Texas toadflax

Linaria canadensis (L.) Dum. Cours. var. *texana* (Scheele) Pennell [HC]
Linaria texana Scheele

Penstemon [HC, HC2]
beardtongue, penstemon

Penstemon acuminatus Douglas ex Lindl. [HC, HC2]
Edwards\'s Bot. Reg. 15: t. 1285. 1829.
sand dune penstemon, sharp-leaved penstemon

var. *acuminatus* [HC2, IMF4, Strickler 1997]
Edwards's Bot. Reg. 15: pl. 1285. 1829.
sand dune beardtongue, sand dune penstemon, sharp-leaved penstemon

Penstemon attenuatus Douglas ex Lindl. [HC, HC2]
Edwards's Bot. Reg. 15: t. 1295. 1830.
taper-leaved beardtongue, sulphur penstemon, taper-leaved penstemon

var. *attenuatus* [HC, HC2]
Edwards's Bot. Reg. 15: pl. 1295. 1830.
taper-leaved beardtongue, sulphur penstemon, taper-leaved penstemon

Penstemon nelsoniae D.D. Keck & J.W. Thomp.

Penstemon barrettiae A. Gray [HC, HC2]
Synopsis Filicum (ed. 2) 2(1): 440. 1886.
Barrett's beardtongue

Penstemon cardwellii Howell [HC, HC2]
Fl. N.W. Amer. 5: 510-511. 1901.
Cardwell's beardtongue

Penstemon cinereus Piper [HC2]
Contr. U.S. Natl. Herb. 16: 209. 1913.
gray beardtongue

Penstemon humilis Nutt. ex A. Gray [FNA17, JPM2], misapplied
Penstemon humilis Nutt. ex A. Gray var. *humilis* [FNA17, JPM2, FPNW2], misapplied

ssp. *cinereus* [HC2]
gray beardtongue

ssp. *foliatus* D.D. Keck [HC2]
leafy gray beardtongue

Penstemon confertus Douglas ex Lindl. [HC, HC2]
Edwards\'s Bot. Reg. 15: pl. 1260. 1829.
lesser yellow beardtongue

Penstemon davidsonii Greene [HC, HC2]
Pittonia 2(11): 241. 1892.
Davidson's penstemon

var. *davidsonii* [HC, HC2]
Pittonia 2(11C): 241-242. 1892.
Davidson's beardtongue

Penstemon menziesii Hook. ssp. *davidsonii* (Greene) Piper
Penstemon menziesii Hook. ssp. *thompsonii* Pennell & D.D. Keck

var. *menziesii* (D.D. Keck) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 379. 1959.
Davidson's beardtongue

Penstemon davidsonii Greene ssp. *menziesii* D.D. Keck

Penstemon deustus Douglas ex Lindl. [HC, HC2]

hot-rock penstemon

var. *deustus* [HC, HC2]
Edwards's Bot. Reg. 16: pl. 1318. 1830.
hot-rock penstemon

var. *variabilis* (Suksd.) Cronquist [HC, HC2]
hotrock penstemon, scabland penstemon, scorched penstemon

Penstemon deustus Douglas ex Lindl. ssp. *variabilis* (Suksd.) Pennell & D.D. Keck
Penstemon variabilis Suksd.

Rare

Penstemon ellipticus J.M. Coult. & Fisher [HC, HC2]
Bot. Gaz. 18: 302. (as Pentstemon). 1893.
rockvine beardtongue

Penstemon davidsonii Greene ssp. *ellipticus* (J.M. Coult. & Fisher) B. Boivin

Penstemon eriantherus Pursh [HC, HC2]
Fl. Amer. Sept. (Pursh) 2: 737-738. 1813.
crested-tongue penstemon, fuzzy-tongue penstemon

var. *eriantherus* [HC, HC2]
Fl. Amer. Sept. 2: 737-738 [1813]. 1814.
fuzzy-tongue penstemon

Var. eriantherus is not to be expected in WA, and the one collection at WTU was collected within the city of Spokane. Two specimens of this variety were collected in WA in 1995 and are held at RM. These specimens have not been verified.

var. *whitedii* (Piper) A. Nelson [HC, HC2]
Bot. Gaz. 54(2): 148. 1912.
Whited's fuzzy-tongue penstemon

Penstemon whitedii Piper

WA endemic.

Penstemon euglaucus English [HC, HC2]
Proceedings of the Biological Society of Washington 41(45): 197-198. 1928.
glaucous beardtongue

Penstemon fruticosus (Pursh) Greene [HC, HC2]
bush penstemon, shrubby penstemon

var. *fruticosus* [HC, HC2]
Pittonia 2(11C): 239. 1892.
shrubby penstemon

var. *scouleri* (Lindl.) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 385. 1959.
shrubby penstemon

Penstemon fruticosus (Pursh) Greene ssp. *scouleri* (Lindl.) Pennell & D.D. Keck
Penstemon scouleri Lindl.

var. *serratus* (D.D. Keck) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 385. 1959.
shrubby penstemon

Penstemon fruticosus (Pursh) Greene ssp. *serratus* D.D. Keck

Penstemon gairdneri Hook. [HC, HC2]
gairdner's penstemon

var. *gairdneri* [HC, HC2]
Fl. Bor.-Amer. 2: 99. 1838.
Gairdner's penstemon

Penstemon glandulosus Douglas [HC, HC2]
Edwards\'s Bot. Reg. 15: t. 1262. 1829.
glandular penstemon

var. *chelanensis* (D.D. Keck) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 388. 1959.
sticky-stem penstemon

Penstemon glandulosus Douglas ssp. *chelanensis* D.D. Keck

var. *glandulosus* [HC, HC2]
Edwards\'s Bot. Reg. 15: pl. 1262. 1829.
sticky-stem penstemon

Penstemon hesperius M. Peck [HC2]
Torreya 32(6): 152?153. 1932.
tall beardtongue

Known only from Clark County in Washington.

Penstemon lyallii A. Gray [HC, HC2]
Syn. Fl. N. Amer., ed. 2. 2(1): 440. 1886.
Lyall's penstemon

Penstemon ovatus Douglas [HC, HC2]
Bot. Mag. 56: pl. 2903. 1829.
egg-leaf beardtongue, broad-leaved penstemon

**Penstemon palmeri* A. Gray [HC2, JPM, Strickler 1997]
Palmer's penstemon

Not in H&C. Increasingly used by transportation departments in roadside wildflower seed mixes. Reportedly escaped in eastern WA.

*var. *palmeri* [HC2, JPM]
Proc. Amer. Acad. Arts 7: 379. 1868.
Palmer's penstemon

Penstemon palmeri A. Gray ssp. *typicus* D.D. Keck

Penstemon pennellianus D.D. Keck [HC, HC2]
American Midland Naturalist 23(3): 614-615. 1940.
Blue Mountains beardtongue, Pennell's beardtongue

Penstemon procerus Douglas ex Graham [HC, HC2]
small-flowered penstemon

var. *procerus* [HC, HC2]
Edinburgh New Philos. J. 7: 348. 1829.
small-flowered penstemon

var. *tolmiei* (Hook.) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 399. 1959.
small-flowered penstemon

Penstemon pruinosus Douglas ex Lindl. [HC, HC2]
Botanical Register; consisting of coloured . . . 15: pl. 1280. 1828.
Chelan beardtongue

Penstemon richardsonii Douglas ex Lindl. [HC, HC2]
Bot. Reg. 13: t. 1121. 1828.
Richardson's penstemon

var. *richardsonii* [HC, HC2]
Bot. Reg. 13: pl. 1121. 1828.
Richardson's penstemon

Penstemon rupicola (Piper) Howell [HC, HC2]
Fl. N.W. Amer. 5: 510. 1901.

cliff beardtongue, rock penstemon

Penstemon newberryi A. Gray var. *rupicola* Piper

Penstemon rydbergii A. Nelson [HC, HC2]
Bull. Torrey Bot. Club 25(5): 281. 1898.
Rydberg's beardtongue

Penstemon serrulatus Menzies ex Sm. [HC, HC2]
The Cyclopaedia; or, universal dictionary of arts, . . . 26: Penstemon no. 5. 1813.
Cascade beardtongue, coast penstemon

Penstemon speciosus Douglas ex Lindl. [HC, HC2]
Edwards's Bot. Reg. 15: pl. 1270. 1829.
royal beardtongue, showy penstemon

Penstemon speciosus Douglas ex Lindl. ssp. *kennedyi* (A. Nelson) D.D. Keck

Penstemon subserratus Pennell [HC, HC2]
Notulae Naturae of the Academy of Natural Sciences of Philadelphia 71: 13. 1941.
fine-toothed beardtongue, subserrate beardtongue

Penstemon triphyllus Douglas ex Lindl. [HC, HC2]
Edwards's Botanical Register 15: pl. 1245. 1829.
whorled beardtongue

var. *triphyllus* [HC2]

Penstemon venustus Douglas ex Lindl. [HC, HC2]
Edwards's Botanical Register 16: pl. 1309. 1830.
elegant beardtongue, Blue Mountain penstemon

Penstemon washingtonensis D.D. Keck [HC, HC2]
American Midland Naturalist 33(1): 150-151, f. 6. 1945.
Washington beardtongue

WA endemic.

Penstemon wilcoxii Rydb. [HC, HC2]
Bulletin of the Torrey Botanical Club 28(1): 28-29. 1901.
Wilcox's beardtongue

Penstemon ovatus Douglas var. *pinetorum* Piper

Plantago [HC, HC2]
plantain

**Plantago arenaria* Waldst. & Kit. [HC2]
Descr. Icon. Pl. Hung. 1: 51, t. 51. 1799-1802. 1799.
sand plantain

Plantago indica L.
Plantago psyllium L. [HC], illegitimate name
Plantago scabra Moench

**Plantago coronopus* L. [HC, HC2, JPM]
Sp. Pl. 1: 115. 1753.
buck-horn plantain

Plantago coronopus L. ssp. *commutata* (Guss.) Pilg.

Plantago elongata Pursh [HC, HC2, JPM]
Fl. Amer. Sept. 2: 729 [1813]. 1814.
slender plantain

**Plantago lanceolata* L. [HC, HC2]
Sp. Pl. 1: 113-114. 1753.
English plantain

Plantago macrocarpa Cham. & Schltdl. [HC, HC2]
Linnaea 1(2): 166-167. 1826.
Alaska plantain, large-fruited plantain

**Plantago major* L. [HC, HC2]
Sp. Pl. 1: 112-113. 1753.
common plantain, great plantain

Plantago major L. var. *major* [HC]
Plantago major L. var. *pachyphylla* Pilg. [HC]

Plantago maritima L. [HC, HC2, JPM2]
Sp. Pl. 1: 114-115. 1753.
sea plantain, seaside plantain

Plantago patagonica Jacq. [HC, HC2]
Icon. Pl. Rar. 2: 9, pl. 306. 1786.
woolly plantain

Plantago purshii Roem. & Schult.

Plantago subnuda Pilg. [HC2, JPM]
Notizbl. Königl. Bot. Gart. Berlin 5: 260. 1912.
Mexican plantain, tall coastal plantain

Tonella [HC, HC2]
tonella

Tonella floribunda A. Gray [HC, HC2]
Geological Survey of California, Botany 1: 556. 1876.
greater baby-innocence, large-flowered tonella

Tonella tenella (Benth. ex A. DC.) A. Heller [HC, HC2]
Muhlenbergia; a journal of botany 1(1): 5. 1900.
lesser baby-innocence, small-flowered tonella

Veronica [HC, HC2]
kittentails, synthyris

Synthyris [HC, HC2]

Veronica americana Schwein. ex Benth. [HC, HC2]
Prodr. 10: 468. 1846.
American brooklime, American speedwell

**Veronica anagallis-aquatica* L. [HC, HC2]
Sp. Pl. 1: 12. 1753.
blue water speedwell

Veronica anagallis L., invalidly published, nomen nudum

**Veronica argute-serrata* Regel & Schmalh. [HC2]
Trudy Imp. S.-Peterburgsk. Bot. Sada 5: 626. 1877.
bilobed speedwell

Veronica biloba L. [HC], misapplied
See Flora of China for differences.

**Veronica arvensis* L. [HC, HC2]
Sp. Pl. 1: 13. 1753.
corn speedwell, wall speedwell

**Veronica catenata* Pennell [HC, HC2, JPM]
Rhodora 23: 37. 1921.
chain speedwell

**Veronica chamaedrys* L. [HC, HC2]
Sp. Pl. 1: 13. 1753.

Germander speedwell

Veronica cusickii A. Gray [HC, HC2]
Syn. Fl. N. Amer. 2(1): 288. 1878.
Cusick's speedwell

Veronica dissecta (Rydb.) M.M.Mart.Ort. & Albach
Taxon 53(2): 441. 2004.
feather-leaf kittentails

Synthyris dissecta Rydb. [HC2]
Synthyris pinnatifida S. Watson var. *canescens* (Pennell) Cronquist [HC]

ssp. *lanuginosa* (Piper) M.M.Mart.Ort. & Albach
(Piper) M.M.Mart.Ort. & Albach. 2004.
cut-leaf kittentails

Synthyris lanuginosa (Piper) Pennell & J.W. Thomp. [HC2]
Synthyris pinnatifida S. Watson var. *lanuginosa* (Piper) Cronquist [HC]

Endemic to Olympic Mountains in Washington.

**Veronica filiformis* Sm. [HC, HC2]
Trans. Linn. Soc. London 1: 195. 1791.
thread-stalk speedwell

**Veronica hederifolia* L. [HC2]
Sp. Pl. 1: 13-14. 1753.
ivy-leaf speedwell

Veronica hederaefolia L. [HC], orthographic variant

**Veronica ×lackschewitzii* Keller [HC2]
Bot. Közlem. 39: 154. 1942.
Lackschewitz's speedwell
(= *Veronica anagallis-aquatica* × *Veronica catenata*)

Mostly sterile hybrid; first collected in 2009 in Yakima County, WA. Uncommon in North America.

**Veronica longifolia* L. [HC, HC2]
Sp. Pl. 1: 10. 1753.
long-leaf speedwell

Veronica missurica Raf.
Amer. Monthly Mag. & Crit. Rev. 2(3): 175. 1818.
tailed kittentails

Synthyris missurica (Raf.) Pennell [HC, HC2]
Synthyris missurica (Raf.) Pennell ssp. *hirsuta* Pennell

ssp. *major* (Hook.) M.M.Mart.Ort. & Albach
Taxon 53(2): 442. 2004.
tailed kittentails

Synthyris missurica (Raf.) Pennell ssp. *major* (Hook.) Pennell [HC2]
Synthyris missurica (Raf.) Pennell var. *major* (Hook.) Pennell ex R.J. Davis
Synthyris reniformis (Douglas ex Benth.) Benth. var. *major* Hook.

ssp. *missurica*
Amer. Monthly Mag. & Crit. Rev. 2(3): 175. 1818.
mountain kittentail

Synthyris missurica (Raf.) Pennell ssp. *missurica* [HC2, KZ99]

ssp. *stellata* (Pennell) M.M.Mart.Ort. & Albach
Taxon 53(2): 442. 2004.
starry tailed kittentails

Synthyris missurica (Raf.) Pennell ssp. *stellata* (Pennell) Kartesz & Gandhi [HC2, KZ99]

Synthyris stellata Pennell

**Veronica officinalis* L. [HC, HC2]
Sp. Pl. 1: 11. 1753.
Paul's betony, common speedwell

Veronica peregrina L. [HC, HC2]
Sp. Pl. 1: 14. 1753.
purslane speedwell

*var. *peregrina* [HC, HC2]
Sp. Pl. 1: 14. 1753.
purslane speedwell

Veronica peregrina L. var. *typica* Pennell

var. *xalapensis* (Kunth) Pennell [HC, HC2]
Northw. Sci. 2, no. 3: 90. 1928.
purslane speedwell

Veronica peregrina L. ssp. *xalapensis* (Kunth) Pennell [KZ99]

**Veronica persica* Poir. [HC, HC2]
Encycl. 8: 542. 1808.
bird-eye speedwell, Persian speedwell

Veronica persica Poir. var. *aschersoniana* (Lehm.) B. Boivin
Veronica persica Poir. var. *corrensiana* (Lehm.) B. Boivin
Veronica persica Poir. var. *persica*

**Veronica polita* Fr. [HC2]
Novit. Fl. Suec. Alt. 1. 1828.
gray speedwell

Veronica regina-nivalis M.M.Mart.Ort. & Albach
Taxon 53(2): 442. 2004.
round-leaved kittentails, snow queen

Synthyris reniformis (Douglas ex Benth.) Benth. [HC, HC2]
Synthyris reniformis (Douglas ex Benth.) Benth. var. *reniformis*

Veronica rubra (Douglas ex Hook.) M.M.Mart.Ort. & Albach
Taxon 53(2): 443. 2004.
red coraldrops, red kittentails

Besseya rubra (Douglas ex Hook.) Rydb. [HC]
Synthyris rubra (Douglas ex Hook.) Benth. [HC2]

Veronica schizantha (Piper) M.M.Mart.Ort. & Albach
Taxon 53(2): 443. 2004.
fringe-petal kittentails, fringed kittentails

Synthyris schizantha Piper [HC, HC2]

Veronica scutellata L. [HC, HC2]
Sp. Pl. 1: 12. 1753.
grass-leaf speedwell, marsh speedwell, skullcap speedwell

Veronica serpyllifolia L. [HC, HC2]
Sp. Pl. 1: 12. 1753.
thyme-leaved speedwell

var. *humifusa* (Dicks.) Vahl [HC, HC2]
Enum. Pl. [Vahl] 1: 65. 1804.
thyme-leaved speedwell

Veronica serpyllifolia L. ssp. *humifusa* (Dicks.) Syme [KZ99]

*var. *serpyllifolia* [HC, HC2]

thyme-leaved speedwell

Veronica serpyllifolia L. ssp. *serpyllifolia* [KZ99]

**Veronica triphyllos* L. [HC2, JPM]
Species Plantarum 1: 14. 1753.
finger speedwell

Not in H&C.

**Veronica verna* L. [HC2]
spring speedwell

Veronica wormskjoldii Roem. & Schult. [HC, HC2]
Syst. Veg. 1: 101. 1817.
American alpine speedwell

Platanaceae [FNA3] Plane-Tree Family, Sycamore Family

**Platanus* [FNA3]
Sp. Pl. 2: 999. 1753; Gen. Pl. ed. 5, 433, 1754.

**Platanus ×hispanica* Mill. ex Münchh.
Hausvater 5: 229. 1770.
London plane
(= *Platanus occidentalis x Platanus orientalis*)

**Platanus occidentalis* L. [FNA3]
Sp. Pl. 2: 999. 1753.
American plane-tree, sycamore

Collected in a few localities along the Columbia River, where likely established from seeds dispersed from trees intentionally planted elsewhere.

Plumbaginaceae [FNA5, HC, HC2] Leadwort Family, Plumbago Family

Armeria [FNA5, HC, HC2]
Enum. Pl. 1: 333. 1809.
sea-pink, thrift

**Armeria arenaria* (Pers.) Schult. [HC2]
Syst. Veg., ed. 15 bis [Roemer & Schultes] 6: 771. 1820.
Jersey thrift

Armeria maritima (Mill.) Willd. [FNA5, HC, HC2]
Enum. Pl. 1: 333. 1809.
sea-pink, thrift

ssp. *californica* (Boiss.) A.E. Porsild [FNA5, HC2]
Bull. Natl. Mus. Canada. 135: 174. 1955.
sea-pink, thrift

Armeria andina Poepp. ex Boiss. var. *californica* Boiss.
Armeria arctica (Cham.) Wallr. ssp. *californica* (Boiss.) Abrams
Armeria maritima (Mill.) Willd. var. *californica* (Boiss.) G.H.M. Lawr. [HC]
Armeria maritima (Mill.) Willd. var. *purpurea* (W.D.J. Koch) G.H.M. Lawr. [HC], misapplied

FNA5: "In northern Washington and on Vancouver Island, populations with hairy leaves have been

called Armeria maritima var. purpurea (Koch) G. H. M. Lawrence, a dimorphic-flowered taxon from central Europe. The American monomorphic-flowered specimens thought to belong to var. purpurea are not distinct from subsp. californica, except for their hairy leaves. We include hairy-leaved specimens in subsp. californica."

*ssp. *maritima* [FNA5, HC2]
Enum. Pl. 1: 333?334. 1809.
sea-pink, thrift

Limonium [FNA5, HC2]
Gard. Dict. Abr., ed. 4. vol. 2. 1754.
[name conserved]
sea lavender, marsh rosemary, statice

**Limonium californicum* (Boiss.) A. Heller [FNA5, HC2]
Cat. N. Amer. Pl., 6. 1898.
western marsh-rosemary

Recently (2016) collected from a spreading population in a salt marsh in Whatcom County.

Polemoniaceae [HC, HC2] Phlox Family

Aliciella [HC2]
aliciella, gilia

Aliciella leptomeria (A. Gray) J.M. Porter [HC2]
Aliso 17(1): 38. 1998.
Great Basin gilia, sand gily-flower

Gilia leptomeria A. Gray [HC, IMF4, JPM, KZ99]
Gilia leptomeria A. Gray var. *leptomeria* [HC]

Rare, tracked by WNHP. G. lottiae, which was split from this taxon is more common in Washington.

Aliciella lottiae (A.G. Day) J.M. Porter [HC2]
Aliso 17(1): 40. 1998.
Lott's gily-flower

Gilia lottiae A.G. Day [KZ99, JPM]

Not in Hitchcock. This taxon was split from G. leptomeria.

Collomia [HC, HC2]
collomia

Collomia debilis (S. Watson) Greene [HC, HC2]
Pittonia 1(3): 127. 1887.
alpine collomia
(see also *Collomia larsenii*)

var. *debilis* [HC, HC2]
Pittonia 1(8): 127. 1887.
alpine collomia

Collomia debilis (S. Watson) Greene var. *ipomoea* Payson
Collomia debilis (S. Watson) Greene var. *typica* Payson

Collomia grandiflora Douglas ex Lindl. [HC, HC2]
Bot. Reg. 13: pl. 1107. 1827.
large-flowered collomia, large-flower mountain-trumpet

Collomia heterophylla Douglas ex Hook. [HC, HC2]

Bot. Mag. 65: pl. 3695. 1838.
varied-leaf collomia, variable-leaf mountain-trumpet

Collomia larsenii (A. Gray) Payson [HC2, JPM]
Univ. Wyoming Publ. Sci., Bot. 1: 85. 1924.
Larsen's alpine collomia, talus collomia

Collomia debilis (S. Watson) Greene var. *larsenii* (A. Gray) Brand [HC]

Collomia linearis Nutt. [HC, HC2]
Proc. Amer. Acad. Arts 15(1): 50. 1880.
narrow-leaf collomia, narrow-leaf mountain-trumpet

Collomia macrocalyx Leiberg ex Brand [HC, HC2]
Repert. Spec. Nov. Regni Veg. 17: 317. 1921.
bristle-flowered collomia, bristle-flower mountain-trumpet

Collomia tenella A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 8: 259. 1870.
diffuse collomia, diffuse mountain-trumpet

Collomia tinctoria Kellogg [HC, HC2]
Proc. Calif. Acad. Sci. 3(2): 17-18, f. 2. 1863.
yellow-staining collomia, yellow-staining mountain-trumpet

Eriastrum [HC, HC2]
eriastrum, woollystar

Eriastrum wilcoxii (A. Nelson) H. Mason [HC2, JPM]
Madroño 8(3): 85. 1945.
Wilcox's woolstar

Eriastrum sparsiflorum (Eastw.) H. Mason var. *wilcoxii* (A. Nelson) Cronquist [HC, IMF4]

Gilia [HC, HC2]
gilia
(see also *Aliciella*, *Ipomopsis*, *Lathrocasis*, *Microgilia*, *Navarretia*)

Gilia capitata Sims [HC, HC2]
Bot. Mag. 53: t. 2698. 1826.
bluehead gilia, globe gilia

ssp. *capitata* [HC2, JPM]
Bot. Mag. 53: pl. 2698. 1826.
bluefield gilia, globe gilia

Gilia inconspicua (Sm.) Sweet [HC2, JPM]
Hort. Brit. 286. 1826.
shy gily-flower

Gilia sinuata Douglas ex Benth. [HC, HC2, JPM]
Prodr. 9: 313. 1845.
shy gilia, sinuate gilia, rosy gily-flower

Gilia inconspicua (Sm.) Sweet var. *sinuata* (Douglas ex Benth.) A. Gray [IMF4]
Gilia sinuata Dougl. var. *sinuata* [HC]

Ipomopsis [HC2]
ipomopsis, skyrocket

Ipomopsis aggregata (Pursh) V.E. Grant [HC2]
Aliso 3: 360. 1956.
scarlet gilia

Cantua aggregata Pursh
Gilia aggregata (Pursh) Spreng. [HC]
Gilia pulchella

ssp. *aggregata* [HC2, JPM2]
Aliso 3(3): 360. 1956.
scarlet gilia, skyrocket

Gilia aggregata (Pursh) Spreng. ssp. *euaggregata* Brand
Gilia aggregata (Pursh) Spreng. var. *aggregata* [HC, IMF4]
Ipomopsis aggregata (Pursh) V.E. Grant ssp. *formosissima* (Greene) Wherry [HC2, JPM], misapplied
Ipomopsis aggregata (Pursh) V.E. Grant var. *aggregata* [IFBC]

Ipomopsis congesta (Hook.) V.E. Grant [HC2]
Aliso 3: 361. 1956.
ball-head gilia, many-flowered gilia

Gilia congesta Hook. [HC]

ssp. *congesta* [HC2, JPM]
Aliso 3(3): 361. 1956.
ball-head gilia, many-flowered gilia

Gilia burleyana A. Nelson
Gilia congesta Hook. var. *burleyana* (A. Nelson) Constance & Rollins
Gilia congesta Hook. var. *congesta* [HC, IMF4]

Lathrocasis [HC2]
lathrocasis

Lathrocasis tenerrima (A. Gray) L.A. Johnson [HC2, JPM2]
Aliso 19(1): 67. 2000.
delicate gilia

Gilia tenerrima A. Gray [HC]

Leptosiphon [HC2]
leptosiphon, linanthus

Linanthastrum [HC]

Leptosiphon bicolor Nutt. [HC2, JPM2]
Proc. Acad. Nat. Sci. Philadelphia 4(1): 11. 1848.
bicolored babystars, bicolored linanthus
(see also *Leptosiphon minimus*)

Linanthus bicolor (Nutt.) Greene [HC]
Linanthus bicolor (Nutt.) Greene var. *bicolor* [HC]

Leptosiphon bolanderi (A. Gray) J.M. Porter & L.A. Johnson [HC2, JPM2]
Aliso 19(1): 80. 2000.
Bolander's desert-trumpets, Baker's linanthus

Linanthus bakeri H. Mason [HC]
Linanthus bolanderi (A. Gray) Greene [JPM]

Leptosiphon harknessii (Curran) J.M. Porter & L.A. Johnson [HC2, JPM2]
Aliso 19(1): 80. 2000.
Harkness's desert-trumpets, three-seed desert-trumpets

Linanthus harknessii (Curran) Greene [HC]
Linanthus harknessii (Curran) Greene ssp. *condensatus* H. Mason

Leptosiphon liniflorus (Benth.) J.M. Porter & L.A. Johnson [HC2, JPM2]
Aliso 19(1): 81. 2000.
flax-flower desert-trumpets, thread-stem linanthus, thread-stemmed linanthus

Gilia pharnaceoides Benth.
Linanthus liniflorus (Benth.) Greene [JPM]
Linanthus liniflorus (Benth.) Greene ssp. *pharnaceoides* (Benth.) H. Mason
Linanthus liniflorus (Benth.) Greene var. *pharnaceoides* (Benth.) A. Gray

Linanthus pharnaceoides (Benth.) Greene [HC, IMF]

Leptosiphon minimus (H. Mason) R. Patt. [IPNI]
Phytoneuron 2021-58: 1. 2021.
true babystars

Leptosiphon minimus (H. Mason) Battaglia is an invalid name (Phytoneuron 2021-58: 1. 2021).

Leptosiphon nuttallii (A. Gray) J.M. Porter & L.A. Johnson [HC2]
Aliso 19(1): 81. 2000.
Nuttall's leptosiphon

Gilia nuttallii A. Gray
Leptodactylon nuttallii (A. Gray) Rydb.
Linanthastrum nuttallii (A. Gray) Ewan [HC, IMF4]
Linanthus nuttallii (A. Gray) Greene ex Milliken

ssp. *nuttallii* [HC2, JPM2]
Aliso 19(1): 81. 2000.
Nuttall's leptosiphon

Linanthus nuttallii (A. Gray) Greene ex Milliken ssp. *nuttallii*

ssp. *pubescens* (R. Patt.) J.M. Porter & L.A. Johnson [HC2]
Aliso 19(1): 81. 2000.
Nuttall's leptosiphon

Linanthastrum nuttallii (A. Gray) Ewan var. *pubescens* (R. Patt.) Cronquist
Linanthus nuttallii (A. Gray) Greene ex Milliken ssp. *pubescens* R. Patt.

Occurs in California and Nevada; disjunct in the Wenatchee Mountains of Washington.

Leptosiphon septentrionalis (H. Mason) J.M. Porter & L.A. Johnson [HC2, JPM2]
Aliso 19(1): 81. 2000.
northern desert-trumpets, northern linanthus

Gilia septentrionalis (H. Mason) H. St. John
Linanthus harknessii (Curran) Greene var. *septentrionalis* (H. Mason) Jeps. & V. Bailey
Linanthus septentrionalis H. Mason [HC, IMF4, JPM, KZ99]

Linanthus [HC, HC2]
linanthus, prickly-phlox

Linanthus pungens (Torr.) J.M. Porter & L.A. Johnson [HC2, JPM2]
Aliso 19(1): 82. 2000.
prickly phlox

Gilia hallii Parish
Gilia pungens (Torr.) Benth.
Gilia pungens (Torr.) Benth. var. *hookeri* (Douglas ex Hook.) A. Gray
Leptodactylon hazeliae M. Peck
Leptodactylon lilacinum Greene ex Brand
Leptodactylon pungens (Torr.) Nutt. [HC, IMF4]
Leptodactylon pungens (Torr.) Nutt. ssp. *eupungens* (Brand) Wherry
Leptodactylon pungens (Torr.) Nutt. ssp. *hallii* (Parish) H. Mason
Leptodactylon pungens (Torr.) Nutt. ssp. *hazeliae* (M. Peck) Meinke
Leptodactylon pungens (Torr.) Nutt. ssp. *hookeri* (Benth.) Wherry
Leptodactylon pungens (Torr.) Nutt. ssp. *pulchriflorum* (Brand) H. Mason
Leptodactylon pungens (Torr.) Nutt. ssp. *squarrosum* (A. Gray) Tidestr.
Leptodactylon pungens (Torr.) Nutt. var. *hallii* (Parish) Jeps.
Leptodactylon pungens (Torr.) Nutt. var. *hookeri* (Benth.) Jeps.

Microgilia [HC2]
gilia

Microgilia minutiflora (Benth.) J.M. Porter & L.A. Johnson [HC2]

Aliso 19(1): 79. 2000.
small-flowered gilia, small-flower skyrocket

Gilia minutiflora Benth. [HC]
Ipomopsis minutiflora (Benth.) V.E. Grant [IFBC]

Microsteris [HC, HC2]
microsteris

Microsteris gracilis (Hook.) Greene [HC, HC2, JPM2]
Pittonia 3: 300. 1898.
pink microsteris, slender phlox

Gilia gracilis Hook.
Gilia gracilis Hook. var. *humilior* (Hook.) H. St. John
Microsteris gracilis (Hook.) Greene ssp. *humilis* (Greene) Brand
Microsteris gracilis (Hook.) Greene var. *gracilis* [HC, IMF4]
Microsteris gracilis (Hook.) Greene var. *humilior* (Hook.) Cronquist [HC, IMF4]
Microsteris humilis Greene
Microsteris micrantha (Kellogg) Greene
Phlox gracilis (Hook.) Greene
Phlox gracilis (Hook.) Greene ssp. *gracilis* [KZ99, JPM]
Phlox gracilis (Hook.) Greene ssp. *humilis* (Greene) H. Mason [KZ99]
Phlox gracilis (Hook.) Greene var. *humilior* (Hook.) B. Boivin

Navarretia [HC, HC2]
navarretia, pincushion-plant

Navarretia breweri (A. Gray) Greene [HC, HC2]
Pittonia 1: 137. 1887.
Brewer's navarretia, yellow-flowered navarretia, yellow pincushion-plant

Navarretia divaricata Greene [HC, HC2]
Pittonia 1(3): 136. 1887.
divaricate navarretia, mountain navarretia, divaricate pincushion-plant, mountain pincushion-plant

ssp. *divaricata* [HC2, JPM2]
Pittonia 1: 136. 1887.
mountain navarretia

Navarretia intertexta (Benth.) Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 2(8): 75. 1837.
needle-leaf navarretia
(see also *Navarretia propinqua*)

Navarretia intertexta (Benth.) Hook. ssp. *intertexta* [JPM]
Navarretia intertexta Nutt. var. *intertexta* [HC]
Navarretia minima Nutt. var. *intertexta* (Benth.) B. Boivin

Navarretia leucocephala Benth. [HC2]
Pl. Hartw. [Bentham] 324. 1849.
least navarretia

ssp. *diffusa* Bjork [HC2]
Madroño 49(3): 165. 2002.
diffuse navarretia

ssp. *minima* (Nutt.) A.G. Day [HC2, JPM]
Novon 3(4): 337. 1993.
least navarretia

Navarretia minima Nutt. [HC, IMF4]

Navarretia linearifolia (Howell) L. A. Johnson [HC2]
Syst. Bot. 35(3): 625. 2010.
linear-leaved navarretia

ssp. *linearifolia* [HC2]
Syst. Bot. 35(3): 625. 2010.
linear-leaved navarretia, linear-leaved pincushion-plant

See Syst. Bot. 35(3): 625 for how G. capillaris/N. capillaris are misapplied names for this species.

Navarretia propinqua Suksd. [HC2]
Allg. Bot. Z. Syst. 12: 26. 1904.
Great Basin navarretia, near navarretia

Gilia propinqua (Suksd.) H. St. John
Navarretia intertexta (Benth.) Hook. ssp. *propinqua* (Suksd.) A.G. Day [JPM2]
Navarretia intertexta (Benth.) Hook. var. *propinqua* (Suksd.) Brand [HC, IMF4]

Navarretia sinistra (M.E. Jones) L.A. Johnson [HC2]
Aliso 19(1): 68. 2000.
Alva Day's pincushion-plant

See Aliso 19(1): 68. 2000 for details of how this species relates to N. capillaris.

Navarretia squarrosa (Eschsch.) Hook. & Arn. [HC, HC2]
Bot. Beechey Voy. 368. 1839.
skunkweed

Gilia squarrosa (Eschsch.) Hook. & Arn.

Navarretia tagetina Greene [HC, HC2]
Pittonia 1: 137. 1887.
marigold navarretia, northern navarretia, marigold pincushion-plant

Phlox [HC, HC2]
phlox, wild sweet-william

Phlox caespitosa Nutt. [HC, HC2]
J. Acad. Nat. Sci. Philadelphia 7(1): 41, pl. 6, f. 1. 1834.
clumped phlox, clustered phlox, stiff phlox, tufted phlox

Phlox caespitosa Nutt. ssp. *eucaespitosa* Brand
Phlox diffusa Benth. ssp. *scleranthifolia* (Rydb.) Wherry
Phlox douglasii Hook.
Phlox douglasii Hook. ssp. *eudouglasii* Brand
Phlox douglasii Hook. ssp. *rigida* (Benth.) Wherry
Phlox rigida Benth.
Phlox scleranthifolia Rydb.

Phlox colubrina Wherry & Constance [HC, HC2]
American Midland Naturalist 19(2): 433-435, f. 1-2. 1938.
Snake River phlox

Phlox diffusa Benth. [HC, HC2]
Pl. Hartw. [Bentham] 325 (-326) 1849.
spreading phlox

Phlox cyanea Eastw.
Phlox diffusa Benth. ssp. *longistylis* Wherry [KZ99]
Phlox diffusa Benth. ssp. *subcarinata* Wherry [JPM]
Phlox diffusa Benth. var. *longistylis* (Wherry) M. Peck [HC]

Phlox hendersonii (E.E. Nelson) Cronquist [HC, HC2]
Vasc. Pl. Pacific NW 4: 130. 1959.
Henderson's phlox

Phlox douglasii Hook. ssp. *hendersonii* (E.E. Nelson) Wherry

Phlox hoodii Richardson [HC, HC2]
Narr. Journey Polar Sea 733, pl. 28. 1823.
Hood's phlox

ssp. *canescens* (Torr. & A. Gray) Wherry [HC2, IMF4, JPM, KZ99]
Proc. Acad. Nat. Sci. Philadelphia 90: 139. 1938.
carpet phlox, Hood's phlox

Phlox canescens Torr. & A. Gray
Phlox hoodii Richardson var. *canescens* (Torr. & A. Gray) M. Peck
Phlox muscoides Nutt. [HC]

Phlox longifolia Nutt. [HC, HC2]
J. Acad. Nat. Sci. Philadelphia 7(1): 41-42. 1834.
long-leaf phlox

Phlox grahamii Wherry
Phlox longifolia Nutt. ssp. *calva* Wherry
Phlox longifolia Nutt. ssp. *compacta* (Brand) Wherry
Phlox longifolia Nutt. ssp. *cortezana* (A. Nelson) Wherry
Phlox longifolia Nutt. ssp. *humilis* (Brand) Wherry
Phlox longifolia Nutt. ssp. *longifolia* [KZ99]
Phlox longifolia Nutt. ssp. *longipes* (M.E. Jones) Wherry
Phlox longifolia Nutt. ssp. *typica* Wherry
Phlox longifolia Nutt. ssp. *viridis* (E.E. Nelson) Wherry
Phlox longifolia Nutt. var. *linearifolia* (Hook.) Brand
Phlox longifolia Nutt. var. *longipes* (M.E. Jones) M. Peck
Phlox longifolia Nutt. var. *puberula* E.E. Nelson
Phlox longifolia Nutt. var. *viridis* (E.E. Nelson) Peabody
Phlox stansburyi (Torr.) A. Heller [JPM]
Phlox viridis E.E. Nelson
Phlox viridis E.E. Nelson ssp. *compacta* (Brand) Wherry
Phlox viridis E.E. Nelson ssp. *longipes* (M.E. Jones) Wherry
Phlox viridis E.E. Nelson ssp. *viridis*

Phlox multiflora A. Nelson [HC, HC2]
Bull. Torrey Bot. Club 25(5): 278. 1898.
many-flowered phlox

Phlox solivaga Mayfield & Darrach [HC2]
Phytoneuron 2015-25: 1?12. 2015.
yeti phlox

Phlox solivagus Mayfield & Darrach, orthographic variant

Recently (2015) described from the Blue Mts.

Phlox speciosa Pursh [HC, HC2, JPM2]
Fl. Amer. Sept. 1: 149. [1813]. 1814.
showy phlox

Phlox speciosa Pursh ssp. *lanceolata* (E.E. Nelson) Wherry
Phlox speciosa Pursh ssp. *lignosa* Brand
Phlox speciosa Pursh ssp. *nitida* (Suksd.) Wherry [JPM]
Phlox speciosa Pursh ssp. *occidentalis* (Durand ex Torr.) Wherry
Phlox speciosa Pursh ssp. *speciosa*
Phlox speciosa Pursh var. *nitida* Suksd.
Phlox speciosa Pursh var. *occidentalis* (Durand ex Torr.) M. Peck

Phlox viscida E.E. Nelson [HC, HC2]
Revis. W. N. Amer. Phlox. 24. 1899.
sticky phlox

Polemonium [HC, HC2]
Jacob's-ladder, polemonium, sky-pilot

Polemonium californicum Eastw. [HC2, JPM]
Bot. Gaz. 37(6): 437-438. 1904.

low Jacob's-ladder

Polemonium columbianum Rydb.
Polemonium pulcherrimum Hook. ssp. *tricolor* (Eastw.) Brand
Polemonium pulcherrimum Hook. var. *calycinum* (Eastw.) Brand [HC, IMF4]

Polemonium carneum A. Gray [HC, HC2, JPM]
Syn. Fl. N. Amer. 2(1): 151. 1878.
royal Jacob's-ladder, great polemonium, salmon polemonium

Polemonium carneum A. Gray ssp. *luteum* (A. Gray) Brand

Polemonium elegans Greene [HC, HC2]
Pittonia 3(18D): 305. 1898.
elegant Jacob's-ladder, elegant polemonium

Probably related to P. chartaceum H. Mason [JPM].

Polemonium micranthum Benth. [HC, HC2, JPM2]
Prodr. 9: 318. 1845.
annual Jacob's-ladder, annual polemonium

Polemoniella micrantha (Benth.) A. Heller

Polemonium occidentale Greene [HC, HC2]
Pittonia 2(8): 75. 1890.
western Jacob's-ladder, western polemonium

Polemonium caeruleum L. ssp. *amygdalium* (Wherry) Munz
Polemonium caeruleum L. ssp. *occidentale* (Greene) J.F. Davidson
Polemonium caeruleum L. var. *pterospermum* Benth.
Polemonium helleri Brand
Polemonium intermedium (Brand) Rydb.
Polemonium occidentale Greene ssp. *amygdalium* Wherry
Polemonium occidentale Greene ssp. *occidentale* [JPM2]
Polemonium occidentale Greene ssp. *typicum* Wherry

Polemonium pectinatum Greene [HC, HC2]
Bull. Calif. Acad. Sci. 1(1): 10. 1884.
Washington Jacob's-ladder, Washington polemonium

Polemonium pulcherrimum Hook. [HC, HC2]
Bot. Mag. 57: t. 2979. 1830.
showy polemonium
(see also *Polemonium californicum*)

var. *pulcherrimum* [HC, HC2, JPM]
Bot. Mag. 57: pl. 2979. 1830.
showy Jacob's-ladder

Polemonium berryi Eastw.
Polemonium fasciculatum Eastw.
Polemonium haydenii A. Nelson
Polemonium humile Lindl.
Polemonium lindleyi Wherry
Polemonium pilosum (Greenm.) G.N. Jones
Polemonium pulcherrimum Hook. ssp. *pulcherrimum* [KZ99]
Polemonium pulcherrimum Hook. var. *lindleyi* (Wherry) J.P. Anderson
Polemonium pulcherrimum Hook. var. *pilosum* (Greenm.) Brand [JPM2]
Polemonium shastense Baker ex Eastw.

Polemonium viscosum Nutt. [HC, HC2]
J. Acad. Nat. Sci. Philadelphia, ser. 2, 1: 154. 1848.
sticky Jacob's-ladder, sticky polemonium

Polemonium viscosum Nutt. ssp. *genuinum* Wherry
Polemonium viscosum Nutt. ssp. *lemmonii* (Brand) Wherry

Rare, tracked by the WNHP.

Polygalaceae [HC2] Milkwort Family

**Polygala* [HC2]
milkwort

**Polygala vulgaris* L. [HC2]
Sp. Pl. 2: 702. 1753.

Recently collected (2014) in Clark County as an apparent garden escape in a nearby natural area.

Polygonaceae [FNA5, HC, HC2] Buckwheat Family

The family Polygonaceae is treated in Volume 5 of the Flora of North America series. Significant taxonomic and nomenclatural changes were made in that treatment. Efforts to incorporate those changes here are ongoing (November, 2007).

Aconogonon [FNA5, HC2]
fleeceflower

Aconogonon davisiae (W.H. Brewer ex A. Gray) Soják [FNA5, HC2]
Preslia. 46: 151. 1974.
Newberry's fleeceflower, Davis' knotweed, Davis's knotweed

Aconogonon davisiae (W.H. Brewer ex A. Gray) Soják var. *davisiae* [FNA5]
Aconogonon davisiae (W.H. Brewer ex A. Gray) Soják var. *glabrum* (G.N. Jones) S.P. Hong [FNA5]
Polygonum davisiae W.H. Brewer ex A. Gray [HC]
Polygonum newberryi Small [HC]
Polygonum newberryi Small var. *glabrum* G.N. Jones [HC]
Polygonum newberryi Small var. *newberryi* [HC]

Aconogonon phytolaccifolium (Meisn. ex Small) Rydb. [FNA5, HC2]
Fl. Rocky Mts. 1061. 1917. (as Aconogonum phytolaccaefolium).
alpine fleeceflower

Polygonum phytolaccaefolium Meisn. ex Small [HC], orthographic variant
Polygonum phytolaccifolium Meisn. ex Small

var. *phytolaccifolium* [FNA5, HC2]
In P. A. Rydberg, Fl. Rocky Mts. 1061. 1917. (as Aconogonum phytolaccaefolium). 1917.
poke knotweed

Aconogonon phytolaccaefolium (Meisn. ex Small) Rydb. var. *phytolaccaefolium*, orthographic variant
Polygonum polymorphum

Bistorta [FNA5, HC2]
Meth. Pl.. 24. 1754.
bistort

Bistorta bistortoides (Pursh) Small [FNA5, HC2]
Bull. Torrey Bot. Club. 33: 57. 1906.
American bistort, western bistort

Polygonum bistortoides Pursh [HC]
Polygonum glastifolium Greene
Polygonum linearifolium

Polygonum vulcanicum Greene

FNA5: "Infrequent specimens of Bistorta bistortoides have basal leaf blades that are lance-ovate and abruptly contracted at the bases, and petioles distinctly winged distally, similar to those of B. officinalis."

Bistorta vivipara (L.) Delarbre [FNA5, HC2]
Fl. Auvergne, ed. 2. 2: 516. 1800.
alpine bistort, serpent-grass

Bistorta vivipara (L.) Delarbre ssp. *macounii* (Small ex J.M. Macoun) Soják
Persicaria vivipara (L.) Ronse Decr.
Polygonum viviparum L. [HC, ILBC4]
Polygonum viviparum L. var. *macounii* (Small ex J.M. Macoun) Hultén

FNA5: "Bistorta vivipara is highly variable morphologically and cytologically. Robust plants with large leaves, compact spikes, and persistent bulblets have been named subsp. macounii. Abortion of stamens, production of bulblets, and the rarity of fruits suggest that reproduction is largely asexual; fruits and seedlings are produced rarely (N. Söyrinki 1989). B. Jonsell and T. Karlsson (2000+, vol. 1) summarized chromosome numbers that include 2n = 66, ca. 77, ca. 80, 88, 99, ca. 100, 110, 120, and ca. 132."

Chorizanthe [FNA5, HC, HC2]
Trans. Linn. Soc. London. 17: 416, plate 17, fig. 11; plate 19. 1836.
chorizanthe, spineflower

Chorizanthe watsonii Torr. & A. Gray [FNA5, HC, HC2]
Proc. Amer. Acad. Arts. 8: 199. (as watsoni). 1870.
five-tooth spineflower, Watson's spineflower

FNA5: "Chorizanthe watsonii is widely distributed in the cold desert of the Great Basin and in the northern part of the warmer Mojave Desert. Plants in the northern part of the range (especially on the Palouse Prairie of south-eastern Washington) usually have three stamens."

Eriogonum [FNA5, HC, HC2]
Fl. Bor.-Amer. 1: 246, plate 24. 1803.
buckwheat, wild buckwheat, eriogonum, sulfur flower, umbrella-plant

Eriogonum baileyi S. Watson [FNA5, HC, HC2]
Proc. Amer. Acad. Arts. 10: 348. 1875.
Bailey's buckwheat

var. *baileyi* [FNA5, HC2]
Proc. Amer. Acad. Arts. 10: 348. 1875.
Bailey's buckwheat

Eriogonum vimineum Douglas ex Benth. var. *multiradiatum* S. Stokes
Eriogonum vimineum Douglas ex Benth. var. *porphyreticum* (S. Stokes ex M.E. Jones) S. Stokes
Eriogonum vimineum Douglas ex Benth. var. *restioides* (Gand.) S. Stokes

FNA5: "Variety baileyi basically is a taxon of arid regions of the far West, being found primarily in California and Nevada northward through eastern Oregon to eastern Washington. Isolated populations are known from south-central Idaho and from Beaver County, Utah."

Eriogonum cernuum Nutt. [FNA5, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia. 4: 14. 1848.
nodding buckwheat

Eriogonum cernuum Nutt. ssp. *tenue* (Torr. & A. Gray) S. Stokes
Eriogonum cernuum Nutt. var. *cernuum* [JPM]
Eriogonum cernuum Nutt. var. *psammophilum* S.L. Welsh
Eriogonum cernuum Nutt. var. *tenue* Torr. & A. Gray
Eriogonum cernuum Nutt. var. *viminale* (S. Stokes) Reveal

Reported by Reveal (1989c) from "southern Washington", and from Franklin Co. by KZ. One immature specimen from Benton Co., WA (WTU) may be this species.

Eriogonum codium Reveal, Caplow & K. A. Beck [FNA5, HC2]

Rhodora. 97: 350, fig. 1. 1997.
basalt desert buckwheat, Umtanum buckwheat

Endemic to Benton Co. FNA5: "Eriogonum codium is a potentially endangered species known from a single site on volcanic bluffs overlooking the Columbia River in Hanford Research National Monument in Benton County. It is worthy of cultivation as a rock-garden plant, although little or no sexual reproduction is known in the natural population. The Umtanum Desert wild buckwheat is a candidate for federal listing and is considered an endangered species by the state of Washington. Much of the population was destroyed in a man-caused fire in 1997. The species is in the Center for Plant Conservation\\'s National Collection of Endangered Plants."

Eriogonum compositum Douglas ex Benth. [FNA5, HC, HC2]
Edwards's Bot. Reg. 21: plate 1774.
arrow-leaf buckwheat, northern buckwheat

var. *compositum* [FNA5, HC, HC2]
Edwards's Bot. Reg. 21: plate 1774.
northern buckwheat

Eriogonum compositum Douglas ex Benth. var. *citrinum* S. Stokes
Eriogonum compositum Douglas ex Benth. var. *pilicaule* H. St. John & F.A. Warren
Eriogonum johnstonii
Eriogonum pilicaule

FNA5: "Variety compositum is widespread and common from central-northern Washington and west-central Idaho south through Oregon to northern California."

var. *lancifolium* H. St. John & F.A. Warren [FNA5, HC, HC2]
Res. Stud. State Coll. Wash. 1: 88. 1929.
wild buckwheat

Eriogonum compositum Douglas ex Benth. ssp. *lancifolium* (H. St. John & F.A. Warren) S. Stokes

FNA5: "Variety lancifolium is local and usually uncommon in the mountains of Chelan, Kittitas, Okanogan, and Yakima counties in eastern Washington."

var. *leianthum* Hook. [FNA5, HC, HC2]
Hooker's J. Bot. Kew Gard. Misc. 5: 264. 1853.
smooth arrow-leaf wild buckwheat

FNA5: "Variety leianthum is mostly occasional to locally common in eastern Washington, northwestern and west-central Idaho, and northeastern Oregon."

Eriogonum douglasii Benth. [FNA5, HC, HC2]
Prodr. 14: 9. 1856.
Douglas's buckwheat
(see also *Eriogonum sphaerocephalum*)

var. *douglasii* [FNA5, HC, HC2]
in A. P. de Candolle and A. L. P. P. de Candolle, Prodr. 14: 9. 1856.
Douglas' buckwheat

Eriogonum caespitosum Nutt. var. *douglasii* (Benth.) M.E. Jones

FNA5: "Variety douglasii is widespread in scattered, disjunct populations in southeastern Washington (Columbia, Douglas, Ferry, Kittitas, Klickitat, and Yakima counties) and northeastern Oregon (Baker, Gilliam, Grant, Jefferson, Malheur, Sherman, Union, Wallowa, and Wasco counties)."

Eriogonum elatum Douglas ex Benth. [FNA5, HC, HC2]
Trans. Linn. Soc. London. 17: 413. 1836.
rush buckwheat, tall buckwheat

var. *elatum* [FNA5, HC2]
Trans. Linn. Soc. London. 17: 413. 1836.
tall buckwheat

FNA5: "Variety elatum is found mainly along the eastern edge of the Cascade Ranges in Washington south into northern Oregon, and skips to the Siskiyou/Trinity mountains of southwestern Oregon and

northwestern California."

Eriogonum flavum Nutt. [FNA5, HC, HC2]
Cat. Pl. Upper Louisiana. no. 34. 1813.
yellow buckwheat

var. *piperi* (Greene) M.E. Jones [FNA5, HC, HC2]
Contr. W. Bot. 11: 7. 1903.
Piper's buckwheat, yellow buckwheat

Eriogonum flavum Nutt. ssp. *piperi* (Greene) S. Stokes
Eriogonum piperi Greene

FNA5: "Variety piperi is the common and widespread phase of the species, found mainly west of the Continental Divide in southern Alberta, southern British Columbia, eastern Washington, northern Idaho, and western Montana south into northeastern Oregon and northwestern Wyoming. It is only slightly variable, the major exception being depauperate individuals at high elevations in harsh exposures; these have been recognized by some as var. polyphyllum. The length of the stipelike base shortens from west to east, but only rarely are individuals in Montana troublesome to place either here or in var. flavum. The plants do well in cultivation and are now widely available."

Eriogonum heracleoides Nutt. [FNA5, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 7: 49, plate 7. 1834.
bractless parsnip-flowered wild buckwheat, parsnip-flowered buckwheat, parsnip-flowered eriogonum

Eriogonum angustifolium Nutt.
Eriogonum caespitosum Nutt. ssp. *ramosum* (Piper) S. Stokes
Eriogonum heracleoides Nutt. var. *angustifolium* (Nutt.) Torr. & A. Gray [HC]
Eriogonum heracleoides Nutt. var. *heracleoides* [FNA5, HC]
Eriogonum heracleoides Nutt. var. *leucophaeum* Reveal [FNA5]
Eriogonum heracleoides Nutt. var. *minus* Benth. [HC]

FNA5: "Variety heracleoides is widespread and usually common. It is highly variable. Narrow-leaved populations of southern British Columbia, northern Washington, Idaho, and northwestern Montana occasionally are segregated as var. angustifolium, but plants in southeastern Oregon and northeastern Nevada can have narrower leaves during years of limited precipitation, and the same condition is found in scattered populations elsewhere. Plants found farther to the east consistently have broader leaves. This expression of the species is most frequently seen in cultivation."

Eriogonum maculatum A. Heller [FNA5, HC, HC2]
Muhlenbergia. 2: 188. 1906.
spotted buckwheat

Eriogonum angulosum Benth. ssp. *maculatum* (A. Heller) S. Stokes
Eriogonum angulosum Benth. var. *maculatum* (A. Heller) Jeps.
Eriogonum angulosum Benth. var. *rectipes* Gand.

Known only from historical record (1884) in Yakima Co., and considered extirpated in Washington.

Eriogonum marifolium Torr. & A. Gray [FNA5, HC, HC2]
Proc. Amer. Acad. Arts. 8: 161. 1870.
marum-leaf wild buckwheat, mountain buckwheat

var. *marifolium* [FNA5, HC2]
Proc. Amer. Acad. Arts. 8: 161. 1870.
marum-leaf wild buckwheat, mountain buckwheat

Eriogonum marifolium Torr. & A. Gray var. *apertum* S. Stokes

FNA5 says that this taxon occurs in Yakima County. Both H&C and JPM state range to OR. FNA5: "Variety marifolium occurs in widely scattered locations, often on volcanic peaks, in Washington (Yakima County), Oregon (Crook, Deschutes, Douglas, Hood River, Jackson, Jefferson, Klamath, Lane, Linn, and Marion counties), and north-central California (to Shasta County)."

Eriogonum microtheca Nutt. [FNA5, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia. 4: 15. (as microtheca). 1848.
slender buckwheat

Eriogonum microthecum Nutt., orthographic variant

From IPNI:"Nuttall used the epithet "microtheca" as a noun in apposition," and this spelling is, therefore, grammatically correct." Furthermore, an attempt to overturn the original orthography was not recommended by the Nomenclature Committee for Vascular Plants, Applequist, Taxon 63(6): 1368 (2014), nor by the General Committee.

var. *laxiflorum* Hook. [FNA5, HC, HC2]

Hooker's J. Bot. Kew Gard. Misc. 5: 264. (as microtheca). 1853.
Great Basin slender buckwheat, Great Basin wild buckwheat

Eriogonum confertiflorum Benth.
Eriogonum microtheca Nutt. ssp. *confertiflorum* (Benth.) S. Stokes
Eriogonum microtheca Nutt. ssp. *laxiflorum* (Hook.) S. Stokes
Eriogonum microthecum Nutt. var. *laxiflorum* Hook., orthographic variant

FNA5: "Variety laxiflorum is the common expression of the species in the northern part of the species\\' range. It occurs in northern Arizona, eastern California, western Colorado, central and southern Idaho, southwestern Montana, Nevada, eastern Oregon, northern and western Utah, eastern Washington, and southwestern Wyoming. It overlaps morphologically with var. simpsonii in northern Arizona. The variety is the primary host plant for the rare Mattoni blue butterfly (Euphilotes rita mattoni)."

Eriogonum niveum Douglas ex Benth. [FNA5, HC, HC2]

Trans. Linn. Soc. London. 17: 414. 1836.
snow buckwheat

Eriogonum niveum Douglas ex Benth. ssp. *decumbens* (Benth.) S. Stokes
Eriogonum niveum Douglas ex Benth. ssp. *dichotomum* (Douglas ex Benth.) S. Stokes

FNA5: "Eriogonum niveum is a highly variable species with a multitude of minor expressions that do not appear to have any biogeographic or taxonomic significance. The species is found mainly on the grassy plains east of the Cascade Range in southern British Columbia, west-central Idaho, northeastern Oregon, and eastern Washington. Some populations closely approach E. strictum var. proliferum, but the densely lanate leaves and semileaflike to leaflike bracts nearly always distinguish E. niveum from that taxon where their ranges overlap. It may well prove that E. niveum would be better treated as a subspecies of E. strictum, but the nomenclatural combination is not available and it is not suggested here. The plants do well in cultivation."

Eriogonum nudum Douglas ex Benth. [FNA5, HC, HC2]

Trans. Linn. Soc. London. 17: 413. 1836.
bare-stem buckwheat, naked buckwheat

var. *nudum* [FNA5, HC2]

Trans. Linn. Soc. London. 17: 413. 1836.
barestem buckwheat, naked buckwheat

Eriogonum latifolium Sm. var. *parvulum* S. Stokes

FNA5: "Variety nudum is the low-elevation tetraploid expression of the species, found mainly in the Coast Ranges and interior valleys from southern Washington through Oregon to California. It is replaced by var. deductum at higher elevations in the Sierra Nevada. Yellow-flowered populations occur rarely in the Siskiyou Mountains of California and Oregon."

Eriogonum ovalifolium Nutt. [FNA5, HC, HC2]

J. Acad. Nat. Sci. Philadelphia. 7: 50, plate 8, fig. 1. 1834.
cushion buckwheat, oval-leaved eriogonum

var. *nivale* (Canby ex Coville) M.E. Jones [FNA5, HC, HC2]

Contr. W. Bot. 11: 8. 1903.
Sierra cushion buckwheat

Eriogonum nivale Canby ex Coville
Eriogonum rhodanthum A. Nelson & P.B. Kenn.

FNA5: "Variety nivale is the common high-elevation expression of the species in desert ranges of the Great Basin and in the Sierra-Cascade cordillera. In northwestern Washington, some plants of var.

nivale have scapes to 13 cm (especially in Chelan County). They are well removed from var. purpureum, and have the dense, almost brilliant white tomentum of var. nivale."

var. *ovalifolium* [FNA5, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 7: 50, plate 8, fig. 1. 1834.
cushion wild buckwheat

Eriogonum ovalifolium Nutt. var. *multiscapum* Gand.
Eriogonum ovalifolium Nutt. var. *nevadense* Gand.

FNA5: "Variety ovalifolium is found in eastern California, northwestern Colorado, Idaho, Montana, Nevada, eastern Oregon, Utah, eastern Washington, and Wyoming. It is less widespread than var. purpureum and generally tends to flower earlier than that variety. The two sometimes occur together but do not seem to intergrade, although in some cases the only distinguishing feature is flower color. It is important to note that the yellowish hue of var. ovalifolium will fade in some herbarium material, making identification of older or less well-preserved material difficult."

var. *purpureum* (Nutt.) Durand [FNA5, HC2]
Trans. Amer. Philos. Soc. n. s. 11: 175. 1860.
purple cushion wild buckwheat

Eriogonum davisianum S. Stokes
Eriogonum orthocaulon Small
Eriogonum ovalifolium Nutt. ssp. *purpureum* (Nutt.) A. Nelson ex S. Stokes
Eriogonum ovalifolium Nutt. var. *celsum* A. Nelson [HC]
Eriogonum ovalifolium Nutt. var. *orthocaulon* (Small) C.L. Hitchc.
Eucycla purpurea Nutt.

FNA5: "Variety purpureum is the most widespread and common expression of the species, being found in southern British Columbia and southwestern Alberta, and in northern Arizona, eastern California, western Colorado, Idaho, western Montana, Nevada, northwestern New Mexico, eastern Oregon, Utah, southeastern Washington, and Wyoming. It approaches var. depressum both geographically and morphologically in the Yellowstone National Park area, and a clear distinction is not always possible. The name var. ovalifolium was long misapplied to what is here termed var. purpureum."

Eriogonum pyrolifolium Hook. [FNA5, HC, HC2]
Hooker's J. Bot. Kew Gard. Misc. 5: 395, plate 10. (as pyrolaefolium). 1853.
alpine buckwheat, oarleaf buckwheat, Shasta wild buckwheat

Eriogonum pyrolifolium Hook. var. *bellingeranum* M. Peck
Eriogonum pyrolifolium Hook. var. *coryphaeum* Torr. & A. Gray [FNA5, HC]
Eriogonum pyrolifolium Hook. var. *pyrolifolium* [FNA5, HC]

Eriogonum sphaerocephalum Douglas ex Benth. [FNA5, HC, HC2]
Trans. Linn. Soc. London. 17: 407. 1836.
rock buckwheat, round-headed eriogonum

var. *halimioides* (Gand.) S. Stokes [FNA5, HC, HC2]
Eriogonum. 104. 1936.
rock buckwheat

Eriogonum fruticulosum S. Stokes
Eriogonum halimioides Gand.

FNA5: "Variety halimioides is common and widespread in three areas of concentration. The northernmost is east of the Cascade Range in central Washington (Douglas, Kittitas, Klickitat, and Yakima counties). The middle series of populations occurs from central Oregon (Gilliam, Jefferson, Union, Wallowa, and Wasco counties) east into Idaho (Blaine, Elmore, Gem, Gooding, and Washington counties). The southernmost series is in central-southern Oregon (Baker, Grant, Harney, Jackson, Klamath, Lake, Malheur, and Wheeler counties), northeastern California (Lassen, Modoc, Shasta, and Siskiyou counties), and northwestern Nevada (Humboldt and Washoe counties). Variety halimioides is highly variable, and a clear distinction between it and some populations assigned here to E. douglasii var. douglasii is not always possible. Of particular concern are those plants of var. halimioides in northeastern Oregon and adjacent southeastern Washington with capitate rather than

umbellate inflorescences. Much of what has passed for E. douglasii (especially its sublineare phase) in that area actually may be var. halimioides."

var. *sphaerocephalum* [FNA5, HC, HC2]
Trans. Linn. Soc. London. 17: 407. 1836.
rock buckwheat

Eriogonum sphaerocephalum Douglas ex Benth. var. *geniculatum* (Nutt.) S. Stokes

FNA5: "Variety sphaerocephalum is common and widespread in eastern Washington, eastern Oregon, and southwestern Idaho, less so in northern and central-western Nevada, and infrequent in California. A collection supposedly obtained in 1883 from the "Flathead region"• of Montana (Ayres s.n., NY) is discounted as to location."

var. *sublineare* (S. Stokes) Reveal [FNA5, HC2]
Harvard Pap. Bot. 9: 197. 2004.
scabland wild buckwheat

Eriogonum douglasii Benth. var. *sublineare* (S. Stokes) Reveal
Eriogonum douglasii Benth. var. *tenue* (Small) C.L. Hitchc. [HC]

FNA5: "Variety sublineare is found in south-central Wash-ington and adjacent north-central Oregon. It is frequently confused with Eriogonum douglasii."

Eriogonum strictum Benth. [FNA5, HC, HC2]
Trans. Linn. Soc. London. 17: 414. 1836.
strict buckwheat

var. *anserinum* (Greene) S. Stokes [FNA5, HC, HC2]
Fl. Idaho. 249. 1952.
Goose Lake wild buckwheat

Eriogonum anserinum Greene
Eriogonum ovalifolium Nutt. ssp. *flavissimum* (Gand.) S. Stokes
Eriogonum proliferum Torr. & A. Gray ssp. *anserinum* (Greene) Munz
Eriogonum strictum Benth. ssp. *anserinum* (Greene) S. Stokes
Eriogonum strictum Benth. var. *flavissimum* (Gand.) C.L. Hitchc.

FNA5: "Variety anserinum is the yellow-flowered phase of the species; it and var. proliferum are only occasionally found together. This taxon is widely scattered in most of its range in northeastern California, southwestern Idaho, northern Nevada, eastern Oregon, and eastern Washington. It is common mainly from south-central Oregon south into northwestern Nevada and eastern California. The plants are attractive and are occasionally seen in cultivation."

var. *proliferum* (Torr. & A. Gray) C.L. Hitchc. [FNA5, HC, HC2]
Vasc. Pl. Pacif. N.W. 2: 132. 1964.
strict buckwheat

Eriogonum fulvum S. Stokes
Eriogonum proliferum Torr. & A. Gray
Eriogonum strictum Benth. ssp. *bellum* (S. Stokes) S. Stokes
Eriogonum strictum Benth. ssp. *proliferum* (Torr. & A. Gray) S. Stokes [HC]
Eriogonum strictum Benth. var. *argenteum* S. Stokes

FNA5: "Variety proliferum is widespread and often rather common throughout its range. The largest concentration is found in a gentle arc from northeastern Washington to southern Idaho and western Montana. The variety is widely distributed also in central and eastern Oregon, northern California, and Nevada. In portions of central Idaho and western Montana, some individuals clearly approach Eriogonum ovalifolium var. pansum."

var. *strictum* [FNA5, HC2]
Trans. Linn. Soc. London. 17: 414. 1836.
strict buckwheat

Eriogonum strictum Benth. ssp. *strictum* [HC]
Eriogonum strictum Benth. var. *glabrum* C.L. Hitchc. [HC]

FNA5: "Variety strictum is infrequent and widely scattered throughout its range in west-central Idaho (Adams, Nez Perce, and Washington counties), northeastern Oregon (Douglas, Morrow, Umatilla, Union, and Wallowa counties), and southeastern Washington (Benton, Columbia, Douglas, Grant, Kittitas, and Yakima counties). Its greatest concentration is in the Blue Mountains of northeastern Oregon and extreme southeastern Washington."

Eriogonum thymoides Benth. [FNA5, HC, HC2]
Prodr. 14: 9. 1856.
thyme buckwheat, thyme-leaf wild buckwheat

Eriogonum sphaerocephalum Douglas ex Benth. ssp. *minimum* (Small) S. Stokes
Eriogonum thymoides Benth. ssp. *congestum* S. Stokes

FNA5: "Eriogonum thymoides is an exquisite species concentrated in three regions of the Pacific Northwest. The first is along the eastern edge of the Cascade Range from near Wenatchee, Washington (Adams, Benton, Chelan, Douglas, Franklin, Grant, Kittitas, Klickitat, Lincoln, and Yakima counties), to near the Dalles in extreme north-central Oregon (Union County). The second is from Baker and northern Malheur counties, Oregon, to Adams, Canyon, and Washington counties, Idaho. A third series of populations is in the Mount Bennett Hills area of Gooding County, Idaho, and just over the borders in Blaine, Camas, Elmore, and Lincoln counties. Staminate plants tend to have yellow flowers that quickly fade after pollen release. Pistillate plants tend to have white to pale yellow flowers that persist and greatly elongate as the achene matures."

Eriogonum umbellatum Torr. [FNA5, HC, HC2]
Ann. Lyceum Nat. Hist. New York. 2: 241. 1827.
sulfur buckwheat, sulfurflower

var. *devestivum* Reveal [FNA5, HC2]
Great Basin Naturalist. 32: 115. 1972.
emperor's sulfur flower

var. *ellipticum* (Nutt.) Reveal [FNA5, HC2]
Taxon. 32: 294. 1983.
sulfur flower

Eriogonum ellipticum Nutt.
Eriogonum umbellatum Torr. var. *chrysanthum* Gand. [HC]
Eriogonum umbellatum Torr. var. *croceum* (Small) S. Stokes
Eriogonum umbellatum Torr. var. *stellatum* (Benth.) M.E. Jones [HC]

FNA5: "Variety ellipticum is widely scattered but locally common in the mountains of the Pacific Northwest. It has long been known as var. stellatum, the name being altered to var. ellipticum only for technical nomenclatural reasons. This is the northern phase of the species, with compound inflorescences. Considerable variation in plant size is retained within the circumscription adopted here. Plants from northeastern Oregon and adjacent west-central Idaho are large and showy, and it is this phase (called Eriogonum croceum or E. umbellatum var. chrysanthum) that occasionally is seen in cultivation."

var. *haussknechtii* (Dammer) M.E. Jones [FNA5, HC2]
Contr. W. Bot. 11: 6. 1903. (as hausknechtii). 1903.
sulfur flower

Eriogonum haussknechtii Dammer
Eriogonum montanum Howell
Eriogonum umbellatum Torr. ssp. *haussknechtii* (Dammer) S. Stokes
Eriogonum umbellatum Torr. var. *hausknechtii* (Dammer) M.E. Jones [HC]

FNA5: "Variety haussknechtii, as here circumscribed, is a high-elevation taxon found mainly on volcanic peaks in north-central Oregon (Benton, Clackamas, Hood River, and Wasco counties) and south-central Washington (Kittitas and Yakima counties). It is common on Mt. Hood and Mt. Adams. It typically grows with E. marifolium, and mixed collections often are found in herbaria; the two taxa have in common a distinctive olive green color of the adaxial leaf surfaces. Haussknecht's sulphur flower is not always clearly distinct from var. modocense. "

var. *hypoleium* (Piper) C.L. Hitchc. [FNA5, HC, HC2]

Vasc. Pl. Pacif. N.W. 2: 135. 1964.
sulfur flower

Eriogonum umbellatum Torr. ssp. *hypoleium* Piper

FNA5: "Variety hypoleium is restricted to Chelan and Kittitas counties, Washington, extending from the Mt. Stuart Range south to the Bald Mountain area west of Ellensburg. It is doubtfully distinct from var. aureum, although geographically well isolated."

var. *majus* Hook. [FNA5, HC2]
Hooker's J. Bot. Kew Gard. Misc. 5: 264. 1853.
subalpine sulfur flower

Eriogonum subalpinum Greene
Eriogonum umbellatum Torr. ssp. *majus* (Hook.) Piper
Eriogonum umbellatum Torr. ssp. *subalpinum* (Greene) S. Stokes
Eriogonum umbellatum Torr. var. *subalpinum* (Greene) M.E. Jones [HC]

FNA5: "Variety majus is widespread and common in the Rocky Mountains. These plants are often locally common in Idaho and northern Utah, but they are rather rare in the Cascade Range of Washington. The high-elevation plants in Washington are often markedly different from similarly situated Rocky Mountain plants, having smaller leaves and flowers, and tighter, more compact, umbellate inflorescences. Variety majus is distinct from and often grows with var. umbellatum in Colorado, leading many local taxonomists to distinguish the two at species rank. In Wyoming and Montana, however, var. majus occasionally is difficult to differentiate from var. dichrocephalum. Variety majus often occurs with Eriogonum heracleoides, and mixed collections occasionally are encountered. Care must be taken in the herbarium to differentiate the narrow-leaved E. heracleoides var. leucophaeum from the broader-leaved E. umbellatum var. majus, although the two do not grow together."

var. *sandbergii* Reveal [FNA5, HC2]
Phytologia. 86: 154. 2004.
Sandberg's sulfur flower

Eriogonum vimineum Douglas ex Benth. [FNA5, HC, HC2]
Trans. Linn. Soc. London. 17: 416. 1836.
broom buckwheat

Eriogonum shoshonense A. Nelson
Eriogonum vimineum Dougl. ex Benth. ssp. *shoshonense* (A. Nelson) S. Stokes
Eriogonum vimineum Douglas ex Benth. var. *shoshonense* (A. Nelson) S. Stokes [HC]
Eriogonum vimineum Douglas ex Benth. var. *vimineum* [HC]

FNA5: "Eriogonum vimineum is widespread and common to abundant or even locally weedy from southeastern Washington southward through central and eastern Oregon and western Idaho to northeastern California and northern Nevada. Except for occasional populations in northeastern California, where it can be confused with E. luteolum, this species is distinct, albeit variable, throughout its range."

**Fagopyrum* [FNA5, HC2]
Gard. Dict. Abr., ed. 4. vol. 1. 1754.
[name conserved]

**Fagopyrum esculentum* Moench [FNA5, HC2]
Methodus. 290. 1794.
garden buckwheat

Fagopyrum sagittatum Gilib.
Fagopyrum vulgare T. Nees
Polygonum fagopyrum L.

Native to Eurasia. FNA5: "Fagopyrum esculentum is a heterostylous, obligate out-crosser. Morphological, allozyme, and molecular data suggest that the cultivated plants are most closely related to wild ones in northwestern Yunnan, China. Common buckwheat is an important pseudocereal crop in China, the Russian Federation, Ukraine, Kazakhstan, and Poland; it is grown in many other countries. It is planted frequently in wildlife food plots, as a catch or cover crop, and as a honey plant in North America. Hulls from

the achenes are used for pillow filling, which manufacturers claim has health benefits over traditional foam, polyester, or down fillings."

**Fallopia* [FNA5, HC2]
Fam. Pl. 2: 277, 557. 1763.
false buckwheat, fleeceflower, knotweed

**Fallopia baldschuanica* (Regel) Holub [FNA5, HC2]
Folia Geobot. Phytotax. 6: 176. 1971.
Bukhara fleeceflower, Chinese fleecevine, mile-a-minute vine

Bilderdykia aubertii (L. Henry) Moldenke
Fallopia aubertii (L. Henry) Holub
Polygonum aubertii L. Henry [KZ99]
Polygonum baldschuanicum Regel

**Fallopia ×bohemica* (Chrtek & Chrtková) J.P. Bailey [FNA5, HC2]
Watsonia. 17: 443. 1989.
Bohemian knotweed, hybrid knotweed

Polygonum ×bohemicum (Chrtek & Chrtková) Zika & Jacobson
Reynoutria ×bohemica Chrtek & Chrtková

An aggressive weed in lowland Washington, especially in riparian corridors, where it is the most common member of the complex.

**Fallopia convolvulus* (L.) Á. Löve [FNA5, HC2]
Taxon. 29: 300. 1970.
black bindweed, climbing bindweed, ivy bindweed

Bilderdykia convolvulus (L.) Dumort.
Fallopia convolvulus (L.) Á. Löve var. *subulata* (Lej. & Courtois) D.H. Kent
Polygonum convolvulus L. [HC, JPM]
Polygonum convolvulus L. var. *convolvulus* [KZ99]
Reynoutria convolvulus (L.) Shinners
Tinaria convolvulus (L.) Webb & Moq. ex Webb & Berthel.

FNA5: "Fallopia convolvulus can be an aggressive weed in crop fields. Rare plants with winged fruiting perianths have been named var. subalata; that characteristic often varies within populations."

**Fallopia japonica* (Houtt.) Ronse Decr. [FNA5, HC2]
Bot. J. Linn. Soc. 98: 369. 1988.
Japanese knotweed

Polygonum cuspidatum Siebold & Zucc. [HC]
Polygonum cuspidatum Siebold & Zucc. var. *compactum* (Hook. f.) L.H. Bailey
Reynoutria japonica Houtt.

An aggressive weed in lowland Washington, especially in riparian corridors.

**var. japonica* [FNA5, HC2]
Japanese knotweed

**Fallopia sachalinensis* (F. Schmidt) Ronse Decr. [FNA5, HC2]
Bot. J. Linn. Soc. 98: 369. 1988.
giant knotweed

Polygonum sachalinense F. Schmidt [HC]

Oxyria [FNA5, HC, HC2]
Veg. Syst. 10: 24, plate 24, fig. 2. 1765.
mountain sorrel

Oxyria digyna (L.) Hill [FNA5, HC, HC2]
Hort. Kew. 158. 1768.
mountain-sorrel

Rumex digynus L.

FNA5: "Morphological and physiological differences between arctic and alpine populations of Oxyria in North America have been documented (H. A. Mooney and W. D. Billings 1961). Arctic plants (Alaska, northern Canada, and Greenland) taken from the field and grown in controlled environments tend to bear inflorescences with more branches, leaves with blades that are wider, and flowers with a more stable number of stamens as compared to alpine plants from populations in the south (California, Colorado, Montana, and Wyoming). Northern plants also have a greater tendency to reproduce asexually, often producing rhizomes and exhibiting relatively lower seed production."

Oxytheca [FNA5, HC, HC2]

Proc. Acad. Nat. Sci. Philadelphia. 4: 18. 1848.
oxytheca, puncturebract

Oxytheca dendroidea Nutt. [FNA5, HC2]

Proc. Acad. Nat. Sci. Philadelphia. 4: 19. 1848.
treelike puncturebract

Oxytheca dendroides Nutt. [HC], orthographic variant

Note that the specific epithet is misspelled in H&C. The epithet "dendroides" was never published.

ssp. *dendroidea* [FNA5, HC2, JPM]

Proc. Acad. Nat. Sci. Philadelphia. 4: 19. 1848.
treeline puncturebract

Persicaria [FNA5, HC2]

Gard. Dict. Abr., ed. 4. vol. 3. 1754.
knotweed, smartweed, tearthumb

Persicaria amphibia (L.) Gray [FNA5, HC2]

Nat. Arr. Brit. Pl. 2: 268. 1821.
water smartweed

Polygonum amphibium L. [HC]
Polygonum amphibium L. var. *coccineum* (Muhl. ex Willd.) Farw.
Polygonum amphibium L. var. *emersum* Michx. [JPM, ILBC4]
Polygonum amphibium L. var. *stipulaceum* N. Coleman [JPM, ILBC4]
Polygonum coccineum Muhl. ex Willd. [HC]
Polygonum natans Eaton

FNA5: "Persicaria amphibia is widespread in the Northern Hemisphere and naturalized in Mexico, South America, and southern Africa. It is highly polymorphic and the most hydrophytic of the native North American smartweeds (R. S. Mitchell 1976). In recent decades, botanists have tended to follow Mitchell (1968) in recognizing two endemic, intergrading North American varieties. Studies by G. Turesson (1961) and Mitchell (1968, 1976) have shown that phenotypic extremes in the species are part of a cline of nearly continuous morphological variation that is strongly correlated with submergence, but also with some genetic integrity. Formal recognition of varieties is even less tenable when Eurasian elements also are considered. Aquatic-adapted plants, which bloom in water or are sometimes stranded on land, have been called var. stipulacea (although that epithet may not be the oldest one available for the taxon). They produce ovoid-conic to short-cylindric inflorescences 10-40(-60) mm, prostrate aerial stems, and leaf blades that are glabrous with acute to rounded apices. Terrestrial forms of this ecotype usually are spreading-pubescent and often bear ocreae that are foliaceous, green, and flared distally, characters found only in North American plants (R. S. Mitchell 1968). Terrestrial-adapted plants, referred to var. emersa, bloom on moist soil and produce short- to elongate-cylindric inflorescences 40-110(-150) mm, spreading or erect aerial stems, and leaf blades that are appressed-pubescent with acute to acuminate apices. They produce ocreae that are entirely chartaceous and not flared distally. Emergent and terrestrial plants of this ecotype exhibit less phenotypic plasticity and a lower frequency of heterostyly than do plants of the aquatic ecotype (R. S. Mitchell 1968). R. S. Mitchell and J. K. Dean (1978) and H. R. Hinds (2000) recognized var. amphibia, the Eurasian element, as introduced in New York and New Brunswick, respectively. These plants are morphologically intermediate between the North American ecotypes and often indistinguishable from North American plants (Mitchell and Dean)."

*_Persicaria hydropiper_ (L.) Spach [FNA5, HC2]

Hist. Nat. Vég. 10: 536. 1841.

smartweed, mild water-pepper

Polygonum hydropiper L. [HC]
Polygonum hydropiper L. var. _projectum_ Stanford

FNA5: "Herbarium specimens of Persicaria hydropiper often are misidentified as P. punctata. In addition to its minutely roughened and dull achenes, P. hydropiper differs from P. punctata frequently in bearing flowers enclosed in the ocreae, the inflorescences thus appearing somewhat leafy. By contrast, inflorescences of P. punctata generally appear terminal and leafless."

Persicaria hydropiperoides (Michx.) Small [FNA5, HC2]

Fl. S.E. U.S. 378. 1903.

water pepper, swamp smartweed

(see also _Persicaria setacea_)

Persicaria opelousana (Riddell ex Small) Small
Persicaria paludicola Small
Polygonum hydropiperoides Michx. [HC, ILBC4, JPM]
Polygonum hydropiperoides Michx. var. _adenocalyx_ (Stanford) Gleason
Polygonum hydropiperoides Michx. var. _asperifolium_ Stanford
Polygonum hydropiperoides Michx. var. _breviciliatum_ Fernald
Polygonum hydropiperoides Michx. var. _buschianum_ Stanford
Polygonum hydropiperoides Michx. var. _digitatum_ Fernald
Polygonum hydropiperoides Michx. var. _hydropiperoides_ [HC]
Polygonum hydropiperoides Michx. var. _opelousanum_ (Riddell ex Small) W. Stone
Polygonum hydropiperoides Michx. var. _psilostachyum_ H. St. John
Polygonum opelousanum Riddell ex Small
Polygonum opelousanum Riddell ex Small var. _adenocalyx_ Stanford

FNA5: "The extreme variability in Persicaria hydropiperoides is reflected in its extensive synonymy. Among the segregates most often recognized in floras and checklists is P. opelousana, which C. B. McDonald (1980) showed to be broadly sympatric and highly interfertile with P. hydropiperoides. Consistent with this conclusion, R. S. Mitchell (1971) found that P. hydropiperoides and P. opelousana are unique among native North American smartweeds in consistently possessing multicellular plate-glands on the abaxial surface of their leaves. Such glands also are found on P. maculosa, an introduced European species. Herbarium specimens of Persicaria hydropiperoides sometimes are misidentified as P. maculosa, especially when the roots are missing. The former species may be distinguished reliably by its achenes all trigonous (trigonous and biconvex achenes are mixed in the inflorescences of P. maculosa) and bristles on the margins of the ocreae that average longer. M. L. Fernald (1922c) reported hybrids with P. robustior from Nova Scotia."

Persicaria lapathifolia (L.) Gray [FNA5, HC2]

Nat. Arr. Brit. Pl. 2: 270. 1821.

dock-leaf smartweed, pale smartweed, willow weed

Polygonum incanum F.W. Schmidt
Polygonum incarnatum Elliott
Polygonum lapathifolium L. [HC]
Polygonum lapathifolium L. var. _salicifolium_ Sibth.
Polygonum linicola Sutulov
Polygonum nodosum Pers.
Polygonum scabrum Moench
Polygonum tomentosum Willd.

H&C states introduced from Europe, FNA and JPM state that this species is native. FNA5: "Persicaria lapathifolia is a morphologically variable complex with more than two-dozen infraspecific taxa described in the New World and Old World. An allozyme study by L. L. Consaul et al. (1991) did not support recognition of elements often referred to Polygonum lapathifolium var. salicifolium or P. scabrum, which are synonymized here. Yang J. and Wang J. W. (1991) reached a similar conclusion regarding var. salicifolium and P. nodosum based on their morphometric analysis."

*_Persicaria maculosa_ Gray [FNA5, HC2]

Nat. Arr. Brit. Pl. 2: 269. 1821.

heartweed, lady's-thumb, spotted lady's-thumb, redshank

Polygonum persicaria L. [HC]

Native to Europe. FNA5: "An allozyme study by L. L. Consaul et al. (1991) provided evidence of the allotetraploid origin of Persicaria maculosa, with P. lapathifolium as one of the parents. Plants with stems spreading-hairy and peduncles stipitate-glandular have been named P. maculosa subsp. hirsuticaulis (Danser) S. Ekman & Knutsson. Material referable to this subspecies has not been seen among North American specimens. Hybrids between P. maculosa and P. minor have been documented in Europe (R. H. Roberts 1977)."

Persicaria punctata (Elliott) Small [FNA5, HC2]

Fl. S.E. U.S. 1903.

dotted knotweed, dotted smartweed, water smartweed

Polygonum acre Kunth
Polygonum acre Kunth var. _leptostachyum_ Meisn.
Polygonum punctatum Elliott [HC, ILBC4, JPM]
Polygonum punctatum Elliott var. _confertiflorum_ (Meisn.) Fassett [KZ99]
Polygonum punctatum Elliott var. _ellipticum_ Fassett

FNA5: "N. C. Fassett (1949) proposed a complicated classification for Persicaria punctata with 12 varieties in North America and South America. He also identified numerous specimens that he considered to be morphologically intermediate between various varieties. M. Dalci (1972) documented a wide range of phenotypic and genotypic variation throughout the range of P. punctata and extensive overlap in many of the features used by Fassett to distinguish varieties. Consequently, recognition of varieties does not seem warranted. Persicaria punctata and its close relatives P. robustior and P. glabra are unique among native North American smartweeds in possessing complex glands called valvate chambers in their epidermises. Persicaria punctata is confused most frequently with P. hydropiper; the achenes are diagnostic."

*_Persicaria wallichii_ Greuter & Burdet [FNA5, HC2]

Willdenowia. 19: 41. 1989.

garden knotweed, Himalayan knotweed

Aconogonon polystachyum (Wall. ex Meisn.) M. Král
Pleuropteropyrum polystachyum (Wall. ex Meisn.) Munshi & G.N. Javied
Polygonum polystachyum Wall. ex Meisn. [HC]
Reynoutria polystachya (Wall. ex Meisn.) Moldenke
Rubrivena polystachya (Wall. ex Meisn.) M. Král

Recently collected in Grays Harbor, King, and Wahkiakum Cos. FNA5: "Persicaria wallichii is an ornamental that escapes infrequently in the flora area. A population in Nova Scotia apparently was ephemeral. Plants with leaf blades sparsely to densely pubescent abaxially and pedicels glabrous are var. wallichii, to which naturalized North American plants appear to be referable. Plants with leaf blades brownish-tomentose abaxially and pedicels usually pubescent are var. tomentosa S. P. Hong, which may be in cultivation in North America."

*var. _wallichii_ [FNA5, HC2]

Polygonum [FNA5, HC, HC2]

Sp. Pl. 1: 359. 1753. Gen. Pl. ed. 5, 170. 1754.

doorweed, knotweed, smartweed

(see also _Aconogonon_, _Bistorta_, _Fallopia_, _Persicaria_)

Polygonum achoreum S.F. Blake [FNA5, HC, HC2]

Rhodora. 19: 232. 1917.

Blake's knotweed

Polygonum erectum L. ssp. _achoreum_ (S.F. Blake) Á. Löve & D. Löve

FNA5: "Polygonum achoreum frequently is confused with P. erectum. It can be distinguished by its usually homophyllous leaves, its perianth, which is enlarged at the base and constricted above the fruit, its longer perianth tube, and its yellow-green to tan, tubercled achenes."

Polygonum austiniae Greene [FNA5, HC, HC2]
Bull. Calif. Acad. Sci. 1: 212. 1885. (as austinae). 1885.
Austin's knotweed

Polygonum douglasii Greene ssp. *austiniae* (Greene) E. Murray [JPM, ILBC4]
Polygonum douglasii Greene var. *austiniae* (Greene) M.E. Jones

Polygonum aviculare L. [FNA5, HC, HC2]
Sp. Pl. 1: 362. 1753.

*ssp. *aviculare* [FNA5, HC2]
Sp. Pl. 1: 362. 1753.
common knotweed, yard knotweed

Polygonum aviculare L. ssp. *heterophyllum* Asch. & Graebn.
Polygonum aviculare L. ssp. *maximum* (Lindm.) Asch. & Graebn.
Polygonum aviculare L. ssp. *monspeliense* (Thiéb.-Bern. ex Pers.) Arcang.
Polygonum aviculare L. var. *vegetum* Ledeb.
Polygonum heterophyllum Lindm.
Polygonum monspeliense Thiéb.-Bern. ex Pers.

*ssp. *buxiforme* (Small) Costea & Tardif [FNA5, HC2]
Sida. 20: 988. 2003.
American knotweed, prairie knotweed

Polygonum aviculare L. var. *littorale* (Link) Mert.
Polygonum buxiforme Small [ILBC4, KZ99]
Polygonum littorale Link

Introduced from Eastern North America- naturalization in WA needs verification. FNA5: "Although apparently it has a North American origin, subsp. buxiforme is considered part of the Polygonum aviculare complex because it intergrades with subsp. aviculare (M. Costea and F. J. Tardif 2003)."

*ssp. *depressum* (Meisn.) Arcang. [FNA5, HC2]
Comp. Fl. Ital. 583. 1882.
common knotweed, oval-leaf knotweed

Polygonum aequale Lindm.
Polygonum arenastrum Boreau [JPM, ILBC4]
Polygonum aviculare L. ssp. *aequale* (Lindm.) Asch. & Graebn.
Polygonum aviculare L. ssp. *calculatum* (Lindm.) Thell.
Polygonum aviculare L. ssp. *microspermum* (Jordan ex Boreau) Berher
Polygonum aviculare L. var. *depressum* Meisn.
Polygonum calcatum Lindm.
Polygonum microspermum Jordan ex Boreau
Polygonum montereyense Brenckle

FNA5: "Plants referable to P. arenastrum in the narrow sense are the most commonly encountered form of the subspecies in North America."

*ssp. *neglectum* (Besser) Arcang. [FNA5, HC2]
Comp. Fl. Ital. 583. 1882.
narrow-leaf knotweed

Polygonum aequale Lindm. ssp. *oedocarpum* Lindm.
Polygonum aviculare L. ssp. *rectum* Chrtek
Polygonum neglectum Besser

Polygonum californicum Meisn. [FNA5, HC, HC2]
Prodr. 14: 100. 1856.
California knotweed

Duravia californica (Meisn.) Greene
Polygonum greenii S. Watson

Polygonum douglasii Greene [FNA5, HC, HC2]
Bull. Calif. Acad. Sci. 1: 125. 1885.

Douglas' knotweed, Douglas's knotweed

Polygonum douglasii Greene ssp. *douglasii* [JPM]
Polygonum douglasii Greene var. *douglasii* [HC]
Polygonum douglasii Greene var. *latifolium* (Engelm.) Greene [HC]
Polygonum emaciatum A. Nelson

H&C treats Polygonum douglasii var. douglasii and var. latifolium as distinct varieties. FNA5: FNA5: "Five taxa that have been included in Polygonum douglasii (E. Murray 1982; J. C. Hickman 1984; J. T. Kartesz and K. N. Gandhi 1990) are treated here as distinct species: P. austiniae, P. majus, P. nuttallii, P. sawatchense, and P. spergulariiforme. Hickman noted extensive intergradation and numerous intermediate specimens among those sympatric elements, but qualitative or quantitative characters allow reliable discrimination in most cases (M. Costea and F. J. Tardif 2005), and species are here circumscribed similar to C. L. Hitchcock (1964). Greene described var. latifolium as having leaf blades and achenes broader than those of var. douglasii. C. L. Hitchcock (1964) recognized the former, but the characters used to distinguish it appear to vary continuously, and reliable separation is not possible."

Polygonum erectum L. [FNA5, HC, HC2]
Sp. Pl. 1: 363. 1753.
erect knotweed

Polygonum aviculare L. var. *erectum* (L.) Roth ex Meisn.

Polygonum fowleri B.L. Rob. [FNA5, HC, HC2]
Rhodora. 4: 67, plate 35, figs. 14, 15. 1902.
Fowler's knotweed

ssp. *fowleri* [FNA5, HC2]
Rhodora. 4: 67, plate 35, figs. 14, 15. 1902.
Fowler's knotweed

Polygonum allocarpum S.F. Blake

Polygonum majus (Meisn.) Piper [FNA5, HC, HC2]
Fl. Palouse Reg. 63. 1901.
Palouse knotweed, wiry knotweed

Polygonum coarctatum Douglas ex Meisn. var. *majus* Meisn.
Polygonum douglasii Greene ssp. *majus* (Meisn.) J.C. Hickman [JPM, ILBC4]

Polygonum minimum S. Watson [FNA5, HC, HC2]
Botany (Fortieth Parallel). 315. 1871.
leafy dwarf knotweed, zigzag knotweed

Polygonum torreyi S. Watson

Polygonum nuttallii Small [FNA5, HC, HC2]
Mongr. Amer. Sp. Polygonum. 132, plate 53. 1895.
Nuttall's knotweed

Polygonum douglasii Greene ssp. *nuttallii* (Small) J.C. Hickman [ILBC4]
Polygonum intermedium Nutt. ex S. Watson

FNA5: "C. L. Hitchcock (1964) suggested that Polygonum nuttallii is but a small-flowered form of P. spergulariiforme. Although morphologically similar, P. nuttallii differs from P. spergulariiforme in some respects, including its wiry, purplish stems, short and funnelform ocreae, adaxially glaucous leaves, longer bracts, shorter fruiting perianth, and achenes."

Polygonum paronychia Cham. & Schltdl. [FNA5, HC, HC2]
Linnaea. 3: 51. 1828.
beach knotweed, black knotweed

Polygonum parryi Greene [FNA5, HC, HC2]
Bull. Torrey Bot. Club. 8: 99. 1881.
Parry's knotweed, prickly knotweed

Polygonum polygaloides Meisn. [FNA5, HC, HC2]
Prodr. 14: 101. 1856.

ssp. *confertiflorum* (Nutt. ex Piper) J.C. Hickman [FNA5, HC2]
Madroño. 31: 251. 1984.
close-flowered knotweed

Polygonum confertiflorum Nutt. ex Piper [HC]
Polygonum kelloggii Greene var. *confertiflorum* (Nutt. ex Piper) Dorn
Polygonum watsonii Small [HC]

This taxon treated as two separate species by H&C.

ssp. *kelloggii* (Greene) J.C. Hickman [FNA5, HC2]
Madroño. 31: 251. 1984.
white-margin knotweed

Polygonum kelloggii Greene [HC]
Polygonum minutissimum L.O. Williams
Polygonum unifolium Small ex Rydb.

ssp. *polygaloides* [FNA5, HC2]
In A. P. de Candolle and A. L. P. P. de Candolle, Prodr. 14: 101. 1856.
Polygala knotweed

Polygonum polygaloides Meisn. var. *montanum* Brenckle

Polygonum ramosissimum Michx. [FNA5, HC, HC2, JPM]
Fl. Bor.-Amer. 1: 237. 1803.

ssp. *prolificum* (Small) Costea & Tardif [FNA5, HC2]
Sida. 20: 995. 2003.
proliferous knotweed

Polygonum prolificum (Small) B.L. Rob.
Polygonum prolificum (Small) B.L. Rob. var. *autumnale* (Brenckle) Brenckle
Polygonum prolificum (Small) B.L. Rob. var. *profusum* Brenckle
Polygonum ramosissimum Michx. var. *prolificum* Small [ILBC4]

Reported from WA in FNA5.

ssp. *ramosissimum* [FNA5, HC2]
Fl. Bor.-Amer. 1: 237. 1803.
bushy knotweed

Polygonum atlanticum (B.L. Rob.) E.P. Bicknell
Polygonum exsertum Small [HC]
Polygonum interior Brenckle
Polygonum latum Small ex Rydb.
Polygonum leptocarpum B.L. Rob.
Polygonum stevensii Brenckle
Polygonum triangulum E.P. Bicknell

FNA5: "Polygonum ramosissimum exhibits considerable morphological complexity and is similar in difficulty to the P. aviculare complex. Further research is necessary to understand the infraspecific variability of this species (M. Costea and F. J. Tardif 2003b). Subspecies ramosissimum is heterogeneous; some additional elements may deserve recognition. It is closely related to European Polygonum bellardii Allioni, which was collected in south Boston in 1785 (B. L. Robinson 1902). The latter species has semi-open flowers, petaloid tepals with white or pink margins, and eight stamens. A distinct form of P. ramosissimum growing in saline marshes from California has been mistakenly identified as P. patulum Bieberstein (M. Costea and F. J. Tardif 2003b). The morphology of late-season achenes and the branching patterns, which have been emphasized by some authors, appear to have little taxonomic value."

Polygonum sawatchense Small [FNA5, HC, HC2]
Bull. Torrey Bot. Club. 20: 213, plate 156. 1893.

ssp. *oblivium* Costea & Tardif [FNA5, HC2]
Sida. 20: 1637, figs. 1b, 2b, d, f. 2003.
Sawatch knotweed

ssp. *sawatchense* [FNA5, HC2]
Bull. Torrey Bot. Club. 20: 213, plate 156. 1893.
Sawatch knotweed

Polygonum douglasii Greene ssp. *johnstonii* (Munz) J.C. Hickman [JPM, ILBC4]
Polygonum douglasii Greene var. *johnstonii* Munz
Polygonum exile Eastw.
Polygonum triandrum Coolidge

FNA5 lists this subspecies as occurring in WA.

Polygonum spergulariiforme Meisn. ex Small [FNA5, HC2]
Bull. Torrey Bot. Club. 19: 366. (as spergulariaeforme). 1892.
fall knotweed, spurry knotweed

Polygonum douglasii Greene ssp. *spergulariiforme* (Meisn. ex Small) J.C. Hickman [JPM, ILBC4]
Polygonum spergulariaeforme Meisn. ex Sm. [HC], orthographic variant

**Rheum* [FNA5]
Sp. Pl. 1: 371. 1753. Gen. Pl. ed. 5, 174. 1754.
rhubarb

**Rheum rhabarbarum* L. [FNA5]
Sp. Pl. 1: 372. 1753.
rhubarb

Rumex [FNA5, HC, HC2]
Sp. Pl. 1: 333. 1753. Gen. Pl. ed. 5, 156. 1754.
dock, sorrel

**Rumex acetosa* L. [FNA5, HC, HC2]
Sp. Pl. 1: 337. 1753.
alpine sorrel, common sorrel, garden sorrel, Lapland sorrel

Introduced from Eurasia. FNA5: "Rumex acetosa is morphologically uniform in North America. It sometimes is misidentified as R. hastatulus orR. acetosella. Collections from North America are few in herbaria, and this species probably is not as common in the flora area as has been generally assumed. Some literature reports for R. acetosa may refer to other taxa of the species group."

**Rumex acetosella* L. [FNA5, HC, HC2]
Sp. Pl. 1: 338. 1753.
common sheep sorrel

Acetosa acetosella (L.) Mill.
Acetosa hastata Moench
Acetosella vulgaris Fourreau
Rumex acetosella L. var. *vulgaris* W.D.J. Koch

Introduced from Eurasia. FNA5: "Rumex acetosella in the broad sense is an extremely variable and taxonomically complicated polyploid complex, which includes diploids, tetraploids, hexaploids, and octoploids. This complex (excluding more distantly related arctic-montane R. graminifolius and its allies) probably originated and developed mostly in southern Europe and southwestern Asia. Some races of R. acetosella now are distributed almost worldwide as introduced and often completely naturalized aliens."

**Rumex conglomeratus* Murray [FNA5, HC, HC2]
Prodr. Stirp. Gott. 52. 1770.
clustered dock, sharp dock

Rumex ×acutus Sm.

Native to Eurasia. FNA5: "Rumex conglomeratus often is confused with immature specimens of R. obtusifolius, as well as with other species (e.g., R. sanguineus). Its distribution in North America is insufficiently known, and some literature records may refer to R. obtusifolius. Rumex conglomeratus and R. sanguineus were placed in subsect. Conglomerati Rechinger f. (K. H. Rechinger 1937)."

Rumex crassus Rech. f. [FNA5, HC2]

Repert. Spec. Nov. Regni Veg. 40: 295. 1936.
fleshy willow dock

Rumex salicifolius Weinm. var. *crassus* (Rech. f.) J.T. Howell

Recently collected in Grays Harbor County, likely elsewhere along the outer coast.

******Rumex crispus* L. [FNA5, HC, HC2]
Sp. Pl. 1: 335. 1753.
curly dock, sour dock

Lapathum crispum (L.) Scop.
Rumex crispus L. ssp. *crispus* [KZ99]

Introduced from Eurasia. FNA5: "Rumex crispus (belonging to subsect. Crispi Rechinger f.; see K. H. Rechinger 1937) is the most widespread and ecologically successful species of the genus, occuring almost worldwide as a completely naturalized and sometimes invasive alien. It has not been reported from Greenland, but it probably occurs there. Rumex crispus hybridizes with many other species of subg. Rumex. Hybrids with R. obtusifolius (Rumex ×pratensis Mertens & Koch) are the most common in the genus, at least in Europe, and have been reported for several localities in North America. Rumex crispus × R. patientia (Rumex ×confusus Simonkai) was reported from New York. According to R. S. Mitchell (1986, p. 47), "this hybrid is now spreading along highway shoulders, and it has replaced R. crispus in some local areas."• However, that information should be confirmed by more detailed studies since spontaneous hybrids between species of sect. Rumex usually are much less fertile and ecologically successful than the parental species. Hybrids of Rumex occuring in North America need careful revision. Numerous infraspecific taxa and even segregate species have been described in the Rumex crispus aggregate. Many seem to represent minor variation of little or no taxonomic significance, but some are geographically delimited entities that may deserve recognition as subspecies or varieties. The typical variety has inner tepals with three well-developed tubercles; the less common var. unicallosus Petermann, with one tubercle, occurs sporadically in North America."

******Rumex dentatus* L. [FNA5, HC, HC2]
Mant. Pl. 226. 1771.
toothed dock

Rumex maritimus L. [FNA5, HC, HC2]
Sp. Pl. 1: 335. 1753.
golden dock

Lapathum minus Lam.
Rumex aureus Mill.

Treatment of R. maritimus is challenging. Jepson Manual 2nd edition and Flora of Oregon treat this taxon as R. fueginus.

The treatment of R. maritimus in FNA5 does not include Washington within the distribution of this species, which is not to say that this species does not occur here. The taxonomic treatment of R. maritimus and related species appears unresolved based on the FNA treatment: "This Eurasian species is known as a casual alien from several localities in North America. Its distribution is poorly known due to confusion with native American species of this aggregate. Plants from Alaska and Yukon reported by E. Hultén (1968) as Rumex maritimus need additional study; they may be conspecific with some eastern Asian races of the R. maritimus aggregate. It is rare or almost absent in eastern Asia, where it is replaced by closely related taxa. Species of the Rumex maritimus aggregate can be placed in a separate subsection Maritimi Rechinger f. (K. H. Rechinger 1937) or even section Orientales A. I. Baranov & B. V. Skvortzov (see A. E. Borodina 1977). In addition to characters mentioned in the key and descriptions, additional distinctive features of Rumex maritimus are the smooth tubercles (occasionally finely striate or indistinctly pitted in herbarium specimens), and golden yellow or greenish yellow mature inflorescences."

ssp. *fueginus* (Phil.) Hultén [HC2]
American golden dock, Tierra del Fuego dock

Rumex fueginus Phil. [FNA5]

FNA5: "Rumex fueginus, in spite of its similarities to R. maritimus, is more closely related to R.

persicarioides. Specimens of R. fueginus often are misidentified as R. maritimus, and the name R. persicarioides has been applied to R. fueginus. This confusion obscures distribution patterns among members of the aggregrate. Several varieties have been described based mostly on teeth variation. These taxa appear to have little taxonomic significance, with the possible exception of var. athrix (St. John) Rechinger f., which has entire or subentire inner tepals and occurs in arid regions of the southwestern United States (H. St. John 1915; K. H. Rechinger 1937). Rumex fueginus is known in Europe as an uncommon, casual alien."

**Rumex obtusifolius* L. [FNA5, HC, HC2]

Sp. Pl. 1: 335. 1753.

bitter dock

Rumex crispatulus Michx.
Rumex rugelii Meisn.

Introduced from Eurasia. FNA5: "Rumex obtusifolius, a member of subsect. Obtusifolii Rechinger f. (K. H. Rechinger 1937), is a polymorphic species represented in Eurasia by three or four rather distinct races often treated by European authors as subspecies or varieties. These taxa differ mostly in inner tepal dentation and geographic distribution. In North America the morphotypes often intergrade. In Eurasia this species is differentiated into predominantly western subsp. obtusifolius [including R. obtusifolius subsp. agrestis (Fries) Danser], eastern subsp. sylvestris (Wallroth) Rechinger f., intermediate central European subsp. transiens (Simonkai) Rechinger f., and montane subsp. subalpinus (Schur) Simonkai. Only subspp. obtusifolius and sylvestris occur in North America; the former seems to be more common. Subspecies obtusifolius differs from subsp. sylvestris in having larger and more prominently dentate inner tepals with one tubercle, or with three distinctly unequal tubercles; in subsp. sylvestris the teeth are usually less than 0.6 mm, developing only near the base of the inner tepals, and the tubercles often almost subequal."

Rumex occidentalis S. Watson [FNA5, HC, HC2]

Proc. Amer. Acad. Arts. 12: 253. 1877.

western dock, western dock o n

Rumex aquaticus L. ssp. *occidentalis* (S. Watson) Hultén
Rumex aquaticus L. var. *fenestratus* (Greene) Dorn [ILBC4]
Rumex bakeri Greene
Rumex confinis
Rumex fenestratus Greene
Rumex fenestratus Greene var. *labradoricus* Rech. f.
Rumex gracilipes Greene
Rumex occidentalis S. Watson var. *labradoricus* (Rech. f.) Lepage
Rumex occidentalis S. Watson var. *procerus* (Greene) J.T. Howell [HC]
Rumex procerus

FNA5: "All of the species of subsect. Aquatici Rechinger f., represented in North America by Rumex occidentalis, R. arcticus, R. nematopodus, and R. tomentellus, form a taxonomically complex aggregate with poorly delimited, often intergrading species. Extremes are evidently distinct (e.g., R. arcticus and R. tomentellus). The taxonomy and distribution of members of this aggregate are still insufficiently known. Some authors prefer to treat all or most of these taxa as subspecies or varieties of R. aquaticus in the broad sense. From my point of view, this does not promote a better understanding of their variability and relationships. A number of segregate species have been described and recognized in regional floras in North America. In most cases the features upon which these species are based intergrade. One of the most widely recognized segregates is Rumex fenestratus Greene emend. Rechinger f. [R. aquaticus subsp. fenestratus (Greene) Hultén, R. occidentalis S. Watson subsp. fenestratus (Greene) Hultén], which, according to K. H. Rechinger (1937), may be distinguished mostly by larger and more cordate fruiting inner tepals (more than 7 mm in R. fenestratus, usually less than 7 mm in R. occidentalis), and larger achenes (3 mm, and more than 3.5 mm, respectively). The morphotype of R. fenestratus occurs mostly along the Pacific coast from central western California to Alaska. Plants with large fruiting inner tepals [known as R. fenestratus var. labradoricus Rechinger f. or R. occidentalis var. labradoricus (Rechinger f.) Lepage] occur also in eastern Canada (Newfoundland and Quebec). In this treatment, I follow the taxonomic decision by J. E. Dawson (1979), who carefully analyzed the clinal variability of the R. occidentalis aggregate. However, R. fenestratus probably deserves recognition at least as a subspecies of R. occidentalis, but its taxonomic status needs additional investigation."

var. *occidentalis* [HC, HC2]

**Rumex patientia* L. [FNA5, HC, HC2]
Sp. Pl. 1: 333. 1753.
patience dock

Lapathum hortense Lam.
Rumex lonaczevskii Klokov
Rumex patientia L. ssp. *orientalis* Danser

Introduced from Eurasia. FNA5: "Some North American specimens of Rumex patientia appear to belong to subsp. orientalis (= R. orientalis Bernhardi 1830, not Campderá 1819; R. lonaczevskii), which differs from subsp. patientia in having larger inner tepals (6-10 × 8-10 mm, not 4-8 × 4-8 mm). A predominantly Asian variety with three tubercles sometimes is recognized as subsp. callosus (Fr. Schmidt ex Maximowicz) Rechinger f. [= var. callosus Fr. Schmidt ex Maximowicz; Rumex callosus (Fr. Schmidt ex Maximowicz) Rechinger f.]. However, the distribution of infraspecific taxa of R. patientia in North America has not been studied in detail."

Rumex paucifolius Nutt. [FNA5, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 7: 49. 1834.
alpine sheep sorrel, alpine sorrel, mountain sorrel

Acetosa gracilescens (Rech. f.) Á. Löve & Everson
Acetosa paucifolia (Nutt.) Á. Löve
Acetosella gracilescens (Rech. f.) Á. Löve
Acetosella paucifolia (Nutt.) Á. Löve
Rumex engelmannii Meisn. var. *geyeri* Meisn.
Rumex geyeri (Meisn.) Trel.
Rumex paucifolius Nutt. ssp. *paucifolius* [KZ99]
Rumex paucifolius Nutt. var. *gracilescens* Rech. f.

FNA5: "Rumex paucifolius is a montane species represented by two chromosome races (diploid and tetraploid) and several ecotypes. Smaller plants from California have been described as var. gracilescens; they are tetraploids and sometimes were regarded as a separate species (Á. Löve and V. Everson 1967; Löve 1986). B. W. Smith (1968) showed that both diploids and tetraploids (and even exceptional spontaneous triploids and individuals with higher polyploid chromosome numbers) occur in many other localities within the range of the species; the differences in chromosome number are not strictly correlated with distribution or morphology. Narrow-leaved ecotypes of R. paucifolius reported by Smith sometimes resemble other narrow-leaved taxa of subg. Acetosella, especially R. beringensis. Rumex paucifolius and R. beringensis may be regarded as morphologically and karyologically transitional between subg. Acetosella and subg. Acetosa. Rumex paucifolius was placed in the monotypic subsect. Paucifoliae Á. Löve & N. Sarkar. Later, Löve transferred it to the segregate genus Acetosella, based mostly on the chromosome number of the species, but morphology suggests it is a member of subg. Acetosa. Probably the best solution of this problem was proposed by Smith, who noted that "the composite range of vegetative, reproductive, and karyotypic characteristics of the forty-odd species now included in the diversified subgenus Acetosa would be only slightly extended by the addition of the five species now classified as Acetosella"• (p. 683)."

Rumex persicarioides L. [FNA5, HC, HC2]
Sp. Pl. 1: 335. 1753.
seashore dock, yellow dock

FNA5: "Rumex persicarioides often has been treated by American botanists as a variety or synonym of R. maritimus (see R. S. Mitchell 1978). It and R. fueginus differ from Eurasian R. maritimus in many respects and are as distinct as many widely recognized Eurasian taxa of this aggregate (e.g., R. palustris, R. rossicus Murbeck, R. ucranicus Fischer ex Sprengel, R. marschallianus Reichenbach, R. amurensis Fr. Schmidt ex Maximowicz, R. evenkiensis Elisarjeva). When submerging R. persicarioides as a variety of R. maritimus, Mitchell noted: "Taxonomic treatment of the group from a Eurasian point of view would undoubtedly shed light on the minor problems which we face in North and South America."• However, from a Eurasian point of view (see e.g., K. H. Rechinger 1937, 1949; J. E. Lousley and D. H. Kent 1981; N. N. Tzvelev 1989b), all North American native taxa of subsect. Maritimi are evidently specifically different from any native Eurasian ones (with the only possible exception of Pacific plants, which are discussed below). Plants similar to Rumex persicarioides, but with bigger tubercles and occuring along the Pacific coast from

northern California to British Columbia, are, in my opinion, closer to R. fueginus in their habit and vegetative characters. K. H. Rechinger (1937) provisionally determined such specimens as R. persicarioides. J. E. Dawson (1979) noted that the Pacific plants differ from Atlantic ones in having bigger tubercles (more than 1.9 × 0.7-1 mm in western plants; less than 1.9 × 0.7 mm in eastern R. persicarioides in the narrow sense), and described these large-tubercled plants as a distinct variety, "R. maritimus var. pacificus"•, unfortunately, an invalid name. However, that taxon seems to be extremely closely related to or possibly conspecific with the northeastern Asian species, R. ochotskius Rechinger f., which is known in eastern Asia from northern Japan to the Okhotsk Sea region of Russian Far East (especially Sakhalin and Kuril islands). The latter species also has large (to 2-2.5 mm) botuliform tubercles with obtuse apices. In the original description Rechinger stated: ""¡foliorum forma R. maritimo simillimus"¡,"• but N. N. Tzvelev (1989b) in his recent treatment of the genus in the Russian Far East noted that most of the specimens of R. ochotskius seen by him had leaf blades rotundate-truncate or broadly cuneate at the base. The R. persicarioides-like plants from the Pacific coast of the United States and Canada (as well as their most probable allies from eastern Asia) need additional study. At present I prefer to place them provisionally into R. persicarioides, following Rechinger\\\'s treatment."

Rumex salicifolius Weinm. [FNA5, HC, HC2]
Flora. 4: 28. 1821.
willow dock

var. *angustivalvis* Danser [HC, HC2]
western willow dock

Rumex hesperius Greene [FNA5]

FNA5: "Rumex hesperius is a little-known species reported only from a localized area in Washington. According to N. M. Sarkar (1958) it is "quite distinct from other species"• in its general appearance?a small plant with large, broad leaves and compact inflorescences."

var. *transitorius* (Rech. f.) J.C. Hickman [HC2, KZ99]
narrow-leaved dock, Pacific willow dock

Rumex transitorius Rech. f. [FNA5]

From FNA5 regarding R. salicifolius:"Rumex salicifolius occurs mostly in southern and central California; it has been reported also from adjacent parts of Arizona (N. M. Sarkar 1958) and Nevada (J. T. Kartesz 1987, vol. 1). The name R. salicifolius has been applied in a broad sense to nearly all species of subsect. Salicifolii, including even mostly Asian R. sibiricus. Rumex salicifolius appears to be most closely related to R. californicus and R. utahensis. J. T. Kartesz (1987, vol. 1) reported Rumex transitorius from Washoe County, Nevada; the morphological characters mentioned in his description suggest another taxon of the R. salicifolius aggregate. Records from Idaho also need confirmation."

var. *triangulivalvis* (Danser) J.C. Hickman [HC, HC2, JPM]
or triangular-valved dock, white, white willow

Rumex salicifolius Weinm. ssp. *triangulivalvis* Danser [HC]
Rumex triangulivalvis (Danser) Rech. f. [FNA5]

FNA5: "Rumex triangulivalvis is the most common and widespread species of the R. salicifolius group. It often occurs in ruderal habitats and may be expected outside its present range. The names Rumex salicifolius and R. mexicanus (in the broad sense) were commonly applied to this species by many North American and European authors."

var. *utahensis* (Rech. f.) Reveal [HC2]
Utah willow dock

Rumex utahensis Rech. f. [FNA5]

**Rumex sanguineus* L. [FNA5, HC, HC2]
Sp. Pl. 1: 334. 1753.
red-vein dock

Lapathum sanguineum (L.) Lam.
Rumex condolodes M. Bieb.
Rumex nemorosus Schrad. ex Willd.

FNA5: "Distribution of Rumex sanguineus in North America is known insufficiently. Most reports from California, Washington, New Brunswick, Nova Scotia, Ontario, and Quebec were based on misidentified specimens of R. conglomeratus or immature R. obtusifolius. Rumex sanguineus is represented in Europe by at least two varieties. The uncommon, cultivated, and occasionally escaped var. sanguineus (redvein dock or bloodwort) has bright red or purple venation of leaves. It probably arose as a mutant from the common, wild var. viridis Sibthorp."

**Rumex stenophyllus* Ledeb. [FNA5, HC2]

Fl. Altaica. 2: 58. 1830.
narrow-leaved dock, narrowleaf dock

Rumex alluvius F.C. Gates & McGregor
Rumex crispus L. var. *dentatus* Schur
Rumex obtusifolius L. var. *cristatus* Neilreich
Rumex odontocarpus Sandor ex Borbás

FNA5: "Within its native range Rumex stenophyllus is mostly confined to slightly saline coastal and alluvial (riparian) habitats. It has successfully colonized a wide range of ruderal and segetal habitats in both Europe and North America. Further spread of this species in the central and southwestern United States and southern Canada may be expected (D. Löve and J.-P. Bernard 1958). It was placed by K. H. Rechinger (1949) in subsect. Stenophylli Rechinger f. According to J. K. Morton and J. M. Venn (1990), reports of Rumex stenophyllus from Ontario refer to the hybrid R. crispus × R. obtusifolius, but R. stenophyllus may be found in the province in the future. Rumex stenophyllus may be distinguished from that hybrid by its fertile fruits and more uniform inner tepals."

Rumex venosus Pursh [FNA5, HC, HC2]

Fl. Amer. Sept. 2: 733. 1813.
veiny dock, winged dock

FNA5: "Rumex venosus is a distinctive species rarely confused with any other members of the genus. However, I have seen herbarium specimens of it misidentified as R. hymenosepalus, and vice versa."

Portulacaceae [FNA4, HC, HC2] Purslane Family

Taxonomy follows the narrow circumscription of Nyffeler and Eggli 2010.

**Portulaca* [FNA4, HC, HC2]

Sp. Pl. 1: 445. 1753; Gen. Pl. ed. 5, 204. 1754.

**Portulaca oleracea* L. [FNA4, HC, HC2]

Sp. Pl. 1: 445. 1753.
common purslane

Portulaca neglecta Mack. & Bush
Portulaca retusa Engelm.

FNA4: "A. P. Simopoulos and N. Salem Jr. (1986) and A. P. Simopoulos et al. (1992) have shown Portulaca oleracea to have the highest content of omega-3 fatty acids and antioxidants of any green leafy vegetable examined to date, suggesting that common purslane should be considered for its nutritional value and not for its weediness. It has long been used as fodder and may have been present in the New World in pre-Columbian times (R. Byrne and J. H. McAndrews 1975). Currently, it is fed to poultry to reduce egg cholesterol. Portulaca oleracea is a highly variable species with worldwide distribution in temperate to warm regions and is the most winter-hardy of all the portulacas. It is a very aggressive weed, one of the ten most noxious weeds worldwide (J. S. Singh and K. P. Singh 1967). As such, many variants have been named (C. D. Legrand 1962) based on seed surface differences, size of seeds, or on variable characters of growth habit, leaf length, and number of stamens. Seven subspecies were recognized by A. Danin et al. (1978): subsp. oleracea, subsp. impolita Danin & H. G. Baker, subsp. granulatostellulata Danin & H. G. Baker, subsp. nicaraguensis Danin & H. G. Baker, subsp. nitida Danin & H. G. Baker, subsp. papillatostellulata Danin & H. G. Baker, and subsp. stellata Danin & H. G. Baker."

Primulaceae [FNA8, HC, HC2] Primrose Family

Synonyms:
Myrsinaceae [FNA8, JPM2] (Myrsine Family)
Theophrastaceae [FNA8] (Joewood Family)

FNA8: "As typically described (e.g., A. Cronquist 1981; V. H. Heywood 1978), Primulaceae were clearly polyphyletic, closely related to Myrsinaceae and Theophrastaceae. M. Källersjö et al. (2000) and B. Ståhl and A. A. Anderberg (2004) removed the nonrosette terrestrial members from Primulaceae in the broad sense and placed them in the Myrsinaceae, which are further distinguished by leaves and calyx often dotted with yellow or dark streaks, flowers with relatively shorter corolla tubes, seeds immersed in placentae, and wood devoid of rays or with multiseriate rays only. Maesa, consisting entirely of trees found in the Eastern Hemisphere tropics, also has semi-inferior ovaries, pedicels with two bracts, and wood with both uniseriate and multiseriate rays; it, too, was removed from Primulaceae/Myrsinaceae and placed in its own family (Källersjö et al.). The families Primulaceae in the narrow sense, Myrsinaceae, Theophrastaceae (including Samolaceae), and Maesaceae then form a monophyletic clade within Ericales (P. F. Stevens, http://www.mobot.org/MOBOT/research/APweb/), sharing some features, most notably flowers with sympetalous corollas, stamens in a single series and opposite the petals, free-central placentation, bitegmic, tenuinucellate ovules, and plants generally with tannins and saponins. Additional evidence (L. Martins et al. 2003) indicates that Androsace and Primula may not be monophyletic; more work is needed to resolve these issues. The work of M. Källersjö et al. (2000) showed that Douglasia should remain separate from Androsace, and Dodecatheon should remain separate from Primula, although Dodecatheon clearly is derived from Primula subg. Auriculastrum. Alternative views suggesting more inclusive concepts of Primula and Androsace have been offered by I. Trift et al. (2002), A. R. Mast et al. (2004), and G. M. Schneeweiss et al. (2004). The phylogenetic position of Cyclamen, a scapose taxon currently included in Myrsinaceae, has not been resolved. Our understanding of Primulaceae is still in flux, and future taxonomic realignments at the familial and generic levels are to be expected."

Androsace [FNA8, HC, HC2]

Sp. Pl. 1: 141. 1753; Gen. Pl. ed. 5, 69. 1754.
androsace, fairy-candelabra, rock-jasmine

Androsace filiformis Retz. [FNA8, HC, HC2]

Observ. Bot. 2: 10. 1781.
slender-stem rock-jasmine

Androsace capillaris Greene

FNA8: "Androsace filiformis grows in wetlands and is easily identified by the tiny flowers and delicate, filiform inflorescence that give the plants a graceful appearance. No other North American Androsace occurs in wetlands. Androsace filiformis occurs widely across Europe and Asia (including the Russian Far East) and in the western continental United States, with a notable gap in Alaska and Canada."

Androsace laevigata (A. Gray) Wendelbo [WTU]

smooth douglasia, cliff dwarf-primrose

Douglasia laevigata A. Gray
Douglasia laevigata A. Gray ssp. *ciliolata* (Constance) Calder & Roy L. Taylor
Douglasia laevigata A. Gray var. *ciliolata* Constance
Douglasia laevigata A. Gray var. *laevigata*

FNA8: "Although the first collection of Douglasia laevigata was from the "Mountains near Mt. Hood," the original description of the species was based on plants collected in the Columbia River gorge, which thus represent the nomenclaturally typical variety (L. Constance 1938), even though that entity constitutes an ecological variant with almost glabrous leaves and loose umbels known only from the gorge. The widespread form, var. ciliolata, has more compact umbels and larger, more toothed, conspicuously ciliolate leaves. Because intermediate forms occur commonly, and even the type specimen of D. laevigata has cilia, the infraspecific taxa are not recognized here."

Androsace nivalis (Lindl.) Wendelbo [WTU]

snow douglasia

Douglasia dentata S. Watson

Douglasia nivalis Lindl.
Douglasia nivalis Lindl. var. *dentata* (S. Watson) A. Gray
Douglasia nivalis Lindl. var. *nivalis*

FNA8: "Previous treatments of Douglasia nivalis have recognized two varieties that differ in the degree of dentation on leaf margins. The most common is var. nivalis, with almost entire leaf blade margins, found in the Wenatchee Mountains and north to Chelan and Douglas counties. Variety dentata has more distinctly toothed leaves and is known only from the Wenatchee Mountains. Because there is a great deal of overlapping variation, particularly in the Wenatchee Mountains, those varieties are not given formal recognition here."

Androsace septentrionalis L. [FNA8, HC, HC2]
Sp. Pl. 1: 142. 1753.
northern fairy-candelabra, rock-jasmine

Androsace septentrionalis L. ssp. *subumbellata* (A. Nelson) G.T. Robbins [KZ99]
Androsace septentrionalis L. var. *subumbellata* A. Nelson

FNA8: "Androsace septentrionalis is broadly distributed and ruderal, occurring from low elevations at high latitudes to the alpine tundra in the Rocky Mountains. It is the most common species of Androsace across western North America and is variable in morphology, depending on elevation, exposure, and light. This plasticity has resulted in a plethora of infraspecific names. Most infraspecific taxa show little geographic coherence, and variants representing all the infraspecific taxa can be found throughout the range of this species, sometimes mixed within single populations. High-elevation individuals tend to have very short scapes and a diminutive growth habit; lowland individuals begin flowering when the scapes are barely developed, and elongate throughout anthesis, ultimately often producing robust individuals with relatively tall scapes. Shaded areas produce plants with "long" pedicels; exposed areas produce plants with "very short" ones. The location and degree of glands and other hairs can vary widely as well. The most readily identifiable morphotype is subsp. glandulosa, seen most commonly in Arizona, southern Colorado, New Mexico, and Texas; even in it, nonglandular individuals occur together with glandular plants. Given the lack of coherence in morphological variation within A. septentrionalis and its environmental variation, it seems best to view the complex as a single, highly variable species."

**Cyclamen* [HC2]
cyclamen, sowbread

**Cyclamen hederifolium* Aiton [HC2]
Sp. Pl., ed. 4 [Willdenow] 1(2): 810. 1798.
ivy-leaf cyclamen

Dodecatheon [FNA8, HC, HC2]
Sp. Pl. 1: 144. 1753; Gen. Pl. ed. 5, 71. 1754.
shooting star

Douglasia [FNA8, HC, HC2]
Quart. J. Sci. Lit. Arts. [24]: 385. 1827.
Douglasia

Lysimachia [FNA8, HC, HC2]
Sp. Pl. 1: 146. 1753; Gen. Pl. ed. 5, 72. 1754.
loosestrife, milkwort, saltwort, starflower

Anagallis [FNA8, HC]
Centunculus [HC]
Glaux [HC]
Trientalis [FNA8, HC]

**Lysimachia arvensis* (L.) U. Manns & Anderb. [FNA, HC, HC2]
Willdenowia 39(1): 51. 2009.
scarlet pimpernel

Anagallis arvensis L. [FNA8, HC]
Anagallis arvensis L. ssp. *arvensis*

Anagallis arvensis L. var. *caerulea* (L.) Gouan
Anagallis caerulea L.

FNA8: "The flowers close on cloudy days and as evening approaches, hence the name weatherglass. P. E. Gibbs and S. Talavera (2001) found that Anagallis arvensis self-pollinates as the petals close. This is the most variable species of Anagallis, with reddish flowers once thought to be common in more northerly latitudes and blue flowers in southern areas. There are numerous intermediate color forms. The blue form has been the source of confusion in the nomenclature of this taxon. Linnaeus described the blue form of A. arvensis as A. caerulea. Schreber used A. coerulea (note the spelling) as did Lamarck for a related taxon that is now included within A. foemina Miller. Subsequent authors submerged A. caerulea/coerulea into A. arvensis as a forma, variety, or subspecies, incorrectly crediting either Schreber or Lamarck. L. F. Ferguson (1972) distinguished A. foemina Miller (including Schreber\\\'s A. coerulea), which consistently produces blue flowers, as a separate entity differing, in part, by petals having few to no marginal hairs, which, when present, have elongate terminal cells (in A. arvensis the petal margins have numerous gland-tipped, globose hairs), and by having flowering pedicels equaling or shorter than the subtending leaf."

Lysimachia ciliata L. [FNA8, HC, HC2]
Sp. Pl. 1: 147. 1753.
fringed yellow-loosestrife

Lysimachia greeneana Hand.-Mazz.
Lysimachia longipedicellata (Lunell) Hand.-Mazz.
Lysimachia membrenacea (Greene) Hand.-Mazz.
Nummularia ciliata (L.) Kuntze
Steironema ciliata (L.) Baudo
Steironema longipedicellatum (Lunell) Lunell
Steironema membranaceum Greene
Steironema pumilum Greene

Lysimachia europaea (L.) U. Manns & Anderb. [FNA, HC2]
Willdenowia 39(1): 51. 2009.
arctic starflower, northern starflower

Trientalis arctica Fisch. ex Hook. [HC]
Trientalis europaea L. [FNA8]
Trientalis europaea L. ssp. *arctica* (Fisch. ex Hook.) Hultén [ILBC]
Trientalis europaea L. var. *aleutica* Tatewaki & Kobayashi
Trientalis europaea L. var. *arctica* (Fisch. ex Hook.) Ledeb.

FNA8: "The Alaskan populations of Trientalis europaea have been segregated as T. arctica or T. europaea var. aleutica, based primarily on the number and size of leaves. E. Hultén (1927-1930, vol. 4) reduced these to T. europaea subsp. arctica; he indicated that they (along with populations from eastern Siberia) are merely "geographic races." He later (1968) mapped them as discrete entities. Other taxonomists (e.g., S. L. Welsh 1974) found intermediates, which I corroborated by examination of herbarium specimens. I believe that a conservative approach is warranted until additional research is undertaken."

**Lysimachia hybrida* Michx. [FNA8, HC2]
Fl. Bor.-Amer. 1: 126. 1803.
lance-leaved yellow loosestrife, lowland loosestrife, Mississippi loosestrife, lowland yellow-loosestrife

Lysimachia ciliata L. var. *validula* (Greene) Kearney & Peebles
Lysimachia lanceolata Walter ssp. *hybrida* (Michx.) J.D. Ray
Lysimachia lanceolata Walter var. *hybrida* (Michx.) A. Gray [HC]
Lysimachia lunellii (Greene) Hand.-Mazz.
Lysimachia validula (Greene) Hand.-Mazz.
Nummularia hybrida (Michx.) Farw.
Steironema laevigatum Howell
Steironema lanceolatum (Walter) A. Gray var. *hybridum* (Michx.) A. Gray
Steironema lunellii Greene
Steironema validulum Greene
Steironema verticillatum Greene

Whited specimen from late 1800s from Ellensburg at OSC; Coffey specimen from 1970s collected at junction of Wilson Creek and Yakima River in Ellensburg at GA.

Lysimachia latifolia (Hook.) Cholewa [FNA, HC, HC2]
Phytoneuron 2014-28: 1. 2014.
broad-leaved starflower, western starflower

Alsinanthemum europaeum (L.) Greene var. *latifolium* (Hook.) Greene
Trientalis borealis Raf. ssp. *latifolia* (Hook.) Hultén [IFBC]
Trientalis europaea L. var. *latifolia* (Hook.) Torr.
Trientalis latifolia Hook. [FNA8, HC]

FNA8: "Specimens from a disjunct population in central Yukon (E. Hultén 1968; W. J. Cody 1996) were not examined."

Lysimachia maritima (L.) Galasso, Banfi & Soldano [FNA8, HC2]
Atti Soc. Ital. Sci. Nat. Mus. Civico Storia Nat. Milano. 146: 229. 2005.
sea milkwort

Glaucoides maritima (L.) Lunell
Glaux maritima L. [HC]
Glaux maritima L. var. *angustifolia* B. Boivin
Glaux maritima L. var. *macrophylla* B. Boivin
Glaux maritima L. var. *obtusifolia* Fernald

FNA8: "Infraspecific taxa have been proposed based on habit, leaf shape, and capsule size. Because many intermediates exist throughout the range, and extremes can be found growing together, I follow most floras in not recognizing further division."

Lysimachia minima (L.) U. Manns & Anderb. [FNA, HC2]
Willdenowia 39(1): 52. 2009.
chaffweed

Anagallidastrum exiguum Bubani
Anagallis minima (L.) E.H.L. Krause [FNA8]
Centunculus minimus L. [HC]
Micropyxis exigua (Bubani) Lunell

FNA8: "Canadian populations of Anagallis minima are found in the Columbia River region of southeastern British Columbia to the South Saskatchewan River region of Alberta and Saskatchewan."

**Lysimachia nummularia* L. [FNA8, HC, HC2]
Sp. Pl. 1: 148. 1753.
creeping-Jenny

FNA8: "Lysimachia nummularia is part of a Eurasian complex of 38 species centered on the Indian subcontinent, whose boundaries are not well understood. North American populations of this species rarely, if ever, produce capsules. Plants of eastern Asia are reported to produce fruit; seed viability is unknown. The species reproduces by vegetative means, often forming extensive mats."

**Lysimachia punctata* L. [FNA8, HC, HC2]
Sp. Pl. 1: 147. 1753.
large yellow-loosestrife

**Lysimachia terrestris* (L.) Britton, Sterns & Poggenberg [FNA8, HC, HC2]
Prelim. Cat. 34. 1888.
swampcandles

Lysimachia bulbifera Curtis
Lysimachia racemosa Lam.
Lysimachia stricta Aiton
Lysimachia terrestris (L.) Britton, Sterns & Poggenberg var. *ovata* (E.L. Rand & Redfield) Fernald
Viscum terrestre L.

FNA8: "Lysimachia terrestris has been introduced in cranberry bogs and is occasionally found on muddy lake shores of the Pacific Northwest (British Columbia, Oregon, Washington). A fairly widespread hybrid between Lysimachia terrestris and L. thyrsiflora has been widely reported and named L. ×commixta

Fernald. The parents may or may not be found in the vicinity of hybrid populations, which can form extensive colonies through vegetative reproduction of rhizomes or bulblets. J. D. Ray (1956) indicated that the hybrids are "relatively infertile," with abnormal pollen grains."

Lysimachia thyrsiflora L. [FNA8, HC, HC2]
Sp. Pl. 1: 147. 1753.
tufted yellow-loosestrife

Lysimachia capitellata Raf.
Lysimachia subcapitata Raf.
Lysimachusa thyrsiflora (L.) Pohl
Naumburgia thrysiflora (L.) Rchb.
Nummularia thrysiflora (L.) Kuntze
Thyrsanthus palustris Schrank

FNA8: "Lysimachia thyrsiflora is known to hybridize readily with L. terrestris (see discussion under the latter)."

**Lysimachia vulgaris* L. [FNA8, HC2]
Sp. Pl. 1: 146. 1753.
garden yellow-loosestrife

Noxious weed.

Primula austrofrigidum (K.L. Chambers) A.R. Mast & Reveal [WTU]
frigid shooting star, Tillamook

Dodecatheon austrofrigidum K.L. Chambers

FNA8: "Dodecatheon austrofrigidum occurs mainly in the mountains near the coast of Washington from the southern Olympic Peninsula (Grays Harbor and Pacific counties) to northwestern Oregon (Clatsop and Tillamook counties). The populations are widely scattered and always with relatively few individuals. At higher elevations (e.g., ca. 1200 m atop Saddle Mountain, Tillamook County), D. austrofrigidum occurs in moist, grassy turf. At lower elevations in the same area, it occurs on stream banks in the narrow zone between the high- and low-water mark, persisting in cracks of basaltic rocks. The degree of denticulation of the leaves appears to vary among populations; some larger plants have toothed leaf blades even prior to anthesis."

Primula conjugens (Greene) A.R. Mast & Reveal [WTU]
desert shooting star, slimpod shooting star

Dodecatheon conjugens Greene
Dodecatheon conjugens Greene ssp. *conjugens*
Dodecatheon conjugens Greene ssp. *viscidum* (Piper) H.J. Thomp.
Dodecatheon conjugens Greene var. *beamishiae* B. Boivin
Dodecatheon conjugens Greene var. *conjugens*
Dodecatheon conjugens Greene var. *viscidum* (Piper) H. Mason ex H. St. John
Dodecatheon viscidum Piper
Primula conjugens (Greene) A.R. Mast & Reveal var. *viscida* (Piper) A.R. Mast & Reveal

Primula hendersonii (A. Gray) A.R. Mast & Reveal [WTU]
broad-leaved shooting star, Henderson's shooting star

Dodecatheon hansenii (Greene) H.J. Thomp.
Dodecatheon hendersonii A. Gray
Dodecatheon hendersonii A. Gray ssp. *cruciatum* (Greene) H.J. Thomp.
Dodecatheon hendersonii A. Gray ssp. *parvifolium* (R. Knuth) H.J. Thomp.
Dodecatheon hendersonii A. Gray var. *hansenii* Greene

FNA8: "Dodecatheon hendersonii occurs from southern Vancouver Island in the coastal ranges to west-central California (as far as San Benito County) and is disjunct into the San Bernardino Mountains in southern California. To the east, the species is found on the Siskiyou Mountains and in the Sierra Nevada of California to Tulare County. A Macoun (s.n., DAO) specimen supposedly gathered at Yale, British Columbia, may be misattributed (K. I. Beamish 1955); all other known localities are from Vancouver Island. Inasmuch as bulblets and mature capsules are rarely collected, it is difficult to clearly distinguish between var. hendersonii and var. hansenii. The former may be broadly characterized as plants bearing bulblets at

anthesis with sparsely glandular scapes, pedicels, and, sometimes, calyces. The calyx of var. hendersonii is usually greenish with purple or reddish speckles. The most distinctive characteristics of this phase are a filament tube that is 1-2.5 mm wide and acute anther apices. It is found mainly along the coast from British Columbia to southern Oregon and in scattered locations in coastal California, with disjunct populations in the foothills of the central Sierra Nevada, and in the mountains of southern California. Variety hansenii is glabrous, lacks bulblets, and the calyx typically is green; it usually is found inland in the Siskiyou Mountains and the Sierra Nevada and scattered populations occur in the coastal ranges of northern California. The filaments in var. hansenii are broader, being tubes 1.5-4 mm wide, and anther apices are obtuse. Capsules of var. hendersonii are usually operculate; those of var. hansenii appear to be consistently valvate. The 2n = 66 plants appear to be primarily individuals that produce little or no pollen."

Primula jeffreyi (Van Houtte) A.R. Mast & Reveal [WTU]

Jeffrey's shooting star, tall mountain shooting star

Dodecatheon jeffreyi Van Houtte
Dodecatheon jeffreyi Van Houtte ssp. *pygmaeum* (H.M. Hall) H.J. Thomp.
Dodecatheon jeffreyi Van Houtte var. *viviparum* (Greene) Abrams

FNA8: "Dodecatheon jeffreyi is found in montane places in the Sierra Nevada of California and western Nevada and on the northern coastal ranges and Siskiyou Mountains of northern California and southwestern Oregon. It occurs in the Cascade Ranges of Oregon, Washington, and British Columbia northward to the Kenai Peninsula region of south-central Alaska, often near the coast and especially on the off-shore islands. It is also widely scattered in the mountains of northeastern Oregon, central and northern Idaho, and western Montana, with isolated stations on the Olympic Peninsula of Washington. A single collection (J. Major 2927, GTNP) from Moose Basin, Grand Teton National Park, is the only record from Wyoming."

Primula latiloba (A. Gray) A.R. Mast & Reveal [WTU]

white shooting star

Dodecatheon dentatum Hook.
Dodecatheon dentatum Hook. ssp. *dentatum*
Dodecatheon latilobum (A. Gray) Elmer ex R. Knuth
Dodecatheon meadia L. var. *latilobum* A. Gray
Primula latilobum (A. Gray) A.R. Mast & Reveal

FNA8: "Dodecatheon dentatum occurs mainly on the eastern slope of the Cascade Range from south-central British Columbia to central Washington, with disjunct populations near the Columbia River in southwestern Washington, the Columbia River Gorge, northeastern Oregon, and northern Idaho. In Idaho, this species occasionally forms hybrids with D. pulchellum var. pulchellum (Oberle 262, MO)."

Primula pauciflora (Greene) A.R. Mast & Reveal [WTU]

A.R.Mast & Reveal, Brittonia 59(1): 81. 2007.
pretty shooting star

Dodecatheon pulchellum (Raf.) Merr.
Exinia pulchella Raf.

var. *cusickii* (Greene) A.R. Mast & Reveal [WTU]

Cusick's shooting star, sticky shooting star

Dodecatheon cusickii Greene
Dodecatheon pulchellum (Raf.) Merr. ssp. *cusickii* (Greene) Calder & Roy L. Taylor
Dodecatheon pulchellum (Raf.) Merr. var. *cusickii* (Greene) Reveal

FNA8: "Variety cusickii is densely glandular-pubescent to glandular-puberulent. It occurs from northeastern Oregon to southeastern British Columbia, thence across Idaho to western Montana, with a disjunct population at Birdseye, Wyoming (A. Nelson 9610, 4 May 1911; DS, RM-mixed with Dodecatheon conjugens). Its range is well within that of var. pulchellum. The whole plant (leaves, scapes, pedicels, and calyx) is densely glandular, unlike D. conjugens var. viscidum, which usually has sparsely and minutely glandular-puberulent pedicels, leaves, and scapes that are (typically) glandular-pubescent proximally. Plants from Alberta and Saskatchewan assigned previously to var. cusickii are var. viscidum."

var. *macrocarpa* (A. Gray) A.R. Mast & Reveal [WTU]

Alaskan shooting star

Dodecatheon pulchellum (Raf.) Merr. ssp. *macrocarpum* (A. Gray) Roy L. Taylor & MacBryde
Dodecatheon pulchellum (Raf.) Merr. var. *macrocarpum* (A. Gray) Reveal

var. *pauciflora* [WTU]
dark-throated shooting star

Dodecatheon pauciflorum Greene
Dodecatheon pauciflorum Greene var. *monanthum* Greene
Dodecatheon pauciflorum Greene var. *watsonii* (Tidestr.) C.L. Hitchc.
Dodecatheon pulchellum (Raf.) Merr. ssp. *monanthum* (Greene) H.J. Thomp. ex Munz
Dodecatheon pulchellum (Raf.) Merr. ssp. *pauciflorum* (Greene) Hultén
Dodecatheon pulchellum (Raf.) Merr. ssp. *pulchellum*
Dodecatheon pulchellum (Raf.) Merr. ssp. *watsonii* (Tidestr.) H.J. Thomp.
Dodecatheon pulchellum (Raf.) Merr. var. *pulchellum*
Dodecatheon pulchellum (Raf.) Merr. var. *shoshonense* (A. Nelson) Reveal
Dodecatheon pulchellum (Raf.) Merr. var. *watsonii* (Tidestr.) B. Boivin
Dodecatheon radicatum Greene
Dodecatheon radicatum Greene ssp. *monanthum* (Greene) H.J. Thomp.
Dodecatheon radicatum Greene ssp. *watsonii* (Tidestr.) H.J. Thomp.

FNA8: "Variety pulchellum is the most widespread and common variant of the species. It ranges from south-eastern Alaska and western Canada, to southeastern Manitoba, to Lassen County, California, northern and eastern Arizona, New Mexico, and northern Mexico. Scattered populations are found in western North Dakota (Burke County) and in western Nebraska (Morrill County). A collection at Fort Lewis, Thurston County, Washington (D. Thysell 705, WTU), may be an introduction."

Primula poetica (L.F. Hend.) A.R. Mast & Reveal [WTU]
narcissus shooting star, poet's shooting star

Dodecatheon poeticum L.F. Hend.

FNA8: "Dodecatheon poeticum grows mainly in the Columbia River gorge and on the eastern edge of the Cascade Range in Washington, and in Oregon. Nearby one can find D. conjugens var. conjugens and D. pulchellum var. cusickii, features of which (the rugose connective of the former, the glandular condition of the latter) are combined in D. poeticum. The distinct filaments of var. conjugens readily distinguish that taxon from D. poeticum; distinction between D. poeticum and D. pulchellum var. cusickii is difficult. The former has maroon pollen sacs; var. cusickii has yellow ones. Plants with all of the features of D. poeticum rarely have the smooth connective typical of D. pulchellum. H. J. Thompson (1953) suggested that D. poeticum (a tetraploid) might be the product of an allopolyploid involving var. cusickii and D. hendersonii (both diploids). The leaves of Dodecatheon poeticum are occasionally slightly toothed and relatively broad (e.g., K. L. Chambers 2080, OSC) and resemble the leaves of D. dentatum, a species that flowers in the Gorge typically after D. poeticum. Rootstocks with bulblets are rarely seen on herbarium specimens."

Primula tetrandra (Suksd. ex Greene) A.R. Mast & Reveal [WTU]
alpine shooting star

Dodecatheon alpinum (A. Gray) Greene

FNA8: "Dodecatheon alpinum is found in widely scattered locations in the San Jacinto Mountains, Transverse Ranges, Sierra Nevada, northern coastal ranges, and the Siskiyou Mountains of California, southwestern Oregon, and west-central Nevada, and in the Cascade Ranges to just north of the Columbia River in Skamania and Yakima counties of Washington. It may be seen on scattered basin ranges in the Intermountain West of Nevada (e.g., East Humboldt, Jarbidge, Ruby, Snake) and western Utah (Deep Creek Mountains), and in some desert ranges of southern Oregon as far east as the Steens Mountains in Harney County; it is disjunct to the Blue and Wallowa mountains of northeastern Oregon. There are other disjunct populations in the northern Wasatch and Uinta mountains of northern and northeastern Utah, and even more widely scattered populations in the southern Wasatch and Tushar mountains. The species has also been found at Warm Springs in Millard County. Isolated populations occur on the Pine Valley Mountains, Utah, and around the Grand Canyon and Mogollon Rim areas of Arizona as far south as Greenlee County. Narrow-leaved plants that are sparsely glandular-pubescent are sometimes found at higher elevations in the Sierra Nevada, making a distinction between Dodecatheon alpinum and D. jeffreyi occasionally arbitrary. A specimen from Deschutes County, Oregon (C. L. Hitchcock and J. S. Martin 4919,

UTC, WTU) has leaf blades to 3.5 cm wide."

Samolus [FNA8, HC2]
Sp. Pl. 1: 171. 1753; Gen. Pl. ed. 5, 78. 1754.
brookweed, water pimpernel

Samolus parviflorus Raf. [FNA8, HC2]
Amer. Monthly Mag. & Crit. Rev. 2: 176. 1818.
water pimpernel

Samolus floribundus Kunth
Samolus valerandi L. ssp. *parviflorus* (Raf.) HultTn [KZ99]

FNA8: "Confirmed Canadian populations of Samolus parviflorus appear to be limited to the Atlantic coastal areas and the Ottawa region of the Saint Lawrence Seaway, with a historical record (1903) known from southern Saskatchewan. A report from British Columbia (www.natureserve.org, 2006) is erroneous; no specimens exist at DAO or UBC as reported. The name Samolus floribundus has sometimes been applied to this taxon. The publication date for S. floribundus is February 1818, making it later than S. parviflorus, published in January of that same year. Some taxonomists include this species within the European S. valerandi; that species has larger flowers and capsules, fewer racemes, and staminodes occurring in clusters of one to three. No specimens have been found of true European S. valerandi in the flora area; previous specimens labeled as S. valerandi are native species, usually S. parviflorus. Samolus parviflorus is occasionally sold as an aquarium plant ("underwater salad")."

Pyrolaceae: see Ericaceae

Ranunculaceae [FNA3, HC, HC2] Buttercup Family

Aconitum [FNA3, HC, HC2]
Sp. Pl. 1: 532. 1753; Gen. Pl. ed. 5, 236, 1754.
monkshood

Aconitum columbianum Nutt. [FNA3, HC, HC2]
Fl. N. Amer. 1: 34. 1838.
Columbian monkshood

ssp. *columbianum* [FNA3, HC2]
Fl. N. Amer. 1: 34. 1838.
Columbian monkshood

Aconitum columbianum Nutt. ssp. *pallidum* Piper
Aconitum columbianum Nutt. var. *columbianum* [HC]
Aconitum columbianum Nutt. var. *ochroleucum* A. Nelson [HC]
Aconitum geranioides Greene
Aconitum noveboracense A. Gray
Aconitum uncinatum L. ssp. *noveboracense* (A. Gray) Hardin

FNA3: "Disjunct, outlying populations of Aconitum columbianum subsp. columbianum in Iowa, Wisconsin, Ohio, and New York occur at relatively low elevations (as low as 300 m), sometimes in frigid air drainages from caves, or in other microhabitats that simulate conditions of higher elevations. They are probably relict populations that have persisted locally since the last glacial period. These northern wild monkshoods have been treated as a species (Aconitum noveboracense , which has had U.S. federal conservation status), or as a subspecies of A . uncinatum . We find, however, that they are part of the A . columbianum complex. They have a single daughter tuber that is separated from the parent tuber by a connecting rhizome no more than 5mm long. This is like Acolumbianum , and unlike A . uncinatum , which has several daughter tubers separated from the parent by elongate connectives.

Leaf morphology is also typical of A . columbianum , and unlike A . uncinatum . Floral morphology is similar to that found in diminutive races of A . columbianum in California, Wyoming, and South Dakota. Several populations in Iowa and Wisconsin are at the diminutive extreme of the range of variation in A . columbianum floral characters such as nectary depth and hood height. Data for Iowa and Wisconsin populations can be found in D. E. Brink (1982, also 1980). Plants in an Ohio population were too stressed and depauperate for data collection. Data collected in New York populations by Brink in 1982 are not published. Aconitum columbianum subsp. columbianum is exceedingly variable. Plants often occur in dense, highly localized populations; they are very similar morphologically within populations and within regional groups of populations. Extreme differences occur between the geographic races. Specimens of the most diminutive races rarely exceed 1 m in height, whereas plants of the largest races may exceed 3m, with correlated differences in size and number of plant parts. A complete range of variation exists between the extremes if many regional groups of populations are considered. Geographic patterns of morphologic variation have been considered too complex to accord formal taxonomic rank to the variants, so the group has been treated as one large, intergrading species complex, with bulbil-bearing and nonbulbil-bearing subspecies. White-flowered variants occur within populations, but white-flowered populations and groups of populations also occur. In each case, these seem to be sporadic variants within larger, regional patterns of morphologic variation. Consequently, white-flowered morphs are not accorded formal taxonomic rank."

Actaea [FNA3, HC, HC2]
Sp. Pl. 1: 504. 1753; Gen. Pl. ed. 5, 222, 1754.
baneberry, bugbane

Cimicifuga [FNA3, HC]

Actaea elata (Nutt.) Prantl [HC2]
Bot. Jahrb. Syst. 9(3): 246. 1887.
tall bugbane

Cimicifuga elata Nutt. [FNA3, HC]

var. *elata* [HC2]
tall bugbane

Actaea laciniata (S. Watson) J. Compton [HC2, KZ99]
Taxon 47(3): 621. 1998.
cut-leaved bugbane, Mt. Hood bugbane

Cimicifuga laciniata S. Watson [FNA3, HC]

Actaea rubra (Aiton) Willd. [FNA3, HC, HC2]
Enum. Pl. 1: 561. 1809.
baneberry

Actaea arguta Nutt.
Actaea eburnea Rydb.
Actaea neglecta Gillman
Actaea rubra Willd. f. *neglecta* (Gillman) Robins. [HC]
Actaea rubra (Aiton) Willd. ssp. *arguta* (Nutt.) Hultén
Actaea rubra (Aiton) Willd. var. *dissecta* Britton
Actaea spicata L. var. *rubra* Aiton
Actaea viridiflora Greene

FNA3: "The "eye" formed by the persistent stigma in Actaea rubra is smaller than that in A . pachypoda . Actaea rubra is part of a circumboreal complex and is very similar to the black-fruited European species A . spicata Linnaeus, with which it is sometimes considered conspecific. The western North American plants of A . rubra have been called A . arguta and were distinguished on the basis of their smaller berries, more pubescent leaves, and narrow, more dissected leaflets. Those distinctions, however, are weak; specimens from the West often have fruits and leaves similar to those of plants from the East. A thorough study of A . spicata in the broad sense, on a worldwide scale, is needed to resolve the delimitation of taxa within this complex. Plants with white fruit, sometimes distinguished as Actaea rubra forma neglecta (Gillman) H. Robinson, are frequent and are more common than the red-fruited form in many localities. Native Americans used various preparations made from the roots of Actaea rubra medicinally to treat coughs and

colds, sores, hemorrhages, stomachaches, syphilis, and emaciations; preparations from the entire plant as a purgative; and infusions from the stems to increase milk flow. It was also used in various ceremonies (D. E. Moerman 1986)."

**Adonis* [FNA3, HC, HC2]
Sp. Pl. 1: 547. 1753; Gen. Pl. ed. 5, 242, 1754.
adonis, pheasant-eye

**Adonis aestivalis* L. [FNA3, HC, HC2]
Sp. Pl., ed. 2. 1: 771. 1762.
summer pheasant's-eye

Adonis aestivalis L. var. *citrina* Hoffm.

Has this species naturalized in WA?

Anemone [FNA3, HC, HC2]
Sp. Pl. 1: 538. 1753; Gen. Pl. ed. 5, 241, 1754.
anemone, windflower

Anemone deltoidea Hook. [FNA3, HC, HC2]
Fl. Bor.-Amer. 1: 6. 1829.
threeleaf anemone, Columbian windflower

Anemone drummondii S. Watson [FNA3, HC, HC2]
Bot. California. 2: 424. 1880.
Drummond's anemone, Drummond's windflower

var. *drummondii* [FNA3, HC, HC2]
Bot. California. 2: 424. 1880.
Drummond's anemone, Drummond's windflower

Anemone cairnesiana Greene
Anemone californica Eastw.
Anemone drummondii S. Watson ssp. *drummondii* [KZ99]

Anemone lyallii Britton [FNA3, HC, HC2]
Ann. New York Acad. Sci. 6: 227. 1891.
little mountain anemone, Lyall's anemone, Lyall's windflower

Anemone oligantha Eastw.
Anemone quinquefolia L. var. *lyallii* (Britton) B.L. Rob.

FNA3: "Anemone lyallii may occasionally intergrade with A . oregana west of the Cascades in northern Oregon (C. L. Hitchcock et al. 1955-1969, vol. 2). The area of probable intergradation should be extended to the southern limits of both species where they are sympatric."

Anemone multifida Poir. [FNA3, HC, HC2]
Encycl. suppl. 1: 364. 1810.
cliff anemone, Pacific anemone

var. *multifida* [FNA3, HC, HC2]
In J. Lamarck et al., Encycl. suppl. 1: 364. 1810.
cliff anemone, Pacific anemone, Pacific windflower

Anemone globosa Nutt. ex A. Nelson
Anemone multifida Poir. var. *hudsoniana* DC. [KZ99]
Anemone multifida Poir. var. *nowasadii* B. Boivin
Anemone multifida Poir. var. *richardsiana* Fernald
Anemone multifida Poir. var. *sansonii* B. Boivin

FNA3: "Early-season plants of Anemone multifida var. multifida have solitary flowers and will key to var. saxicola."

var. *saxicola* B. Boivin [FNA3, HC2]
Canad. Field-Naturalist. 65: 2. 1951.
hirsute anemone, hirsute windflower

Anemone multifida Poir. ssp. *saxicola* (B. Boivin) W.A. Weber
Anemone multifida Poir. var. *hirsuta* C.L. Hitchc. [HC]

Anemone occidentalis S. Watson [FNA3, HC, HC2]
Proc. Amer. Acad. Arts. 11: 121. 1876.
mountain pasqueflower, western pasqueflower

Anemone occidentalis S. Watson var. *subpilosa* Hardin
Pulsatilla occidentalis (S. Watson) Freyn [KZ99]

FNA3: "W. J. Hooker (1829) included Anemone occidentalis in his concept of Anemone alpina Linnaeus."

Anemone oregana A. Gray [FNA3, HC, HC2]
Proc. Amer. Acad. Arts. 22: 308. 1887.
Oregon anemone, Oregon windflower

var. *felix* (M. Peck) C.L. Hitchc. [FNA3, HC, HC2]
Vasc. Pl. Pacif. N.W. 2: 329. 1964.
Oregon anemone, western wood anemone

Anemone felix M. Peck

var. *oregana* [FNA3, HC, HC2]
Proc. Amer. Acad. Arts. 22: 308. 1887.
Oregon anemone, western wood anemone

Anemone adamsiana Eastw.
Anemone quinquefolia L. var. *oregana* (A. Gray) B.L. Rob.

Anemone parviflora Michx. [FNA3, HC, HC2]
Fl. Bor.-Amer. 1: 319. 1803.
northern anemone, small-flowered anemone, northern windflower

Anemone borealis Richardson
Anemone parviflora Michx. var. *parviflora* [KZ99]
Anemone parvilfora Michx. var. *grandiflora* Ulbr.

Anemone patens L. [FNA3, HC2]
Sp. Pl. 1: 538. 1753.
pasqueflower, prairie-crocus

var. *multifida* Pritz. [FNA3, HC2]
Linnaea. 15: 581. 1841.
cliff anemone

Anemone ludoviciana Nutt., superfluous renaming (illegitimate)
Anemone nuttalliana DC. [HC]
Pulsatilla patens (L.) Mill. ssp. *multifida* (Pritz.) Zämelis [KZ99]

FNA3 does not show this taxon occurring in WA, however the PLANTS database does show a synonymous taxon (Pulsatilla patens ssp. multifida) occurring in WA. Further work needs to be conducted to determine the proper name and taxonomy for the WA entity that we currently call A. patens var. multifida.

Anemone piperi Britton ex Rydb. [FNA3, HC, HC2]
Bull. Torrey Bot. Club. 29: 153. 1902.
Piper's anemone, Piper's windflower

FNA3: "Plants of Anemone piperi from southeastern Washington and northeastern Oregon (i.e., the westernmost limits of the species) are sometimes intermediate between A . piperi and A . oregana . Although they possess vertical rhizomes characteristic of A . piperi , they have the bluish or pinkish sepals of A . oregana . These plants are best referred to A . piperi , pending detailed biosystematic analysis."

Aquilegia [FNA3, HC, HC2]
Sp. Pl. 1: 533. 1753; Gen. Pl. ed. 5, 237, 1754.
Columbine

Aquilegia flavescens S. Watson [FNA3, HC, HC2]

Botany (Fortieth Parallel). 10. 1871.
yellow columbine

Aquilegia flavescens S. Watson var. *flavescens* [KZ99]
Aquilegia flavescens S. Watson var. *miniata* A. Nelson & J.F. Macbr.
Aquilegia formosa Fisch. ex DC. var. *flavescens* (S. Watson) M. Peck

FNA3: "Aquilegia flavescens sometimes forms hybrid swarms with A . formosa var. formosa , which grows at lower elevations through much of its range. Intermediate specimens having pinkish red flowers and petal blades 5-6 mm are occasionally found where these species grow together. The name A . flavescens var. miniana has sometimes been mistakenly applied to these intermediates, but the type of var. miniana is a typical, pink-sepaled plant of A . flavescens ."

Aquilegia flavescens S. Watson × ***Aquilegia formosa*** Fisch. ex DC. var. ***formosa*** [HC2]

Aquilegia formosa Fisch. ex DC. [FNA3, HC, HC2, KZ99]
Prodr. 1: 50. 1824.
red columbine, Sitka columbine

var. *formosa* [FNA3, HC2]
Prodr. 1: 50. 1824.
red columbine, Sitka columbine, western columbine

Aquilegia canadensis L. var. *formosa*
Aquilegia columbiana Rydb.
Aquilegia formosa Fisch. ex DC. var. *communis* B. Boivin
Aquilegia formosa Fisch. ex DC. var. *megalantha* B. Boivin
Aquilegia formosa Fisch. ex DC. var. *wawawensis* (Payson) H. St. John

**Aquilegia vulgaris* L. [FNA3, HC2]
Sp. Pl. 1: 533. 1753.
European Columbine

Not reported in H&C; AJ reports "escapes and nearly naturalized" in Seattle area. FNA3: "Aquilegia vulgaris is cultivated as an ornamental and occasionally escapes into disturbed habitats. Most plants have blue or purple flowers (the wild type), but horticultural races with white or reddish flowers sometimes become established. Many cultivated columbines are derived from hybrids between A . vulgaris and related species. Some of our escaped plants are probably descended from such hybrids."

Arcteranthis [HC2]
false-buttercup

Arcteranthis cooleyae (Vasey & Rose) Greene [HC2]
Pittonia 3(16): 190. 1897.
Cooley's buttercup

Kumlienia cooleyae (Vasey & Rose) Greene [KZ99]
Ranunculus cooleyae Vasey & Rose [FNA3, HC]

Caltha [FNA3, HC, HC2]
Sp. Pl. 1: 558. 1753; Gen. Pl. ed. 5, 244, 1754.
marsh-marigold

Caltha biflora DC. [HC, HC2]
Syst. Nat. [Candolle] 1: 310. 1817.
broad-leaved marsh-marigold, twin-flowered marsh-marigold
(see also *Caltha leptosepala*)

Caltha biflora DC. var. *biflora* [HC]
Caltha howellii (Huth) Greene
Caltha leptosepala DC. ssp. *biflora* (DC.) P.G. Sm.
Caltha leptosepala DC. ssp. *howellii* (Huth) P.G. Sm. [KZ99]
Caltha leptosepala DC. var. *biflora* (DC.) G. Lawson

Caltha leptosepala DC. [FNA3, HC, HC2]
Syst. Nat. 1: 310. 1817.

elkslip

Caltha biflora DC. var. *rotundifolia* (Huth) C.L. Hitchc. [HC]
Caltha leptosepala DC. var. *rotundifolia* Huth
Psychropila leptosepala (DC.) W. Weber

FNA3: "Caltha leptosepala is morphologically complex, and a number of segregate taxa have been described. Plants are most commonly assigned to two species, however. Caltha leptosepala in strict sense is found in the Rocky Mountains of Arizona and New Mexico north to Alaska and is characterized by longer-than-broad leaves with small, nonoverlapping basal lobes, solitary-flowered inflorescences, and sessile follicles. Plants in the Coast Ranges of central California north to the coastal islands of southern Alaska, distinguished by broader-than-long leaves with large, overlapping basal lobes, 2-flowered inflorescences, and stipitate follicles, have been called C . biflora . My comparison of specimens from the Rocky Mountains and the Coast Ranges indicated that no clear distinction could be made (table 1). While plants are often distinctive in the southern part of their range, a continuous intergradation between the two extremes exists over much of their range."

Caltha palustris L. [FNA3, HC2]
Sp. Pl. 1: 558. 1753.
yellow marshmarigold

Caltha arctica R. Br.
Caltha asarifolia DC. [HC]
Caltha palustris L. ssp. *asarifolia* (DC.) Hultén
Caltha palustris L. var. *asarifolia* (DC.) Rothr.
Caltha palustris L. var. *flabellifolia* (Pursh) Torr. & A. Gray
Caltha palustris L. var. *palustris* [KZ99]

FNA3: "Caltha palustris has been divided into different taxa, although plants have been most commonly assigned to two varieties in North America. Typical C . palustris var. palustris is characterized by permanently erect, stout stems that do not produce roots and shoots at the nodes after anthesis. The basal leaves are broadly cordate to reniform with coarsely crenate-dentate margins and overlapping basal lobes. Generally more than three flowers occur on a stem. In contrast, C . palustris var. flabellifolia [= var. arctica , var. radicans (T. F. Forster) Beck] is characterized by stems that sprawl with age and produce roots and shoots at the nodes after anthesis. The basal leaves are Â± reniform with denticulate margins, and the basal lobes are widely divergent and do not overlap. Often fewer than three flowers occur on a stem. Caltha palustris var. flabellifolia is distributed locally throughout the range of C . palustris var. palustris ; it often grows in places with more extreme environmental conditions, such as shorelines, tidal areas, swiftly running streams and rivers, and areas with an arctic climate. Many arctic specimens can be assigned to this variety. While Caltha palustris var. palustris and var. flabellifolia are distinctive in their extremes, they appear to represent elements along a morphologic continuum rather than recognizable taxonomic entities. For example, P.G. Smit (1973) found plants from Point Barrow, Alaska, to be dwarfed, few flowered, and prostrate, while specimens from southern Alaska were robust, many flowered, and erect. Between these two extremes a complete series of intermediates occurs. Based on that evidence, and considering the phenotypic plasticity known to exist in this species, the various specific and infraspecific segregates of C . palustris in North America are not recognized."

**Ceratocephala* [HC2]*
bur buttercup, hornseed buttercup, curveseed butterwort

**Ceratocephala testiculata* (Crantz) Besser [FNA3, HC2]*
Enum. Pl. [Besser] 70. 1822.
hornseed buttercup

Ceratocephalus orthoceras DC.
Ranunculus testiculatus Crantz [FNA3, HC]

FNA3: "In North America, Ranunculus testiculatus seems to be expanding its range rapidly in arid and semiarid areas. A second species of this subgenus, R . falcatus Linnaeus [Ceratocephala falcata (Linnaeus) Persoon], has been reported from North America, but all reports seem to be based on misidentified material of R . testiculatus."

Clematis [FNA3, HC, HC2]

Sp. Pl. 1: 543. 1753; Gen. Pl. ed. 5, 242, 1754.
clematis, virgins-bower

Clematis hirsutissima Pursh [FNA3, HC, HC2]
Fl. Amer. Sept. 2: 385. 1814.
Douglas's clematis, leatherflower, sugarbowls, vaseflower

var. *hirsutissima* [FNA3, HC2]
Fl. Amer. Sept. 2: 385. 1814.
Douglas' clematis

Clematis hirsutissima Pursh var. *arizonica* (A. Heller) R.O. Erickson
Viorna arizonica (A. Heller) A. Heller
Viorna bakeri (Greene) Rydb.
Viorna eriophora Rydb.
Viorna jonesii (Kuntze) Rydb.
Viorna wyethii (Nutt.) Rydb.

FNA3: "..some plants from Washington, Oregon, Colorado, and elsewhere have leaflets quite as narrowly lobed, and other plants in the Flagstaff area have more widely lobed leaflets. The widely spreading leaves allegedly characteristic of C. hirsutissima var. arizonica likewise occur elsewhere in the range of the species. Clematis hirsutissima var. hirsutissima , as circumscribed here, is highly variable in the density of leaf pubescence throughout most of its range."

Clematis ligusticifolia Nutt. [FNA3, HC, HC2]
Fl. N. Amer. 1: 9. 1838.
western clematis

Clematis ligusticifolia Nutt. var. *brevifolia* Nutt. [KZ99]
Clematis ligusticifolia Nutt. var. *ligusticifolia* [KZ99]
Clematis neomexicana Wooton & Standl.
Clematis suksdorfii B.L. Rob.

FNA3: "Two varieties of Clematis ligusticifolia have been weakly distinguished based on the presence or absence of 2-pinnate leaves."

Clematis occidentalis (Hornem.) DC. [FNA3, HC2]
Prodr. 1: 10. 1824.
Columbia clematis, rock clematis, Columbia virgin's bower

var. *dissecta* (C.L. Hitchc.) J.S. Pringle [FNA3, HC2]
Brittonia. 23: 371. 1971.
Columbia clematis

Clematis columbiana (Nutt.) Torr. & A. Gray var. *dissecta* C.L. Hitchc. [HC]

FNA3: "Clematis occidentalis var. dissecta occurs only in the Wenatchee and adjacent ranges of the Cascade Mountains."

var. *grosseserrata* (Rydb.) J.S. Pringle [FNA3, HC2]
Brittonia. 23: 370. 1971.
Columbia clematis

Atrogene grosseserrata Rydb., orthographic variant
Clematis columbiana (Nutt.) Torr. & A. Gray [FNA3, HC, HC2], misapplied
Clematis columbiana (Nutt.) Torr. & A. Gray var. *columbiana* [FNA3, HC, HC2], misapplied
Clematis occidentalis (Hornem.) DC. ssp. *grosseserrata* (Rydb.) R.L. Taylor & McBryde

FNA3: "The name Clematis columbiana was formerly misapplied to C. occidentalis var. grosseserrata ; it is still associated with that taxon in some horticultural and popular publications. In such works, true C . columbiana is usually called C. pseudoalpina." Not in H&C.

**Clematis orientalis* L. [FNA3, HC2]
Sp. Pl. 1: 543. 1753.
Oriental clematis, Oriental virgin's bower

**Clematis vitalba* L. [FNA3, HC, HC2]

Sp. Pl. 1: 544. 1753.
evergreen clematis, old-man's beard, traveler's-joy

Coptis [FNA3, HC, HC2]
Trans. Linn. Soc. London, Bot. 8:305. 1807.
goldthread

Coptis aspleniifolia Salisb. [FNA3, HC2]
Trans. Linn. Soc. London, Bot. 8:306. 1807.
fern-leaf goldthread

Coptis asplenifolia Salisb. [HC], orthographic variant

FNA3: "This species is widespread in coastal areas from southern British Columbia to southeastern Alaska. The Washington State Heritage Program tracks this species as "state-rare" in Snohomish County, Washington; I have not seen any specimens to confirm its presence in the state. Coptis aspleniifolia , C . laciniata , and C . occidentalis form a group of morphologically similar, allopatric species that are probably recently derived. The species may have originated in response to the opening of the western Cordilleran landscape after Pleistocene glaciation and could be considered localized variants of a single species. Although most individuals can be readily distinguished, some can be difficult to place. A putative hybrid between Coptis aspleniifolia and C . trifolia has been found along the Kennedy River of Vancouver Island, British Columbia (T.C. Brayshaw, pers. comm.). It has 3-5 deeply dissected leaflets per leaf and no complete flowers."

Coptis laciniata A. Gray [FNA3, HC, HC2]
Bot. Gaz. 12:297. 1887.
Oregon goldthread

Coptis occidentalis (Nutt.) Torr. & A. Gray [FNA3, HC, HC2]
Fl. N. Amer. 1:28. 1838.
Idaho goldthread, western goldthread

Chrysocoptis occidentalis Nutt.

Coptis trifolia (L.) Salisb. [FNA3, HC, HC2]
Trans. Linn. Soc. London, Bot. 8:305. 1807.
threeleaf goldthread

Coptis groenlandica (Oeder) Fernald

Single collection from Clallam County.

Delphinium [FNA3, HC, HC2]
Sp. Pl. 1: 530. 1753; Gen. Pl. ed 5, 236. 1754.
delphinium, larkspur

Consolida [FNA3]

**Delphinium ajacis* L. [HC2]
Sp. Pl. 1: 531. 1753
doubtful knight's-spur

Consolida ajacis (L.) Schur [FNA3]
Consolida ambigua (L.) P.W. Ball & Heywood
Delphinium ambiguum L.

FNA3: "In many floras the names Consolida ambigua (Linnaeus) Ball & Heywood and Delphinium ambiguum Linnaeus have been misapplied to this taxon. Consolida ajacis has escaped and become more or less naturalized in many temperate and subtropical parts of the world. It is by far the most commonly encountered species of Consolida in North America." Not in H&C.

Delphinium basalticum M.J. Warnock [FNA3, HC2]
Phytologia. 78: 91. 1995.
basaltic larkspur

FNA3: "Hybrids between Delphinium basalticum and D . trolliifolium are known."

Delphinium ×burkei Greene [FNA3, HC, HC2]
Erythea 2: 183 1894.
Burke's larkspur

The name Delphinium burkei Greene is often incorrectly applied to plants of D. distichum, as in H&C. FNA3: "Although hybridization between D . depauperatum and D . nuttallianum is uncommon, hybrids do occur; they have been named D . × burkei Greene. Burke\\\'s specimens at Kew represent a good series of permutations of this cross and successive backcrosses."

Delphinium depauperatum Nutt. [FNA3, HC, HC2]
Fl. N. Amer. 1: 33. 1838.
slim larkspur

Delphinium cyanoreios Piper
Delphinium diversifolium Greene
Delphinium diversifolium Greene var. *harneyense* (Ewan) R.J. Davis

FNA3: "Delphinium depauperatum and D . nuttallianum are often found in the same meadows, with D . depauperatum occupying wetter sites, often very near streams, while D . nuttallianum is found in drier, better-drained sites. In typical years, the substrate will be dry around D . nuttallianum plants, while the substrate is damp near D . depauperatum plants as they flower. In addition, within a meadow, D . depauperatum flowers later than D . nuttallianum , so there is normally little overlap in flowering phenology of the two taxa. Although hybridization between D . depauperatum and D . nuttallianum is uncommon, hybrids do occur; they have been named D . × burkei Greene. Burke\'s specimens at Kew represent a good series of permutations of this cross and successive backcrosses. Specimens labeled Delphinium depauperatum subsp. harneyense represent the phase with more abundant yellow-glandular trichomes in the inflorescence and slightly larger flowers. Considerable variation in these features may be found within populations. Presence of yellow-glandular hairs is generally greater in more northern populations. Type specimens of Delphinium diversifolium are intermediate in amount of glandular pubescence. Often confused with Delphinium nuttallianum , D . depauperatum may be distinguished by its cylindric inflorescences, less dissected leaves, winged seeds, and erect fruits. These character states contrast with the pyramidal inflorescences, more dissected leaves, ringed seeds, and spreading fruits of D . nuttallianum . Dwarfed phases of Delphinium polycladon may be confused with D . depauperatum ; they can be distinguished on the basis of bluish purple flowers, sigmoid pedicel, and prominent buds in the former, and dark blue flowers, straight pedicels, and absence of prominent buds in the latter."

Delphinium distichum Geyer ex A. Gray [FNA3, HC2]
J. Bot. 6: 68. 1847.
two-spike larkspur

Delphinium strictum A. Nelson var. *distichiflorum* (Hook.) H. St. John

Delphinium glareosum Greene [FNA3, HC, HC2]
Pittonia. 3: 257. 1898.
Olympic larkspur

Delphinium caprorum Ewan

FNA3: "Delphinium bicolor is closely related to D . glareosum ; it differs in its wider-lobed cauline leaves, shallower petal clefts, and narrower fruits." In the Columbia Basin D. glareosum appears to hybridize with D. nuttallianum, making distinction between the two species difficult.

Delphinium glaucum S. Watson [FNA3, HC, HC2]
Bot. California. 2: 427. 1880.
pale larkspur

Delphinium scopulorum A. Gray var. *glaucum* (S. Watson) A. Gray
Delphinium splendens G.N. Jones

FNA3: "Delphinium glaucum hybridizes extensively with D . barbeyi in Utah and Colorado to the extent that hybrids [D . × occidentale (S. Watson) S. Watson] are more common in many areas than individuals of either parental stock. It occasionally hybridizes with D . distichum , D . polycladon , D . ramosum , and D . stachydeum . Hybrids with D . brachycentrum are called D . × nutans A. Nelson. Tremendous variation is apparent in what is here recognized as Delphinium glaucum . This is the northern expression of the complex described in the discussion under Delphinium subsect. Exaltata . Although some geographic

patterns are apparent in the variation within D . glaucum , infraspecific entities are not here recognized. Apparently because of rather recent and/or incomplete genetic isolation, the degree of differentiation between these units is not such that they can be consistently recognized. Specimens named Delphinium splendens represent plants grown in high-moisture, low-light conditions and may occur as sporadic individuals anywhere from California to Alaska. Type specimens of D . brownii Rydberg, D . canmorense Rydberg, and D . hookeri A. Nelson represent plants grown on relatively dry sites at high latitudes. Plants from dry sites at low latitudes are represented by D . bakerianum Bornmüller and D . occidentale var. reticulatum A. Nelson. Plants with lavender to white flowers are represented by type specimens of D . brownii forma pallidiflorum B. Boivin and D . cucullatum A. Nelson. Type specimens of D . alatum A. Nelson and D . glaucum var. alpinum F. L. Wynd (an invalid name) represent plants growing above or near treeline. Delphinium glaucum may be confused with D . californicum , D . exaltatum , D . polycladon , or D . stachydeum . For distinctions from D . californicum , see discussion under that species. Absence of basal or proximal cauline leaves, generally much larger plants (greater than 1.5 m), more flowers in the inflorescence, and shorter petioles on the leaves of D . glaucum are features that serve to distinguish this species from D . polycladon . In the latter, the leaves are primarily on the proximal stem, plants often less than 1.5 m, flowers more scattered, and petioles more than twice the length of leaf blades. Features of the sepals may be used to distinguish D . glaucum (dark lavender to blue purple, usually only minutely puberulent) from D . stachydeum (bright blue, densely puberulent). Vegetative parts of D . stachydeum are also densely puberulent, while those of D . glaucum typically are glabrous."

Delphinium leucophaeum Greene [HC, HC2]
Erythea 3(7): 118. 1895.
pale larkspur

Delphinium nuttallii A. Gray ssp. *ochroleucum* (Nutt.) M.J. Warnock [FNA3]

The treatment here follows H&C, which is not consistent with the FNA3 treament of D. nuttallii ssp. ochroleucum: "The range of morphologic features of Delphinium nuttallii subsp. ochroleucum (D. leucophaeum) is almost completely encompassed within that of D. nuttallii subsp. nuttallii . Sepal color is the only feature consistently separating the two subspecies. Were it not for the fact that any given population typically has plants of only one flower color, a rank of forma would be more appropriate."

Delphinium lineapetalum Ewan [FNA3, HC2]
Univ. Colorado Stud., Ser. D, Phys. Sci. 2: 126. 1945.
line-petaled larkspur

Delphinium nuttallianum Pritz. var. *lineapetalum* (Ewan) C.L. Hitchc. [HC]

Delphinium menziesii DC. [FNA3, HC, HC2]
Syst. Nat. 1: 355. 1817.
Menzies larkspur

Delphinium menziesii DC. ssp. *menziesii* [FNA3]
Delphinium menziesii DC. ssp. *pyramidale* Ewan
Delphinium menziesii var. *menziesii* [HC]
Delphinium menziesii DC. var. *pyramidale* (Ewan) C.L. Hitchc. [HC]

FNA3: "Although Delphinium menziesii has often been confused with D . nuttallii, it may be distinguished by its consistently larger flowers and usually fewer flowers per plant. Interestingly, each species produces both blue-purple and yellowish flower colors in separate populations. Delphinium menziesii subsp. menziesii hybridizes with D . trolliifolium and D . nuttallii ."

Delphinium multiplex (Ewan) C.L. Hitchc. [FNA3, HC, HC2]
Vasc. Pl. Pacif. N.W. 2: 357. 1964.
Kittitas larkspur

Delphinium cyanoreios Piper f. *multiplex* Ewan

Endemic to Washington. Hybridizes freely with D. distichum where the two taxa come into contact. FNA3: "Delphinium multiplex hybridizes with D . glaucum and D . distichum.".

Delphinium nuttallianum Pritz. [FNA3, HC, HC2]
Repert. Bot. Syst. 1: 744. 1842.
thin-petal larkspur, upland larkspur
(see also *Delphinium lineapetalum*)

Delphinium menziesii DC. ssp. *utahense* ined.
Delphinium menziesii DC. var. *utahense* S. Watson
Delphinium nuttallianum Pritz. var. *fulvum* C.L. Hitchc. [HC]
Delphinium nuttallianum Pritz. var. *levicaule* C.L. Hitchc.
Delphinium nuttallianum Pritz. ex Walp. var. *nuttallianum* [HC]
Delphinium pauciflorum Nutt.
Delphinium sonnei Greene

FNA3: "Delphinium nuttallianum represents an extremely difficult complex, with many variations in a number of morphologic traits. The complex has been and continues to be a major source of confusion for identification of Delphinium in North America. Type specimens of D . nuttallianum represent plants growing under dry conditions in open areas. These are typically found at 1200-2000 m in sage scrub or lower montane forest. Delphinium nuttallianum may be confused with D . andersonii , D . antoninum , D . depauperatum , D . gracilentum , and two subspecies of D . patens (subsp. patens and subsp. montanum). Features that may be used to separate D . nuttallianum from the first four, are enumerated under the respective species discussions. From D . patens subsp. patens , D . nuttallianum may be distinguished by its narrower leaf lobes, larger fruits, and more compact inflorescence. The frequent presence of glandular hairs in the inflorescence of D . patens subsp. montanum , contrasted with their absence in D . nuttallianum , will separate these taxa. Dwarfed plants of D . polycladon may be confused with D . nuttallianum . The latter, however may be distinguished by its ringed seeds, and it does not have prominent buds or sigmoid pedicel. Hybrids have been seen between Delphinium nuttallianum and D . andersonii , D . depauperatum (D . × burkei Greene), D . distichum (D . × diversicolor Rydberg), D . nudicaule , and D . polycladon ."

Delphinium nuttallii A. Gray [FNA3, HC, HC2]
Bot. Gaz. 12: 54. 1887.
Nuttall's larkspur

Delphinium nuttallii A. Gray ssp. *nuttallii* [FNA3]

Delphinium occidentale (S. Watson) S. Watson [FNA3, HC, HC2]
Man. Bot. Rocky Mt. 11. 1885.
western larkspur

D. occidentale is a hybrid between D. glaucum and D. barbeyi.

var. *occidentale* [HC2]
western larkspur

Delphinium stachydeum (A. Gray) Tidestr. [FNA3, HC, HC2]
Proc. Biol. Soc. Wash. 27: 61. 1914.
hedge nettle larkspur, spiked larkspur

Delphinium scopulorum A. Gray var. *stachydeum* A. Gray
Delphinium stachydeum (A. Gray) A. Nelson & J.F. Macbr.
Delphinium umatillense Ewan

On 10/14/2009, the PLANTS database shows this species occuring in WA based on a specimen from Clallam County at WS that is cited in a 1906 manuscript in Contributions from the U.S. National Herbarium. This is most likely a misidentified specimen given the known range of this species (east of the Cascades in WA, OR; Intermountain West).FNA3 shows this species barely reaching into southeastern WA, but it is unclear as to which herbarium has the specimen showing this occurrence. FNA3: "Populations of Delphinium stachydeum are widely scattered in isolated mountain ranges surrounded by desert or grassland. The species has been reported (visual sightings) from northwestern Utah; no specimens have been seen from there. Hybrids between D . stachydeum and D . glaucum have been reported. Although D . stachydeum has been seen flowering within 30 m of flowering D . depauperatum , no hybrids have been observed. Delphinium stachydeum may possibly be confused with D . geyeri , from which it may be distinguished by its usually greater plant size, less pubescent foliage, and later flowering date. Delphinium stachydeum also may be confused with D . glaucum ; see discussion under that species."

Delphinium sutherlandii M.J. Warnock [FNA3, HC2]
Phytologia. 78: 97. 1995.
Sutherland's larkspur

Delphinium trolliifolium A. Gray [FNA3, HC, HC2]

Proc. Amer. Acad. Arts. 8: 375. 1872.
cow-poison, poison larkspur

FNA3: "Hybrids between Delphinium trolliifolium and D . decorum , D . menziesii subsp. pallidum (D . × pavonaceum Ewan, Peacock larkspur), D . nudicaule , D . nuttallianum , and D . nuttallii are known. Delphinium trolliifolium is likely to be confused only with D . bakeri . Refer to discussion under that species for differences."

Delphinium viridescens Leiberg [FNA3, HC, HC2]
Proc. Biol. Soc. Wash. 11: 39. 1897.
Wenatchee larkspur

FNA3: "Delphinium viridescens is local in mountains southwest of Wenatchee, Washington."

Delphinium xantholeucum Piper [FNA3, HC, HC2]
Contr. U.S. Natl. Herb. 11: 280. 1906.
yellow-white larkspur

FNA3: "Delphinium xantholeucum is very local; much of the habitat of this species has been converted to orchards."

Enemion [FNA3, HC2]
J. Phys. Chim. Hist. Nat. Arts. 91: 70. 1820.
false rue-anemone

Isopyrum [HC]

Enemion hallii (A. Gray) J.R. Drumm. & Hutch. [FNA3, HC2]
Bull. Misc. Inform. Kew. 1920: 161. 1920.
Willamette false rue-anemone

Isopyrum hallii A. Gray [HC]

FNA3: "Enemion hallii differs from all other North American members of the genus in having well-defined cymose inflorescences. Its closest ally is thought to be the east-Asian species E . raddeanum Regel, from which it differs in having long-petiolate leaves and cymose inflorescences with bracteolate subumbels. Enemion raddeanum is characterized by sessile or short-petiolate leaves and simple, umbellate inflorescences."

**Ficaria* [HC2]
fig buttercup

**Ficaria verna* Huds. [HC2, Stace 1997]
Fl. Angl. (Hudson) 214. 1762.
lesser celandine

Ranunculus ficaria L. [FNA3, HC]
Ranunculus ficaria L. ssp. *bulbifera* (Marsden-Jones) Lawalrée
Ranunculus ficaria L. ssp. *calthifolius* (Rchb.) Arcang.
Ranunculus ficaria L. var. *bulbifera* Albert [KZ99]

Recent molecular evidence indicates Ficaria is distinct from Ranunculus. FNA3: "In North America, Ranunculus ficaria seems to be expanding its range rapidly in areas with cool mesic climates. The species is extremely variable (especially in leaf size and stem posture), and many attempts have been made to divide it into varieties or subspecies (see P. D. Sell 1994). The different forms, however, intergrade extensively and the varieties are often impossible to distinguish."

Halerpestes [HC2]
buttercup

Halerpestes cymbalaria (Pursh) Greene [HC2]
Pittonia 4(23): 208. 1900.
alkali buttercup, seaside buttercup

Ranunculus cymbalaria Pursh [FNA3, HC]
Ranunculus cymbalaria Pursh var. *alpinus* Hook.

Ranunculus cymbalaria Pursh var. *saximontanus* Fernald

**Helleborus* [FNA3, HC2]
Sp. Pl. 1: 557. 1753; Gen. Pl. ed. 5, 244, 1754.

**Helleborus foetidus* L. [HC2]
Sp. Pl. 1: 558. 1753.
stinking hellebore

Myosurus [FNA3, HC, HC2]
Sp. Pl. 1: 284. 1753; Gen. Pl. ed. 5, 137, 1754.
mouse-tail

Myosurus ×alopecuroides Greene [HC2]
Bull. Calif. Acad. Sci. 1(4): 278. 1885.
hybrid mouse-tail

Myosurus ×*clavicaulis* M. Peck [Peck]

FNA7: "Plants of Myosurus minimus from a few sites in coastal southern California, northern Baja California, and immediately west of Riley, Oregon, sometimes have short scapes, so that the heads of achenes are immersed in the leaves. These plants, which have been called M . minimus subsp. apus (Greene) G. R. Campbell, M . minimus var. apus Greene, or M . clavicaulis M. E. Peck are indistinguishable from some recombinant lines found in M . minimus × sessilis hybrid swarms (see discussion under M . sessilis), but they occur outside the current range of M . sessilis . D. E. Stone (1959) has suggested that they resulted from past hybridization between the two species, perhaps at a time when M. sessilis had a wider range than it does now."

Myosurus apetalus Gay [FNA3, HC2]
Fl. Chil. 1: 31. 1845.
bristly mouse-tail, sedge mouse-tail

Myosurus aristatus Benth. [HC], illegitimate name
Myosurus minimus L. var. *aristatus* (Benth.) B. Boivin

var. *borealis* Whittem. [FNA3, HC2]
Novon. 4: 78. 1994.
sedge mouse-tail

FNA3: "The illegitimate names Myosurus aristatus Bentham ex Hooker and M. minimus var. aristatus (Bentham ex Hooker) B. Boivin have been used for this species [M. apetalus]."

Myosurus minimus L. [FNA3, HC, HC2]
Sp. Pl. 1: 284. 1753.
tiny mouse-tail

Myosurus lepturus Greene
Myosurus lepturus Greene var. *filiformus* (Greene) Greene, orthographic variant
Myosurus minimus L. ssp. *major* (Greene) G.R. Campb.
Myosurus minimus L. var. *filiformus* Greene, orthographic variant
Myosurus minimus L. var. *major* (Greene) K.C. Davis

FNA3: "Plants of Myosurus minimus from a few sites in coastal southern California, northern Baja California, and immediately west of Riley, Oregon, sometimes have short scapes, so that the heads of achenes are immersed in the leaves. These plants, which have been called M . minimus subsp. apus (Greene) G. R. Campbell, M. minimus var. apus Greene, or M. clavicaulis M. E. Peck, are indistinguishable from some recombinant lines found in M. minimus × sessilis hybrid swarms (see discussion under M. sessilis), but they occur outside the current range of M. sessilis. D. E. Stone (1959) has suggested that they resulted from past hybridization between the two species, perhaps at a time when M. sessilis had a wider range than it does now." Washington Natural Heritage Program recognizes M. clavicaulis as a distinct taxon and considers it Sensitive in Washington.

Myosurus sessilis S. Watson [FNA3, HC, HC2]
Proc. Amer. Acad. Arts. 17: 362. 1882.
shor-tstemmed mouse-tail, vernal pool mouse-tail

First collected in WA in Klickitat Co. in 2018.

**Nigella* [FNA3, HC, HC2]
Sp. Pl. 1: 534. 1753; Gen. Pl. ed. 5, 238, 1754.

**Nigella damascena* L. [FNA3, HC, HC2]
Sp. Pl. 1: 534. 1753.
devil-in-the-bush, love-in-a-mist

FNA3: "Nigella damascena is frequently cultivated as an ornamental and for dried-flower arrangements. It occasionally escapes cultivation and may become established. Populations in Ontario and Quebec, and probably elsewhere, are short-lived. Most North American populations of Nigella damascena are represented by a mixture of single- and double-flowered (having supernumerary flower parts) individuals. Sepals tend to be larger and more variable in color than in Eurasian plants. Single-flowered plants usually have petals; petals appear to be absent in double-flowered individuals."

Ranunculus [FNA3, HC, HC2]
Sp. Pl. 1: 548. 1753; Gen. Pl. ed. 5, 243, 1754.
buttercup, crowfoot, water-buttercup
(see also *Arcteranthis*, *Ceratocephala*, *Ficaria*, *Halerpestes*)

Ranunculus abortivus L. [FNA3, HC, HC2]
Sp. Pl. 1: 551. 1753.
kidney-leaf buttercup

Ranunculus abortivus L. ssp. *acrolasius* (Fernald) B.M. Kapoor & A. Löve
Ranunculus abortivus L. ssp. *indivisus* Fern.
Ranunculus abortivus L. var. *acrolasius* Fernald
Ranunculus abortivus L. var. *eucyclus* Fernald

**Ranunculus acris* L. [FNA3, HC, HC2]
Sp. Pl. 1: 554. 1753.
meadow buttercup

Ranunculus acris L. var. *latisectus* Beck

FNA3: "Ranunculus acris is variable in form and division of leaves, size of achene beak, and form of indument on the proximal stem. Most North American plants are weedy and have poorly differentiated caudices; these forms probably were introduced from Eurasia. Rhizomatous plants with large flowers (parenthetic measurements above) found in the Aleutian Islands of Alaska and in Greenland are probably native. Aleutian populations of this form have been called R . acris var. frigidus Regel or R . grandis Honda var. austrokurilensis (Tatewaki) H. Hara. Both names were originally applied to Asiatic plants, and their applicability to American specimens is open to question."

Ranunculus alismifolius Geyer ex Benth. [FNA3, HC2]
Pl. Hartw. 295. 1849.
plantain-leaved buttercup

Ranunculus alismaefolius Geyer [HC], orthographic variant

var. *alismellus* A. Gray [FNA3, HC2]
Proc. Amer. Acad. Arts. 7: 327. 1867.
dwarf plantain-leaved buttercup

Ranunculus alismaefolius Geyer var. *alismellus* A. Gray [HC], orthographic variant

var. *alismifolius* [FNA3, HC2]
Pl. Hartw. 295. 1849.
plantain-leaved buttercup

Ranunculus alismaefolius Geyer var. *alismaefolius* [HC], orthographic variant

var. *hartwegii* (Greene) Jeps. [FNA3, HC2]
Fl. Calif. 1: 534. 1922.
Hartweg's buttercup

Ranunculus alismaefolius Geyer var. *hartwegii* (Greene) Jeps. [HC], orthographic variant

Ranunculus hartwegii Greene

FNA3: "This variety is poorly defined and grades into several other varieties."

Ranunculus aquatilis L. [FNA3, HC, HC2]
Sp. Pl. 1: 556. 1753.
white western buttercup, water crowfoot, white water crowfoot

var. *aquatilis* [FNA3, HC2]
Sp. Pl. 1: 556. 1753.
white water buttercup

Ranunculus aquatilis L. var. *hispidulus* Drew [HC]
Ranunculus trichophyllus Chaix var. *hispidulus* (Drew) W.B. Drew

FNA3: "Plants growing in deep water may flower without producing floating leaves. Such plants cannot be distinguished from specimens of Ranunculus aquatilis var. diffusus except by culture in shallow water."

var. *diffusus* With. [FNA3, HC2]
Arr. Brit. Pl., ed. 3. 2: 507. 1796.
water buttercup

Ranunculus aquatilis L. var. *capillaceus* (Thuill.) DC. [HC]
Ranunculus aquatilis L. var. *porteri* (Britton) L.D. Benson [HC]
Ranunculus longirostris Godr. [HC, KZ99]
Ranunculus subrigidus W.B. Drew [HC]
Ranunculus trichophyllus Chaix [KZ99]

FNA3: "Populations of Ranunculus aquatilis var. diffusus with long achene beaks are not known from the Old World. In North America, beak length varies continuously over the whole range given for the variety, and separation of plants with unusually long beaks as R . longirostris is not tenable. Ranunculus aquatilis var. diffusus shows geographic variation, and some regional forms have been recognized as separate varieties. Dwarf creeping arctic plants may be called R . aquatilis var. eradicatum , plants with sparsely pubescent or glabrous receptacle from eastern North America may be called R . aquatilis var. calvescens , plants with linear, noncapillary leaf segments from the northern Great Basin may be called R . aquatilis var. porteri , and very robust plants from Oregon and northernmost California may be called R . aquatilis var. harrisii . Extreme forms of these races are recognizable, but they intergrade and many specimens cannot be confidently assigned to one or another of them."

**Ranunculus arvensis* L. [FNA3, HC, HC2]
Sp. Pl. 1: 555. 1753.
field buttercup, hungerweed

Ranunculus arvensis L. var. *tuberculatus* DC.

**Ranunculus bulbosus* L. [FNA3, HC, HC2]
Sp. Pl. 1: 554. 1753.
St. Anthony's-turnip, bulbous buttercup

Ranunculus bulbosus L. var. *dissectus* Babey
Ranunculus bulbosus L. var. *valdepubens* (Jord.) Briq.

FNA3: "Ranunculus bulbosus is native to Europe and the Near East but has become naturalized in many other parts of the world. It is considered an introduced weed in the flora."

Ranunculus californicus Benth. [FNA3, HC, HC2]
Pl. Hartw. 295. 1849.
California buttercup

var. *californicus* [FNA3, HC2]
Pl. Hartw. 295. 1849.
California buttercup

Ranunculus californicus Benth. var. *austromontanus* L.D. Benson
Ranunculus californicus Benth. var. *gratus* Jeps.

Ranunculus californicus Benth. var. *rugulosus* (Greene) L.D. Benson

FNA3: "In addition to the range given, localized populations of Ranunculus californicus have been reported recently from a few islands in the vicinity of Victoria (British Columbia and Washington) (M. F. Denton 1978; T. C. Brayshaw 1989). Those populations are small and introgress freely with R . occidentalis wherever they come together. Denton referred her specimens to R . californicus var. cuneatus ; Brayshaw reported both varieties from the same small populations, but his data are consistent with populations of R . californicus var. cuneatus that are introgressing extensively with R . occidentalis . Although both Denton and Brayshaw treat R . californicus as a native species in that region, several reasons support the belief that it is introduced there. No reports of R . californicus in the area occur prior to 1978, although the area is quite well collected (especially Victoria, B. C. and the San Juan Islands, Washington); a long history of extensive marine trade between Victoria and San Francisco has resulted in the introduction of a number of other California species to the area; and for scattered small populations of R . californicus to have persisted for long periods in the face of free introgression from R . occidentalis seems unlikely. Given the small population size and the introgression from R . occidentalis , it is questionable whether R . californicus can persist in the area."

Ranunculus cardiophyllus Hook. [FNA3, HC, HC2]
Fl. Bor.-Amer. 1: 14. 1829.
heart-leaf buttercup

Ranunculus cardiophyllus Hook. var. *coloradensis* L.D. Benson
Ranunculus cardiophyllus Hook. var. *subsagittatus* (A. Gray) L.D. Benson
Ranunculus pedatifidus J.E. Sm. var. *cardiophyllus* (Hook.) Britton

FNA3: "Ranunculus cardiophyllus is quite variable. Through most of its range, leaves always have rounded marginal crenae and cordate or truncate bases, stems are often densely pilose (but may be sparsely pilose or glabrous), and achene beaks are curved. In plants from Arizona and New Mexico, however, leaves may have obtuse marginal crenae or broadly obtuse bases, stems are never densely pilose, and achene beaks are sometimes straight. Forms showing some or all of these charactersistics are often separated as R. cardiophyllus var. subsagittatus. The characteristics are poorly correlated, however, and taxonomic recognition is not warranted. Most specimens of Ranunculus cardiophyllus have all of the basal leaves unlobed, but plants with the innermost basal leaf 3-5-lobed are common. A few specimens, mostly from the northern part of its range, have all of the basal leaves 5-parted or -divided. Those plants approach R. pedatifidus in their morphology, and R. cardiophyllus has sometimes been considered a variety of that species."

Ranunculus eschscholtzii Schltdl. [FNA3, HC, HC2]
Animadv. Bot. Ranunc. Cand. 2: 16. 1820.
subalpine buttercup

var. *eschscholtzii* [FNA3, HC, HC2]
Animadv. Bot. Ranunc. Cand. 2: 16. 1820.
Eschscholtz buttercup

Ranunculus eschscholtzii Schltdl. var. *typicus* L.D. Benson
Ranunculus nivalis L. var. *eschscholtzii* (Schltdl.) S. Watson

var. *suksdorfii* (A. Gray) L.D. Benson [FNA3, HC, HC2]
Amer. J. Bot. 23: 170. 1936.
Suksdorf's buttercup

Ranunculus suksdorfii A. Gray [KZ99]

Ranunculus flabellaris Raf. [FNA3, HC, HC2]
Amer. Monthly Mag. & Crit. Rev. 2: 344. 1818.
yellow water buttercup

Ranunculus delphiniifolius Torr. ex Eaton

Ranunculus flammula L. [FNA3, HC, HC2]
Sp. Pl. 1: 548. 1753.
creeping buttercup, lesser spearwort

var. *flammula* [FNA3, HC2]
Sp. Pl. 1: 548. 1753.

creeping spearwort

Ranunculus flammula L. var. *angustifolius* Wallr.

FNA3: "In Eurasia, this taxon [R. flammula] is usually treated as two closely related species. Ranunculus flammula in the strict sense has relatively stout (0.8-3 mm thick) stems that are erect or ascending from prostrate bases, lanceolate to oblanceolate leaves 3-10 mm broad, sepals 3-4 mm, and petals 5-7 × 3-4 mm. Ranunculus reptans has slender (0.2-1 mm thick) stems that are usually prostrate except for the pedicels, leaves linear or filiform, to 2 mm broad, sepals 1-2 mm, and petals 3-5 × 1-2.5 mm. Collections from the Great Plains and Rocky Mountains resemble R . reptans in most characters, but they often have broader leaves (up to 5 mm broad). Plants from farther west are very confusing; specimens showing the typical morphology of R . flammula in the strict sense and R . reptans are found over a wide area, but most specimens from this area combine the characteristics of the two taxa in various ways. For this reason, it is not possible to separate these taxa at the species level. Three varieties are usually recognized, but further study will probably alter the varietal classification (see comments below, under R . flammula var. ovalis). L. D. Benson (1948) reported Ranunculus flammula var. flammula only from eastern Canada and referred all material from the Pacific Slope to Ranunculus flammula var. ovalis . Benson\'s treatment is not tenable, however, because some western collections are indistinguishable from the eastern plants."

var. *ovalis* (J.M. Bigelow) L.D. Benson [FNA3, HC2]
Bull. Torrey Bot. Club. 69: 305. 1942.
creeping spearwort

Ranunculus filiformis Michx. var. *ovalis* J.M. Bigelow
Ranunculus flammula L. var. *samolifolius* (Greene) L.D. Benson
Ranunculus reptans L. var. *ovalis* (J.M. Bigelow) Torr. & A. Gray

FNA3: "Ranunculus flammula var. ovalis , as currently understood, is heterogeneous. Many specimens from throughout the cited range scarcely differ from specimens of R . flammula var. reptans and perhaps should be included in the latter variety. Material from the Pacific slope, however, may be intermediate between R . flammula var. reptans and R . flammula var. flammula or may show various combinations of the distinguishing characteristics of the two. Biosystematic study of R . flammula as a whole will be needed for a meaningful treatment of these populations to be possible."

var. *reptans* (L.) E. Mey. [FNA3, HC2]
Pl. Labrador. 96. 1830.
creeping spearwort

Ranunculus reptans L.
Ranunculus reptans L. var. *filiformis* (Michx.) DC.

Ranunculus glaberrimus Hook. [FNA3, HC, HC2]
Fl. Bor.-Amer. 1: 12. 1829.
sagebrush buttercup

var. *ellipticus* (Greene) Greene [FNA3, HC, HC2]
Fl. Francisc. 1: 298. 1891.
sagebrush buttercup

Ranunculus ellipticus Greene
Ranunculus glaberrimus Hook. var. *buddii* B. Boivin

var. *glaberrimus* [FNA3, HC, HC2]
Fl. Bor.-Amer. 1:12, plate 5, fig. A. 1829.
sagebrush buttercup

Ranunculus glaberrimus Hook. var. *typicus* L.D. Benson

Ranunculus gmelinii DC. [FNA3, HC, HC2]
Syst. Nat. 1: 303. 1817.
Gmelin's buttercup, small yellow water buttercup

Ranunculus gmelinii DC. var. *hookeri* (D. Don) L.D. Benson [HC]
Ranunculus gmelinii DC. var. *limosus* (Nutt.) H. Hara [HC]

FNA3: "Ranunculus gmelinii has been divided into varieties on the basis of the indument and flower size.

These characters are variable and poorly correlated with one another, however, and these varieties scarcely seem natural."

Ranunculus grayi Britton [HC2]
Bull. Torrey Bot. Club 18(9): 265. 1891.
arctic buttercup

Ranunculus gelidus Kar. & Kir. [FNA3, HC], misapplied
Ranunculus gelidus s.s. is restricted to central Asia (Whittemore 2009)
Ranunculus gelidus Kar. & Kir. var. *grayi* (Britton) Hultén
Ranunculus verecundus B.L. Rob. ex Piper [HC, KZ99]

FNA3: "Plants with small achenes are often separated as Ranunculus verecundus. Achene size varies continuously over the range given, however, and it is not correlated with the minor shape difference mentioned by L. D. Benson (1948)."

Ranunculus hebecarpus Hook. & Arn. [FNA3, HC, HC2]
Bot. Beechey Voy. 316. 1838.
downy buttercup

Ranunculus inamoenus Greene [FNA3, HC, HC2]
Pittonia. 3: 91. 1896.
graceful buttercup

var. *inamoenus* [FNA3, HC2]
Pittonia. 3: 91. 1896.
unlovely buttercup

Ranunculus inamoenus Greene var. *alpeophilus* (A. Nelson) L.D. Benson [KZ99]
Ranunculus inamoenus Greene var. *typicus* L.D. Benson

FNA3: "The type collection of Ranunculus inamoenus ver. alpeophilus is a mixed collection, and some apparent "isotype" material is actually R. eschscholtzii."

Ranunculus macounii Britton [FNA3, HC, HC2]
Trans. New York Acad. Sci. 12: 3. 1892.
Macoun's buttercup

Ranunculus macounii Britton var. *macounii* [HC]
Ranunculus macounii Britton var. *oreganus* (A. Gray) K.C. Davis [HC]

FNA3: "Through most of its range, Ranunculus macounii has conspicuously hispid herbage. Glabrous plants are found, however, in the lower Columbia River Valley (southwestern Washington and adjacent Oregon). This variant has been called R. macounii var. oreganus."

**Ranunculus muricatus* L. [FNA3, HC, HC2]
Sp. Pl. 1: 555. 1753.
spiny-fruit buttercup

Ranunculus occidentalis Nutt. [FNA3, HC, HC2]
Fl. N. Amer. 1: 22. 1838.
western buttercup

var. *occidentalis* [FNA3, HC, HC2]
Fl. N. Amer. 1(1): 22. 1838.
western buttercup

Ranunculus occidentalis Nutt. var. *eisenii* (Kellogg) A. Gray
Ranunculus occidentalis Nutt. var. *rattanii* A. Gray [HC]

Several other varieties listed by various authors, but there seems to be agreement that occidentalis is the variety in WA. FNA3: "L. D. Benson (1948) divided Ranunculus occidentalis var. occidentalis into three varieties. The name R . occidentalis var. occidentalis was applied only to plants from Oregon northward, in which leaves are rarely compound and never have lanceolate ultimate segments, and achenes are always glabrous and have beaks over 1 mm. California plants were treated as R . occidentalis var. rattanii (plants with small [5-8 mm] petals from the Coast Ranges) and R . occidentalis var. eisenii (plants with larger petals from the foothills surrounding the Central Valley).

Most of those plants from California, however, cannot be distinguished from more northern plants, and forms with small petals are found throughout the range of the variety."

Ranunculus orthorhynchus Hook. [FNA3, HC, HC2]
Fl. Bor.-Amer. 1: 21. 1829.
straight-beak buttercup

var. *orthorhynchus* [FNA3, HC, HC2]
Fl. Bor.-Amer. 1(1): 21, pl. 9. 1829.
straight-beak buttercup

Ranunculus orthorhynchus Hook. ssp. *alaschensis* (L.D. Benson) Hultén
Ranunculus orthorhynchus Hook. var. *alaschensis* L.D. Benson
Ranunculus orthorhynchus Hook. var. *hallii* Jeps.

H&C and FNA split out var. platyphyllus, but FNA states it is weak so I have lumped per KZ

var. *platyphyllus* A. Gray [FNA3, HC, HC2]
Proc. Amer. Acad. Arts. 21: 377. 1886.
straight-beak buttercup

Ranunculus orthorhynchus Hook. ssp. *platyphyllus* (A. Gray) R.L. Taylor & MacBryde

**Ranunculus parviflorus* L. [FNA3, HC2]
Sp. Pl., ed. 2. 1: 780. 1762.
small-flower buttercup

Ranunculus pensylvanicus L. f. [FNA3, HC, HC2]
Suppl. Pl. 272. 1782.
Pennsylvania buttercup

Ranunculus populago Greene [FNA3, HC, HC2]
Erythea. 3: 19. 1895.
mountain buttercup

Ranunculus pygmaeus Wahlenb. [FNA3, HC, HC2]
Fl. Lapp. 157. 1812.
dwarf buttercup

**Ranunculus repens* L. [FNA3, HC, HC2]
Sp. Pl. 1: 554. 1753.
creeping buttercup

Ranunculus repens L. var. *glabratus* DC.
Ranunculus repens L. var. *pleniflorus* Fernald [HC]
Ranunculus repens L. var. *repens* [HC]

FNA3: "Ranunculus repens is widely naturalized in many parts of the world. Plants with sparse pubescence have been called R . repens var. glabratus . Horticultural forms with the outer stamens transformed into numerous extra petals occasionally become established and have been called R . repens var. pleniflorus. These variants have no taxonomic significance."

**Ranunculus sardous* Crantz [FNA3, HC, HC2]
Stirp. Austr. Fasc. 2: 84. 1763.
hairy buttercup

Ranunculus parvulus L.

FNA3: "Native to Europe; Pacific Islands; Australia."

Ranunculus sceleratus L. [FNA3, HC, HC2]
Sp. Pl. 1: 551. 1753.
blister buttercup, celery-leaved buttercup, celery-leaved crowfoot

Hecatonia scelerata (L.) Fourreau

var. *multifidus* Nutt. [FNA3, HC, HC2]
Fl. N. Amer. 1: 19. 1838.
celery-leaved buttercup

Ranunculus sceleratus L. ssp. *multifidus* (Nutt.) Hultén

*var. *sceleratus* [FNA3, HC, HC2]
Sp. Pl. 1: 551. 1753.
celery-leaved buttercup

Ranunculus sceleratus L. var. *typicus* L.D. Benson

FNA3: "Ranunculus sceleratus var. sceleratus is a serious weed of watercourses and marshy fields. It is a naturalized weed in western North America; it is not clear whether it is native in the eastern part of the continent or was introduced from Europe."

Ranunculus triternatus A. Gray [FNA3, HC2]
Proc. Amer. Acad. Arts. 21: 370. 1886.
Dalles Mountain buttercup, obscure buttercup

Ranunculus glaberrimus Hook. var. *reconditus* L.D. Benson
Ranunculus reconditus A. Nelson & J.F. Macbr. [HC], superfluous renaming (illegitimate)

FNA3: "C. L. Hitchcock et al. (1955-1969, vol. 2) considered the name Ranunculus triternatus A. Gray to be an illegitemate homonym and used the illegitimate (superfluous) name R . reconditus A. Nelson & J. F. Macbride for this species. The name Ranunculus triternatus Poiret was not validly published (not accepted by Poiret) and does not invalidate R . triternatus A. Gray."

Ranunculus uncinatus D. Don [FNA3, HC, HC2]
Gen. Hist. 1: 35. 1831.
little buttercup

Ranunculus bongardii Greene
Ranunculus occidentalis Nutt. var. *parviflorus* Torr.
Ranunculus uncinatus D. Don var. *parviflorus* (Torr.) L.D. Benson [HC, KZ99]
Ranunculus uncinatus D. Don ex G. Don var. *uncinatus* [HC]

FNA3: "Plants with hispid stems and achenes are often separated as Ranunculus uncinatus var. parviflorus ; these two characters are poorly correlated, however, and sometimes vary between plants in a single collection. Ranunculus uncinatus was reported from northeastern Alberta and adjacent Northwest Territories by H. J. Scoggan (1978-1979, part 3). The specimens have hairy receptacles and straight, broad achene beaks; they apparently represent small individuals of R . macounii ."

Thalictrum [FNA3, HC, HC2]
Sp. Pl. 1: 545. 1753; Gen. Pl. ed. 5, 242, 1754.
meadowrue

Thalictrum dasycarpum Fisch. & Avé-Lall. [FNA3, HC, HC2]
Index Sem. Hort. Petrop. 8: 72. 1842.
purple meadow-rue

Thalictrum hypoglaucum Rydb.

FNA3: "Thalictrum dasycarpum is a variable species similar to, and possibly intergrading with, T . pubescens . Glabrous variants of T . dasycarpum have been treated as T . dasycarpum var. hypoglaucum . Glabrous and glandular (stipitate and papillate) forms are found throughout the range of the species and occur together in some populations. Native Americans used Thalictrum dasycarpum medicinally to reduce fever, cure cramps, as a stimulant for horses, and as a love charm (D. E. Moerman 1986)."

Thalictrum occidentale A. Gray [FNA3, HC, HC2]
Proc. Amer. Acad. Arts. 8: 372. 1873.
western meadow-rue

Thalictrum occidentale A. Gray var. *macounii* B. Boivin
Thalictrum occidentale A. Gray var. *occidentale* [KZ99]
Thalictrum occidentale A. Gray var. *palousense* H. St. John

FNA3: "Thalictrum occidentale is similar to T . confine and T . venulosum ; thorough field studies are needed to determine whether or not they should be maintained as separate species. Thalictrum occidentale can usually be distinguished by its reflexed achenes. Plants of northern British Columbia, sometimes called Thalictrum occidentale var. breitungii (B. Boivin) Brayshaw, appear to be intermediate

between T. occidentale and T. venulosum (T. C. Brayshaw, pers. comm.); achenes are ascending, ± compressed, and beaks rather short (2-4 mm) (T. C. Brayshaw 1989). Some of the Native Americans used Thalictrum occidentale medicinally for headaches, eye trouble, and sore legs, to loosen phlem, and to improve blood circulation (D. E. Moerman 1986)."

Thalictrum venulosum Trel. [FNA3, HC, HC2]
Proc. Boston Soc. Nat. Hist. 23: 302. 1886.
veiny-leaf meadow-rue

FNA3: "Thalctrum venulosum is similar to T. confine and T. occidentale . Careful field studies are needed to clarify the relationships among these taxa."

Trautvetteria [FNA3, HC, HC2]
Index Sem. Hort. Petrop. 1: 22. 1835.
false bugbane

Trautvetteria caroliniensis (Walter) Vail [FNA3, HC, HC2]
Mem. Torrey Bot. Club. 2: 42. 1890.
false bugbane, wild bugbane

Trautvetteria caroliniensis (Walter) Vail var. *occidentalis* (A. Gray) C.L. Hitchc. [HC, KZ99]

FNA3: "Populations of Trautvetteria caroliniensis in western North America have been distinguished from the eastern typical material as T. caroliniansis var. borealis (Hara) T. Shimizu [synonym: T. caroliniensis var. occidentalis (A. Gray) C.L. Hitchcock]. Asian populations, long treated as the distinct species T. japonica Siebold & Zuccarini, were most recently regarded (T. Shimizu 1981; M. Tamura 1991) as conspecific with the North American populations [as T. caroliniensis var. japonica (Siebold & Zuccarini) T. Shimizu]. Aside from geography, varietal differences seem rather arbitrary."

Trollius [FNA3, HC, HC2]
Sp. Pl. 1: 556. 1753; Gen. Pl. ed. 5, 243, 1754.
globeflower

Trollius albiflorus (A. Gray) Rydb. [FNA3, HC2]
Mem. New York Bot. Gard. 1: 152. 1900.
western globeflower

Trollius laxus Salisb. [FNA3, HC], misapplied
Trollius laxus Salisb. var. *albiflorus* A. Gray [HC, KZ99]

FNA3: "The diploid Trollius albiflorus is isolated from the tetraploid T. laxus ecologically, geographically, and reproductively, although it often has been treated as a variety of the latter. Identities of specimens of Trollius albiflorus and the superficially similar Anemone narcissiflora subsp. zephyra in Colorado and Wyoming are sometimes confused. Close examination reveals a number of differences. The anemone has sepals yellow (not white), leaf blades and flowering stems pilose to villous (not glabrous), achenes (not follicles), and leaflike bracts subtending the pedicels and whorled (leaves alternate in Trollius)."

Resedaceae [FNA7, HC, HC2] Mignonette Family

**Reseda* [FNA7, HC, HC2]
Sp. Pl. 1: 448. 1753; Gen. Pl. ed. 5, 207. 1754.
mignonette

**Reseda alba* L. [FNA7, HC, HC2]
Sp. Pl. 1: 449. 1753.
white upright mignonette

**Reseda luteola* L. [FNA7, HC, HC2]
Sp. Pl. 1: 448. 1753.
yellow dye, Dyer's rocket, weld

. FNA7: "Reseda luteola is a traditional Old World dye plant, used since Roman times. It contains a high amount of the flavonoid luteolin, which yields one of the most brilliant yellow dyes. When combined with woad (Isatis tinctoria, Brassicaceae), it yields "Saxon Green." In the nineteenth century R. luteola was widely growing, which favored its spreading through many parts of the world; today, it has fallen into disuse. Its potential as a crop for natural dyeing of textiles is being re-evaluated. It is also grown as an ornamental; the appealing rosettes of yellowish green leaves acquire a reddish blush in cool weather."

Rhamnaceae [HC, HC2] Buckthorn Family

Ceanothus [HC, HC2]
buckbrush, buckthorn, ceanothus, wild-lilac

Ceanothus cuneatus (Hook.) Nutt. [HC, HC2]
common buckbrush, narrow-leaf buckthorn, sedge-leaf buckthorn

var. *cuneatus* [HC2]

Ceanothus integerrimus Hook. & Arn. [HC, HC2]
Bot. Beechey Voy. 329. 1838.
deerbrush

Ceanothus andersonii Parry
Ceanothus californicus Kellogg

Ceanothus prostratus Benth. [HC, HC2]
Pl. Hartw. 302 [1849]. 1848.
prostrate ceanothus, Mahala mat

var. *prostratus* [HC2]

Ceanothus sanguineus Pursh [HC, HC2]
Fl. Bor.-Amer. 1(3): 125, pl. 45 [1813]. 1814.
redstem ceanothus, Oregon teatree

Ceanothus velutinus Douglas [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(3): 125 (t. 45). 1831.
mountain balm, greasewood, sticky-laurel, tobacco-brush

var. *laevigatus* Torr. & A. Gray [HC, HC2]
Fl. N. Amer. 1(4): 686 1840.
mountain balm, greasewood, sticky-laurel

Ceanothus velutinus Douglas var. *hookeri* M.C. Johnst.

var. *velutinus* [HC, HC2]
Fl. Bor.-Amer. 1(3): 125, pl. 45. 1831.
mountain balm, greasewood

Frangula [HC2]
coffee berry

Frangula purshiana (DC.) A. Gray ex J.G. Cooper [HC2, JPM2]
Pacif. Railr. Rep. 12(2): 57. 1860.
buckthorn, false buckthorn, cascara

Rhamnus purshiana DC. [HC]

ssp. *purshiana* [FNA]
Pacif. Railr. Rep. 12(2): 57. 1860.
buckthorn, cascara

Rhamnus [HC, HC2]

buckthorn, cascara
(see also *Frangula*)

Rhamnus alnifolia L'Hér. [HC, HC2, JPM2]
Sert. Angl. 5. 1788.
alder-leaf buckthorn

**Rhamnus cathartica* L. [HC2]
common buckthorn

Rosaceae [HC, HC2] Rose Family

Rosaceae is treated in FNA Volume 9, the publication date of which is uncertain as of December 2009. Taxonomic and nomenclatural changes contained in draft treatments for that volume began to be incorporated here in October 2008. Isolated bird-sown individuals of several additional species of Cotoneaster have been seen in King Co., but they are not considered naturalized yet; they can be identified using the keys in Stace (1997) or Fryer and Hylmo (1995).

Agrimonia [HC, HC2]
agrimony

Agrimonia gryposepala Wallr. [HC2, IFBC]
Beitrage zur Botanik 1: 49-50, pl. 1, f. 8. 1842.
tall hairy agrimony, tall hairy grooveburr

Currently not documented by specimens in Washington.

Amelanchier [HC, HC2]
serviceberry, shadbush

Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. [HC, HC2]
Fam. Nat. Syn. Monogr. 3: 147. 1847 1847.
saskatoon, serviceberry

Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *alnifolia* [HC]
Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *cusickii* (Fernald) C.L. Hitchc. [HC]
Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *florida* Schneid.
Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *humptulipensis* (G.N. Jones) C.L. Hitchc. [HC]
Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *pumila* (Torr. & A. Gray) C.K. Schneid. [HC]
Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *semiintegrifolia* (Hook.) C.L. Hitchc. [HC]
Amelanchier basalticola Piper
Amelanchier canadensis (L.) Medik. var. *pumila* Torr. & A. Gray
Amelanchier canadensis var. *semiintegrifolia* Farw.
Amelanchier cuneata Piper
Amelanchier cusickii Fernald [FNA9]
Amelanchier ephemerotricha Suksd.
Amelanchier ephemerotricha Suksd. var. *silvicola* Suksd.
Amelanchier florida Lindl.
Amelanchier florida Lindl. f. *tomentosa* Sealy
Amelanchier florida Lindl. var. *cusickii* (Fernald) M. Peck
Amelanchier florida Lindl. var. *humptulipensis* G.N. Jones
Amelanchier florida Lindl. var. *parvifolia* Loud
Amelanchier gormani Greene
Amelanchier ovalis Medik. var. *semiintegrifolia* Hook.
Amelanchier oxyodon Koehne
Amelanchier parvifolia Hort. ex. Loud Arb & frut.
Amelanchier polycarpa Greene
Amelanchier pumila (Torr. & A. Gray) Nutt. ex M. Roem.
Amelanchier vestita Suksd.

The treatment here does not follow the taxonomy in FNA Rosaceae. The extensive overlap in morphology among putative Amelanchier taxa makes writing a diagnostic key among them untenable. At the species level, differences in ploidy level have been documented, however finding morphological traits that reliable distinguish among these species appears inconclusive at this time.

Amelanchier utahensis Koehne [HC, HC2, JPM2]
in Wissensch. Progr. Falk. Realgymnas. Berlin. 1890.
Utah serviceberry

Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *oreophila* (A. Nelson) R.J. Davis
Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem. var. *utahensis* (Koehne) M.E. Jones
Amelanchier australis Standl.
Amelanchier bakeri Greene
Amelanchier glabra Greene
Amelanchier goldmanii Wooton & Standl.
Amelanchier gracilis A. Heller
Amelanchier mormonica C.K. Schneid.
Amelanchier oreophila A. Nelson
Amelanchier utahensis Koehne var. *oreophila* Clokey
Amelanchier utahensis Koehne var. *utahensis* [JPM2]

Aphanes [HC2]
parsley-piert

**Aphanes arvensis* L. [HC2, Stace 1997]
Species Plantarum 1: 123. 1753.
western lady's-mantle, field parsley-piert

Alchemilla arvensis (L.) Scop.

**Aphanes australis* Rydb. [HC2, Stace 1997]
In N. L. Britton et al., N. Amer. Fl. 22: 380. 1908.
small-fruited parsley-piert

Aphanes inexspectata W. Lippert
Aphanes microcarpa (Boiss. & Reut.) Rothm., misapplied

Draft FNA: "Aphanes microcarpa (Boissier & Reuter) Rothmaler (Alchemilla microcarpa Boissier & Reuteur) is endemic to the western Mediterranean region and is not present in North America. Plants native to other parts of Europe and introduced in North America, misidentified as A. microcarpa, were described in 1984 as a new species, A. inexspectata W. Lippert; this species had previously been described by Rydberg as A. australis from plants introduced to the eastern United States."

Aphanes occidentalis (Nutt.) Rydb. [HC2, IFBC]
North American Flora 22(4): 380. 1908.
western parsley-piert

Alchemilla cuneifolia Nutt.
Alchemilla occidentalis Nutt. [HC]
Aphanes cuneifolia (Nutt.) Rydb.
Aphanes macrosepala Rydb.

FNA9: "Three races of Aphanes occidentalis are recognizable, apparently corresponding to previously described species. Because some apparently intermediate plants exist and, as not all specimens can be confidently assigned to these races, they are not being recognized formally here. It is also possible that they represent independent introductions rather than native species, although no European or North African species are known with the characters they exhibit. "

**Aronia* [HC2]

**Aronia melanocarpa* (Michx.) Elliott [FNA9, HC2]
Sketch Bot. S. Carolina. 1: 557. 1821.
black chokeberry

Collected (2008) near cranberry bog in Pacific County.

Aruncus [HC, HC2]
goatsbeard

Aruncus dioicus (Walter) Fernald [HC2]
Rhodora 41: 423. 1939.
sylvan goatsbeard

var. *acuminatus* (Rydb.) H. Hara [HC2, JPM]
J. Jap. Bot. 30(3): 68. 1955.
Sylvan goatsbeard

Aruncus acuminatus Rydb.
Aruncus sylvester Kostel. ex Maxim. ssp. *acuminatus* (Rydb.) Jeps.

Cercocarpus [HC, HC2]
mountain-mahogany

Cercocarpus ledifolius Nutt. [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 1(3): 427 (-428). 1840.
mountain mahogany

var. *intermontanus* N.H. Holmgren [HC2, JPM]
Brittonia 39(4): 424-426, f. 1A-D. 1987.
birchleaf mountain-mahogany

Cercocarpus ledifolius Nutt. var. *intercedens* C.K. Schneid. [HC], misapplied
Cercocarpus ledifolius Nutt. var. *ledifolius* [FNA9, HC, HC2], misapplied

var. *ledifolius* [FNA9, HC, HC2]
In J. Torrey and A. Gray, Fl. N. Amer. 1: 427. 1840.
mountain mahogany

Cercocarpus ledifolius Nutt. var. *intercedens* C.K. Schneid. [HC]

**Chaenomeles* [HC2]

Comarum [HC2]
marsh cinquefoil, marshlocks cinquefoil, purple cinquefoil

Comarum palustre L. [FNA9, HC2]
Sp. Pl. 1: 502. 1753.
marsh cinquefoil, purple marshlocks

Comarum palustris var. *villosum* Pers.
Potentilla palustris (L.) Scop. [HC]
Potentilla palustris (L.) Scop. var. *parvifolia* (Raf.) Fernald & Long
Potentilla palustris (L.) Scop. var. *villosa* (Pers.) Lehm.
Potentilla palustris (L.) Scop. var. *villosum* (Pers.) Lehm.

FNA9: " Comarum palustre is circumboreal; it occurs in a broad band across the northernmost United States and Canada as far north as the low arctic. Disjunct populations occur well to the north, as on Baffin and Victoria islands, and in the south, as in Gunnison County, Colorado, and the Uinta Mountains of Utah. Appropriate habitats are uncommon and geographically restricted in the southern part of the range, for example, in Idaho, Montana, and North Dakota.

Comarum palustre is sometimes divided into subspecies, varieties, and/or forms on the basis of vestiture, leaflet dimensions, and flower number (for example, M. L. Fernald and B. H. Long 1914; N. N. Tzvelev 2007). Because there is no existing consensus, and a global evaluation of the situation is beyond the scope of this work, no infraspecific taxa are recognized here. Within North America, northern populations tend to have broader leaflets and inflorescences composed of one to relatively few flowers with relatively short sepals and petals, but these differences are not consistent; similar plants occur in subalpine settings in the mountains well to the south. Chromosome numbers also vary, apparently not correlated with morphology or geography; some populations occasionally include individuals of different disploid and polyploid levels.

Horizontal stems were used occasionally by Native Americans as a medicinal aid in the treatment of dysentery and stomach cramps (D. E. Moerman 1998). Aquatic birds in particular eat the leaves and achenes.

**Cotoneaster* [HC2]
cotoneaster

**Cotoneaster atropurpureus* Flinck & B. Hylmö [HC2]
purple-flowering cotoneaster

**Cotoneaster dammeri* C.K. Schneid. [HC2]
bearberry cotoneaster

recently collected in Cowlitz Co.

**Cotoneaster dammeri* C.K. Schneid. × *Cotoneaster salicifolius* Franch. [HC2]

**Cotoneaster dielsianus* E. Pritz. ex Diels [HC2]
Bot. Jahrb. Syst. 29(3-4): 385. 1900.
Diel's cotoneaster

**Cotoneaster divaricatus* Rehder & E.H. Wils. [HC2]
spreading cotoneaster

recently collected in King Co.

**Cotoneaster franchetii* Bois [HC2]
Rev. Hort. [Paris]. 379. 1902.
franchet's cotoneaster, orange cotoneaster

**Cotoneaster horizontalis* Decne. [HC2]
in Fl. des Serres Ser. II, xii. 168. 1877.
rock cotoneaster, rockspray cotoneaster, wall cotoneaster

**Cotoneaster lacteus* W.W. Sm. [HC2]
Notes Roy. Bot. Gard. Edinburgh 10: 23. 1917.
late cotoneaster, milk-flower cotoneaster

**Cotoneaster lucidus* Schltdl. [HC2]
shiny cotoneaster

Collected in 1989 from Columbia Co. (Zika 2002).

**Cotoneaster rehderi* Pojark. [HC2]
bullate cotoneaster, puckered-leaf cotoneaster

Cotoneaster bullatus Bois, misapplied

**Cotoneaster salicifolius* Franch. [HC2]
willow-leaved cotoneaster

recently collected in King Co.

**Cotoneaster simonsii* Baker [HC2]
Refug. Bot. [Saunders] 1: t. 55. 1869.
Himalayan cotoneaster, Simon's cotoneaster

**Cotoneaster ×suecicus* G. Klotz [HC2]
(= *Cotoneaster conspicuus* × *Cotoneaster dammeri*)

**Cotoneaster tengyuehensis* J. Fryer & B. Hylmö [HC2]
Tengyueh cotoneaster

recently collected in King Co., described in Fryer & Hylmo (1997)

Crataegus [HC, HC2]
haw, hawthorn, thornapple

Crataegus castlegarensis J.B. Phipps & O\\'Kennon [FNA9, HC2]

Sida 20(1): 121-127, f. 3-4. 2002.
Castlegar hawthorn

A black-fruited species related to C. douglasii, differing in pubescence, thorn characters, and fruit shape. It is known from dry soils in Thurston Co., and otherwise is widespread east of the Cascades.

Crataegus chrysocarpa Ashe [FNA9, HC2]
Bull. N. C. Exp. Sta. 175: 110. 1900.
fireberry hawthorn

Reported from Okanogan Co. by Phipps (1998). The varieties need more study, their ranges overlap greatly and the stated morphological differences seem minor.

**Crataegus ×cogswellii* K.I. Chr. & T.A. Dickinson [HC2]
Oregon hybrid hawthorn
(= *Crataegus monogyna* × *Crataegus gaylussacia*)

Crataegus douglasii Lindl. [HC, HC2, JPM]
Edwards's Bot. Reg. 8: pl. 1810.
black hawthorn, Douglas's hawthorn
(see also *Crataegus chrysocarpa*)

Crataegus columbiana Howell [HC, Peck]
Crataegus columbiana Howell var. *columbiana* [HC]
Crataegus douglasii Lindl. var. *douglasii* [HC]

Phipps (1995) lectotypified C. columbiana, chosing a black-fruited glabrous specimen that places it in synonymy with C. douglasii. Crataegus columbiana has usually been interpreted as a red-fruited plant, and this typification is controversial, see Holmgren (1997) and rebuttal by Phipps (1998). For discussion of the black-fruited hawthorns of our area see Love (1999), Dickinson and Love (1997), and Dickinson et al. (1996).

Crataegus gaylussacia A. Heller [FNA9, HC2]
Bull. S. Calif. Acad. Sci. 2: 69. 1903.
huckleberry hawthorn, Suksdorf's hawthorn

Crataegus douglasii Lindl. var. *suksdorfii* Sarg. [HC]
Crataegus suksdorfii (Sarg.) Kruschke [JPM]

**Crataegus laevigata* (Poir.) DC. [FNA9, HC2]
Prodr. 2: 630. 1825.
midland hawthorn, woodland hawthorn

Naturalized on Crane Island in San Juan Co., apparently the only wild population in North America (Phipps 1998). Wisskirchen and Haeupler (1998) place C. oxyacantha in synonymy with a different European species, C. rhipidophylla Gand, and note it is a rejected name.

Crataegus macracantha Lodd. ex Louden [FNA9, HC2]
Rhodora 10(113): 82. 1908.
large-thorned hawthorn, western large-thorned hawthorn

Crataegus succulenta Schrad. ex Link, misapplied

Taxonomy follows Phipps (1998). Found east of the Cascades. Can be difficult to separate from C. chrysocarpa. Nutlet pitting obvious only after drying.

**Crataegus monogyna* Jacq. [HC, HC2]
Fl. Austriac. (Jacquin) 3: 50, t. 292, f. 1. 1775.
English hawthorn, one-seed hawthorn

*var. *monogyna* [FNA9, HC2]
Fl. Austriac. 3: 50, pl. 292, f.1. 1775.
common hawthorn, English hawthorn, one-seeded hawthorn

Crataegus okanaganensis J.B. Phipps & O\\'Kennon [FNA9, HC2]
Sida 18(1): 178-184, f. 5, 6 [map], 9d-f. 1998.
Okanagan hawthorn

A dark purple fruited species recently described from the Okanagan Valley of British Columbia (Phipps & O\\\'Kennon 1998), and known from several counties in northeastern WA. Two varieites were proposed by Phipps and O\\\'Kennon (2002).

Crataegus okennonii J.B. Phipps [FNA9, HC2]
Sida 18(1): 170-178, f. 2, 3 [map], 4a-c,f. 1998.
O'Kennon's hawthorn

Recently described (Phipps & O\\\'Kennon 1998) and found east of the Cascades. A segregate from C. douglasii, differing in its fruit shape, fruit waxiness, twig color, and larger flowers. It is often difficult to identify. A key to black-fruited taxa is provided in Phipps & O\\\'Kennon (2002).

**Crataegus phaenopyrum* (L. f.) Medik. [FNA9, HC2]
Gesch. Bot. (Medikus) 84. 1793.
Washington thorn

Uncommon in disturbed suburban/park settings; rarely escaping cultivation.

Crataegus phippsii O\'Kennon [FNA9, HC2]
Sida 18(1): 185-190, f. 7, 8 [map], 9a-c. 1998.
Phipps's hawthorn

Described in Phipps & O\\\'Kennon 1998. In Washington found only at low elevations in the Okanogan Valley, where it is rare. A striking red-purple fruited species, with its close allies in Series Molles in eastern North America.

Crataegus tenuior J.B. Phipps
J. Bot. Res. Inst. Texas 7(1): 281?289, f. 9c?d, 10, 11a, 12a. 2013.
slender red hawthorn

Known from northern Okanogan County.

Dasiphora [HC2]
shrubby cinquefoil

Dasiphora fruticosa (L.) Rydb. [Draft FNA, HC2]
Monogr. N. Amer. Potent. 188. 1898.
shrubby cinquefoil

Dasiphora floribunda (Pursh) Raf.
Dasiphora fruticosa (L.) Rydb. ssp. *floribunda* (Pursh) Kartesz
Dasiphora riparia Raf.
Fragaria fruticosa Crantz
Pentaphylloides floribunda (Pursh) Á. Löve, superfluous renaming (illegitimate)
Pentaphylloides fruticosa (L.) O. Schwarz
Potentilla floribunda Pursh
Potentilla fruticosa L. [HC]
Potentilla fruticosa L. ssp. *floribunda* (Pursh) Elkington
Potentilla fruticosa L. var. *tenuifolia* (D.F.K. Schltdl.) Lehm.

Dryas [HC, HC2]
dryad, dryas, mountain-avens

Dryas drummondii Richardson ex Hook. [HC, HC2]
Bot. Mag. 57: t. 2972. 1830.
yellow mountain-avens

Dryadaea drummondii Kuntze
Dryas drummondii Richardson ex Hook. var. *drummondii* [IFBC]
Dryas drummondii Richardson ex Hook. var. *tomentosa* (Farr) L.O. Williams
Dryas octopetala L. var. *drummondii* (Richardson ex Hook.) S. Watson
Dryas tomentosa Farr

Dryas hookeriana Juz. [FNA9, HC2]
Izv. Glavn. Bot. Sada S.S.S.R. 28: 325. 1925.
white dryas, Hooker's mountain-avens, white mountain-avens

Dryas octopetala L. ssp. *hookeriana* (Juz.) Hultén
Dryas octopetala L. var. *angustifolia* C.L. Hitchc. [HC]
Dryas octopetala L. var. *hookeriana* (Juz.) Breitung [HC]

Drymocallis [HC2]
wood beauty, cinquefoil

Drymocallis arguta (Pursh) Rydb. [HC2]
Monogr. N. Amer. Potentilleae 192. 1898.
cordilleran drymocallis

Drymocallis convallaria (Rydb.) Rydb. [FNA9]
Potentilla arguta Pursh [HC], misapplied
Potentilla arguta Pursh [HC]
Potentilla arguta Pursh ssp. *convallaria* (Rydb.) D.D. Keck
Potentilla arguta Pursh var. *convallaria* (Rydb.) Th. Wolf
Potentilla convallaria Rydb.

Drymocallis glandulosa (Lindl.) Rydb. [HC2]
A Monograph of the North American Potentilleae 198. 1898.
sticky cinquefoil

Potentilla glandulosa Lindl. [HC]

ssp. *glabrata* (Rydb.) Soják [HC2]
Thaiszia 16(1): 48. 2006.
Idaho wood beauty

Potentilla glandulosa Lindl. var. *incisa* Lindl.
Potentilla glandulosa Lindl. var. *intermedia* (Rydb.) C.L. Hitchc. [HC]

ssp. *glandulosa* [HC2]
Monogr. N. Amer. Potentilleae 198. 1898.
gland cinquefoil, sticky cinquefoil

Drymocallis glandulosa (Lindl.) Rydb. var. *glandulosa* [Draft FNA]
Potentilla glandulosa Lindl. ssp. *glandulosa*
Potentilla glandulosa Lindl. ssp. *reflexa* (Greene) D.D. Keck
Potentilla glandulosa Lindl. ssp. *typica* D.D. Keck
Potentilla glandulosa Lindl. var. *glandulosa* [HC]
Potentilla glandulosa Lindl. var. *reflexa* Greene [HC]
Potentilla reflexa (Greene) Greene

ssp. *pseudorupestris* (Rydb.) Soják [HC2]
Thaiszia 16(1): 48. 2006.
cliff drymocallis

Drymocallis pseudorupestris (Rydb.) Rydb.
Drymocallis pseudorupestris (Rydb.) Rydb. var. *saxicola* Ertter [Draft FNA]
Potentilla glandulosa Lindl. ssp. *pseudorupestris* (Rydb.) D.D. Keck
Potentilla glandulosa Lindl. var. *pseudorupestris* (Rydb.) Breitung [HC]

**Duchesnea* [HC, HC2]

**Duchesnea indica* (Andrews) Focke [HC, HC2]
Nat. Pflanzenfam. 3(3): 33. 1888.
Indian-strawberry, mock-stawberry

Fragaria indica Andrews

*var. *indica* [HC2]
Indian strawberry, mock strawberry

Filipendula [HC, HC2]

Filipendula occidentalis (S. Watson) Howell [HC, HC2]

A Flora of Northwest America 2: 185. 1898.
queen-of-the-forest

Fragaria occidentalis Wats. Andr.

Fragaria [HC, HC2]
strawberry

*ssp. *ananassa* [HC2]

ssp. *cuneifolia* (Nutt. ex Howell) Staudt [HC2]

Fragaria cuneifolia Nutt. ex Howell
Fragaria grandiflora Ehrh.

A common hybrid between Fragaria chiloensis and Fragaria virginiana ssp. platypetala.

Fragaria chiloensis (L.) Mill. [HC, HC2, JPM]
Gard. Dict. (ed. 8) Fragaria no. 4. 1768.
beach strawberry, coastal strawberry

ssp. *pacifica* Staudt [HC2]
Canad. J. Bot. 40: 883. 1962.
beach strawberry, coastal strawberry

Fragaria chiloensis (L.) Mill. ssp. *lucida* (E. Vilm. ex Decne.) Staudt

Fragaria vesca L. [HC, HC2]
Sp. Pl. 1: 494 (-495). 1753.
woodland strawberry

ssp. *californica* (Cham. & Schltdl.) Staudt [HC2]
Canad. J. Bot. 40: 872 . 1962.
woodland strawberry

Fragaria bracteata A. Heller
Fragaria crinita Rydb.
Fragaria helleri Holz.
Fragaria vesca L. ssp. *bracteata* (A. Heller) Staudt
Fragaria vesca L. var. *bracteata* (A. Heller) R.J. Davis [HC]
Fragaria vesca L. var. *crinita* (Rydb.) C.L. Hitchc. [HC]

Fragaria virginiana Mill. [HC, HC2]
Gard. Dict., ed. 8. [textus s.n.] Fragaria no. 2. 1768.
blueleaf strawberry, mountain strawberry

ssp. *glauca* (S. Watson) Staudt [HC2]
Canad. J. Bot. 40(6): 881. 1962.
blueleaf strawberry, broadpetal strawberry, wild strawberry

Fragaria glauca (S. Watson) Rydb.
Fragaria multicipita Fernald
Fragaria ovalis (Lehm.) Rydb.
Fragaria pauciflora Rydb.
Fragaria platypetala Rydb.
Fragaria platypetala Rydb. var. *sibbaldifolia* (Rydb.) Jeps.
Fragaria sibbaldifolia Rydb.
Fragaria suksdorfii Rydb.
Fragaria truncata Rydb.
Fragaria virginiana Duchesne ssp. *platypetala* (Rydb.) Staudt
Fragaria virginiana Duchesne var. *glauca* S. Watson [HC]
Fragaria virginiana Duchesne var. *ovalis* (Lehm.) R.J. Davis
Fragaria virginiana Duchesne var. *platypetala* (Rydb.) H.M. Hall [HC]
Fragaria virginiana Duchesne var. *terrae-novae* (Rydb.) Fernald & Wiegand

Geum [HC, HC2]

avens

Geum aleppicum Jacq. [HC, HC2]
Icon. Pl. Rar. 1: 10, pl. 93. 1786.
yellow avens

Geum aleppicum Jacq. ssp. *strictum* (Aiton) R.T. Clausen
Geum aleppicum Jacq. var. *strictum* (Aiton) Fernald
Geum strictum Aiton
Geum strictum Aiton var. *decurrens* (Rydb.) Kearney & Peebles

Geum macrophyllum Willd. [HC, HC2]
Enum. Pl. [Willdenow] 1: 557. 1809.
bigleaf avens, large-leaved avens

Geum macrophyllum Willd. ssp. *macrophyllum*
Geum macrophyllum Willd. ssp. *perincisum* (Rydb.) Hultén
Geum macrophyllum Willd. var. *macrophyllum* [HC]
Geum macrophyllum Willd. var. *perincisum* (Rydb.) Raup [HC]
Geum macrophyllum Willd. var. *rydbergii* Farw.
Geum oregonense (Scheutz) Rydb.
Geum perincisum Rydb.
Geum perincisum Rydb. var. *intermedium* B. Boivin

Geum rivale L. [HC, HC2]
Sp. Pl. 1: 501. 1753.
purple avens, water avens

Geum rossii (R. Br.) Ser. [FNA9, HC, HC2]
in A. P. de Candolle and A. L. P. P. de Candolle, Prodr. 2: 553. 1825.
Ross's avens

Geum rossii (R. Br.) Ser. var. *depressum* (Greene) C.L. Hitchc. [HC]
Geum rossii (R. Br.) Ser. var. *rossii* [HC]
Geum rossii (R. Br.) Ser. var. *turbinatum* (Rydb.) C.L. Hitchc. [HC]

Geum triflorum Pursh [HC, HC2]
Fl. Amer. Sept. (Pursh) 2: 736. 1813.
prairie smoke, old-man's whiskers

Erythrocoma campanulata Greene
Erythrocoma ciliata (Pursh) Greene
Geum campanulatum (Greene) G.N. Jones
Geum ciliatum Pursh
Geum triflorum Pursh var. *campanulatum* (Greene) C.L. Hitchc. [HC]
Geum triflorum Pursh var. *ciliatum* (Pursh) Fassett [HC]
Geum triflorum Pursh var. *triflorum* [HC]
Sieversia campanulata (Greene) Rydb.
Sieversia ciliata (Pursh) G. Don

**Geum urbanum* L. [HC2, Stace 1997]
Sp. Pl. 1: 501. 1753.
herb-bennet

Holodiscus [HC, HC2]
ocean-spray

Holodiscus discolor (Pursh) Maxim. [HC, HC2, JPM2]
Trudy Imp. S.-Peterburgsk. Bot. Sada 6(1): 254. 1879.
creambush ocean-spray, hillside ocean-spray

Schizonotus aariaefolius Green var. *discolor* Kuntze
Schizonotus discolor Raf.
Sericotheca discolor (Pursh) Rydb.
Sericotheca discolor var. *purshianus* Rehd.

Spiraea ariaefolia Sm.
Spiraea discolor Pursh var. *ariaefolia* Wats.

Holodiscus discolor has a complex nomenclatural and taxonomic history.

var. *discolor* [HC2]
Trudy Imp. S.-Peterburgsk. Bot. Sada 6(1): 254. 1879.
ocean-spray

Holodiscus boursieri (Carrière) Rehder

Horkelia [HC, HC2]
horkelia

Ivesia [HC, HC2]
ivesia

Luetkea [HC, HC2]
luetkea, partridgefoot

Luetkea pectinata (Pursh) Kuntze [HC, HC2]
Revisio Generum Plantarum 1: 217. 1891.
luetkea, partridgefoot

Eriogynia pectinata (Pursh) Hook.
Saxifraga pectinata Pursh
Spiraea pectinata (Pursh) Torr. & A. Gray

Malus [HC2]
apple, crabapple

**Malus baccata* (L.) Borkh. [HC2]
Siberian crabapple

**Malus ×dawsoniana* Rehder [HC2]
Sargent, Trees & Shrubs ii. 23. 1907.
Dawson apple

A spontaneously occurring hybrid between feral domestic apples and native Malus fusca (Dickson et al. 1991). Collected recently from several counties in western WA. Uncommon in cultivation (Jacobson 1996). First reported wild in WA by Jacobson (2001).

**Malus domestica* (Suckow) Borkh. [Stace 1997]
Theor. Prakt. Handb. Forstbot. 2: 1272. 1803.

Malus pumila Mill. [HC2], Invalid name (nom. rej.)

Use of this name based on Guan-Ze Qian, Lian-Fen Liu and Geng-Guo Tang. 2010. (1933) Proposal to conserve the name Malus domestica against M. pumila, M. communis, M. frutescens, and Pyrus dioica (Rosaceae). Taxon 59: 650-652.

Malus fusca (Raf.) C.K. Schneid. [HC2, IFBC]
Ill. Handb. Laubholzk. [C.K.Schneider] 1: 723. 1906.
Oregon crabapple, western crabapple

Malus diversifolia (Bong.) M. Roem.
Malus fusca (Raf.) C.K. Schneid. var. *diversifolia* (Bong.) C.K. Schneid.
Malus fusca (Raf.) C.K. Schneid. var. *levipes* (Nutt.) C.K. Schneid.
Malus rivularis (Douglas) M. Roem.
Malus rivularis var. *levipes* (Nutt.) Koehne
Pyrus fusca Raf. [HC]
Pyrus fusca var. *levipes* Bailey
Pyrus rivularis Douglas

**Malus hupehensis* (Pamp.) Rehder [HC2]
J. Arnold Arbor. 14: 207. 1933.

flowering tea crabapple

**Malus prunifolia* (Willd.) Borkh. [HC2]
Theor. Prakt. Handb. Forstbot. 2: 1278. 1803.
pearleaf crabapple, plumleaf crabapple

**Mespilus* [HC2]

Oemleria [HC, HC2]
osoberry, Indian plum

Oemleria cerasiformis (Torr. & A. Gray ex Hook. & Arn.) J.W. Landon [HC, HC2]
Taxon 24(1): 200. 1975.
oso-berry, Indian plum

Exochorda davidiana Baill.
Nuttallia cerasiformis Torr. & A. Gray ex Hook. & Arn.
Nuttallia davidiana Baill.
Oemleria cerasiformis var. *lancifolia* Greene
Oemleria cerasiformis var. *nigra* Greene
Osmaronia cerasiformis (Torr. & A. Gray ex Hook. & Arn.) Greene

Petrophytum [HC, HC2]
rockmat

Petrophytum caespitosum (Nutt.) Rydb. [HC, HC2]
Mem. New York Bot. Gard. 1: 206. 1900.
Rocky Mountain rockmat

Eriogynia caespitosa (Nutt.) S. Watson
Luetkea caespitosa (Nutt.) Kuntze
Spiraea caespitosa Nutt.

ssp. *caespitosum* [HC2, JPM2]
Mem. New York Bot. Gard. 1: 206. 1900.
Rocky Mountain rockmat

Two specimens collected from WA. Tracked by WNHP. Note that the orthographic variant Petrophyton is used in some references for this genus name. From the Jepson Manual online: "Correspondence 1 indicates that Petrophyton is an orthographic variant, and that the correct spelling is Petrophytum, because Rydberg (Memoirs of the New York Botanical Garden 1:206--207. 1900) published the genus name by raising Eriogynia sect. Petrophytum (Nutt. ex Torr. & A. Gray) S. Watson to genus rank, albeit misspelling it as Petrophyton in the process. [Therefore, spelling of genus name corrected to Petrophytum, from Petrophyton previously in this Index, 27 May 2009.] "

Petrophytum cinerascens (Piper) Rydb. [HC, HC2]
North American Flora 22(3): 253. 1908.
Chelan rockmat

Petrophyton cinerascens (Piper) Rydb., orthographic variant
Spiraea cinerascens Piper

Note that the orthographic variant Petrophyton is used in some references for this genus name. From the Jepson Manual online: "Correspondence 1 indicates that Petrophyton is an orthographic variant, and that the correct spelling is Petrophytum, because Rydberg (Memoirs of the New York Botanical Garden 1:206--207. 1900) published the genus name by raising Eriogynia sect. Petrophytum (Nutt. ex Torr. & A. Gray) S. Watson to genus rank, albeit misspelling it as Petrophyton in the process. [Therefore, spelling of genus name corrected to Petrophytum, from Petrophyton previously in this Index, 27 May 2009.] "

Petrophytum hendersonii (Canby) Rydb. [HC, HC2]
North American Flora 22(3): 253. 1908.
Olympic Mountain rockmat

Eriogynia hendersonii Canby
Luetkea hendersonii (Canby) Greene

Petrophyton hendersonii (Canby) Rydb., orthographic variant
Spiraea hendersonii (Canby) Piper

Note that the orthographic variant Petrophyton is used in some references for this genus name. From the Jepson Manual online: "Correspondence 1 indicates that Petrophyton is an orthographic variant, and that the correct spelling is Petrophytum, because Rydberg (Memoirs of the New York Botanical Garden 1:206--207. 1900) published the genus name by raising Eriogynia sect. Petrophytum (Nutt. ex Torr. & A. Gray) S. Watson to genus rank, albeit misspelling it as Petrophyton in the process. [Therefore, spelling of genus name corrected to Petrophytum, from Petrophyton previously in this Index, 27 May 2009.] "

**Photinia* [HC2]
redtip

**Photinia davidiana* (Decne.) Card. [HC2]
Bull. Mus. Natl. Hist. Nat. 25(5): 399. 1919.
Chinese redtip, stranvaesia

**var. davidiana* [HC2]
Chinese redtip, stranvaesia

Physocarpus [HC, HC2]
ninebark

Physocarpus capitatus (Pursh) Kuntze [HC, HC2]
Revisio Generum Plantarum 1: 219. 1891.
Pacific ninebark

Neillia capitata Greene
Neillia opulifolia var. *mollis* Brew & Wats.
Opulaster capitatus Kuntze
Opulaster opulifolius (L.) Maxim. var. *capitatus* Jeps.
Physocarpa tomentosa Raf.
Physocarpus opulifolius (L.) Maxim. var. *tomentellus* (Ser.) B. Boivin
Spiraea capitata Pursh
Spiraea opulifolia var. *mollis* T. & G.
Spiraea opulifolia var. *tomentella* Ser.

Physocarpus malvaceus (Greene) Kuntze [HC, HC2]
Revisio Generum Plantarum 1: 219. 1891.
mallow ninebark, mallow-leaf ninebark

Neillia malvacea Greene
Neillia monogyna var. *malvacea* M.E. Jones
Neillia torreyi Hook. f.
Opulaster cordatus Rydb.
Opulaster pauciflorus (Torr. & A. Gray) A. Heller
Opulaster pubescens Rydb.
Physocarpus pauciflorus (Torr. & A. Gray) Piper
Spiraea opulifolia var. *pauciflora* T. & G.
Spiraea pauciflora Nutt.

Potentilla [HC, HC2]
cinquefoil, five-finger
(see also *Comarum*, *Dasiphora*, *Drymocallis*)

Argentina

Potentilla anserina L. [HC, HC2]
Sp. Pl. 1: 495. 1753.
silverweed cinquefoil, common silverweed

Argentina anserina (L.) Rydb.
Fragaria anserina Crantz

ssp. *anserina* [FNA9, HC2]
Sp. Pl. 1: 495. 1753.
silvery cinquefoil, common silverweed

Argentina anserina (L.) Rydb. var. *concolor* (Ser.) Rydb.
Potentilla anserina L. var. *anserina*
Potentilla anserina L. var. *concolor* Ser.
Potentilla anserina L. var. *sericea* Hayne

ssp. *pacifica* (Howell) Rousi [FNA9, HC2]
Ann. Bot. Fenn. 2: 104. 1965.
Pacific silverweed

Potentilla anserina L. ssp. *egedii* (Wormsk.) Hiitonen, misapplied
Potentilla anserina L. var. *grandis* Torr. & A. Gray
Potentilla egedii Wormsk. ex Hornem. ssp. *grandis* (Torr. & A. Gray) Hultén
Potentilla egedii Wormsk. ex Hornem. var. *grandis* (Torr. & A. Gray) J.T. Howell
Potentilla pacifica Howell [HC]

**Potentilla argentea* L. [FNA9, HC, HC2]
Sp. Pl. 1: 497. 1753.
hoary cinquefoil, silver cinquefoil

Argentina argentea (L.) Rydb.
Fragaria argentea Crantz

Potentilla biennis Greene [FNA9, HC, HC2]
Fl. Francisc. 65. 1891.
biennial cinquefoil

Potentilla kelseyi Rydb.
Potentilla lateriflora Rydb.
Tridophyllum bienne Greene

Potentilla breweri S. Watson [FNA9, HC, HC2]
Proc. Amer. Acad. Arts 8: 555 (-556). 1873.
Brewer's cinquefoil

Potentilla breweri S. Watson var. *expansa* S. Watson
Potentilla drummondii Lehm. ssp. *breweri* (S. Watson) Ertter
Potentilla drummondii Lehm. var. *breweri* (S. Watson) N.H. Holmgren

Potentilla douglasii Greene [WTU]

Horkelia fusca Lindl.

var. *capitata* (Lindl.) J. T. Howell [WTU]
Leafl. W. Bot. 4: 176. 1945.
horkelia

Horkelia capitata Lindl.
Horkelia fusca Lindl. ssp. *capitata* (Lindl.) D.D. Keck
Horkelia fusca Lindl. var. *capitata* (Lindl.) M. Peck

var. *douglasii* [WTU]
Pittonia 1[3]: 103. 1887.
Douglas's cinquefoil

Horkelia caeruleomontana St. John
Horkelia fusca Lindl. ssp. *fusca*
Horkelia fusca Lindl. var. *fusca*
Horkelia tenuisecta Rydb.
Potentilla andersonii Greene
Potentilla capitata Greene
Potentilla douglasii var. *tenuisecta* crum

Potentilla drummondii Lehm. [FNA9, HC, HC2]

Nov. Stirp. Pug. [Lehmann] 2: 9. 1830.
Drummond's cinquefoil

Potentilla anomalofolia M. Peck
Potentilla cascadensis Rydb.
Potentilla dissecta var. *drummondii* Kurtz
Potentilla drummondii var. *cascadensis* Rydb.

Potentilla flabellifolia Hook. ex Torr. & A. Gray [FNA9, HC, HC2]
Fl. N. Amer. 1: 422. 1840.
fan-leaf cinquefoil, fringe-leaf cinquefoil, fan-foil

Potentilla glaucophylla Lehm. [HC2]
Del. Sem. Hort. Hamburg (1836) 7; Cf. Linnaea, xii. (1838) Litt. 83. 1836.
blueleaf cinquefoil, different-leaved cinquefoil, diverse-leaved cinquefoil, vari-leaved cinquefoil

Potentilla ×diversifolia Lehm. [HC]
Potentilla diversifolia Lehm. ssp. *glaucophylla* (Lehm.) Lehm.
Potentilla diversifolia Lehm. ssp. *ranunculus* (Lange) A.E. Porsild
Potentilla diversifolia Lehm. var. *diversifolia* [HC]
Potentilla diversifolia Lehm. var. *glaucophylla* (Lehm.) S. Watson
Potentilla diversifolia Lehm. var. *perdissecta* (Rydb.) C.L. Hitchc. [HC]
Potentilla diversifolia Lehm. var. *ranunculus* (Lange) B. Boivin
Potentilla glaucophylla Lehm. var. *glaucophylla* [FNA9]
Potentilla glaucophylla Lehm. var. *perdissecta* (Rydb.) Soják [FNA9]
Potentilla perdissecta Rydb.

Potentilla gordonii (Hook.) Greene [WTU]
Pittonia 1(3): 106. 1887.
gordon's ivesia, alpine mousetail

Horkelia gordonii Hook.
Ivesia alpicola Rydb. ex. Howell
Ivesia gordonii (Hook.) Torr. & A. Gray

var. *gordonii* [WTU]
Pittonia 1(3): 106. 1887.

Horkelia gordonii Hook. var. *alpicola* (Rydb. ex Howell) Rydb.
Ivesia gordonii (Hook.) Torr. & A. Gray var. *gordonii*

Potentilla gracilis Douglas ex Hook. [HC, HC2]
Bot. Mag. 57: t. 2984. 1830.
slender cinquefoil

var. *brunnescens* (Rydb.) C.L. Hitchc. [HC, HC2]
glandular cinquefoil

var. *flabelliformis* (Lehm.) Nutt. ex Torr. & A. Gray [FNA9, HC, HC2]
Fl. N. Amer. 1: 440. 1840.
comb-leaf cinquefoil, Elmer's cinquefoil, Idaho cinquefoil

Potentilla flabelliformis Lehm.
Potentilla gracilis Douglas ex Hook. var. *elmeri* (Rydb.) Jeps. [FNA9, HC]
Potentilla indiges M. Peck
Potentilla pectinisecta Rydb.

var. *gracilis* [FNA9, HC, HC2]
Bot. Mag. 57: plate 2984. 1830.
Hall's cinquefoil, slender cinquefoil, wooly cinquefoil

Potentilla angustata Rydb.
Potentilla blasckeana Turcz. ex Lehm.
Potentilla blasckeana Turcz. ex Lehm. var. *permollis* (Rydb.) Th. Wolf
Potentilla etomentosa Rydb.
Potentilla etomentosa Rydb. var. *hallii* (Rydb.) Abrams

Potentilla fastigiata Nutt.
Potentilla glomerata A. Nelson
Potentilla gracilis Douglas ex Hook. ssp. *nuttallii* (Lehm.) D.D. Keck
Potentilla gracilis Douglas ex Hook. var. *blasckeana* (Turcz. ex Lehm.) Jeps.
Potentilla gracilis Douglas ex Hook. var. *fastigiata* (Nutt.) S. Watson [FNA9]
Potentilla gracilis Douglas ex Hook. var. *glabrata* (Lehm.) C.L. Hitchc. [HC]
Potentilla gracilis Douglas ex Hook. var. *nuttallii* (Lehm.) Sheldon
Potentilla gracilis Douglas ex Hook. var. *permollis* (Rydb.) C.L. Hitchc. [HC]
Potentilla gracilis Douglas ex Hook. var. *rigida* S. Watson
Potentilla jucunda A. Nelson
Potentilla longipedunculata Rydb.
Potentilla macropetala Rydb.
Potentilla nuttallii Lehm.
Potentilla permollis Rydb.
Potentilla rectiformis Rydb.
Potentilla viridescens Rydb.

var. *pulcherrima* (Lehm.) Fernald [HC, HC2]
Rhodora 42: 213. 1940.
beautiful cinquefoil

Potentilla camporum Rydb.

Potentilla hyparctica Malte [HC2]
Rhodora 36: 177. 1934.
subarctic cinquefoil

ssp. *elatior* (Abrom.) Elven & D.F. Murray [HC2]
J. Bot. Res. Inst. Texas 1(2): 813. 2007.
subarctic cinquefoil

Potentilla emarginata Pursh
Potentilla flabellifolia Hook. ex Torr. & A. Gray var. *emarginata* (Pursh) B. Boivin
Potentilla hyparctica Malte var. *elatior* (Abrom.) Fernald

Potentilla jepsonii Ertter [FNA9]
Journal of the Botanical Research Institute of Texas 2(1): 202. 2008.
Jepson's cinquefoil

Potentilla littoralis Rydb. var. *ovium* (Jeps.) Soják

Presence in WA confirmed by Barbara Ertter on the basis of Kruckeberg 6545 (WTU-280835), Okanogan County.

var. *kluanensis* Ertter
Ertter, B. 2019. Potentilla jepsonii var. kluanensis (Rosaceae): A new variety from Yukon and Alaska to Washington. Phytoneuron 2019-15: 1?8. Published 25 April 2019. ISSN 2153 733X 2019.
Kluane cinquefoil

The treatment of this taxon in the Washington flora remains unresolved. In Flora of the Pacific Northwest, 2nd edition, P. jepsonii is synonymized within P. pensylvanica var. ovium.

Potentilla newberryi A. Gray [FNA9, HC, HC2]
, Proc. Amer. Acad. Arts 6: 532. 1865.
Newberry's cinquefoil

Ivesia gracilis Torr. & A. Gray
Potentilla newberryi var. *arenicola* Rydb.

Last collected in Washington in 1898.

Potentilla nivea L. [FNA9, HC, HC2]
Sp. Pl. 1: 499. 1753.
snow cinquefoil

Fragaria nivea Crantz
Potentilla nivea L. ssp. *fallax* A.E. Porsild

Potentilla nivea L. ssp. *subquinata* (Lange) Hultén
Potentilla nivea L. var. *subquinata* Lange
Potentilla nivea L. var. *tomentosa* Nilsson-Ehle ex Hultén
Potentilla prostrata Rottb.
Potentilla prostrata Rottb. ssp. *floccosa* Soják

Potentilla norvegica L. [FNA9, HC, HC2]
Sp. Pl. 1: 499. 1753.
Norwegian cinquefoil, rough cinquefoil

Fragaria norvegica Crantz
Potentilla monspeliensis L.
Potentilla norvegica L. ssp. *hirsuta* (Michx.) Hyl.
Potentilla norvegica L. ssp. *monspeliensis* (L.) Asch. & Graebn.
Potentilla norvegica L. var. *hirsuta* (Michx.) Lehm.
Potentilla norvegica L. var. *labradorica* (Lehm.) Fernald

Potentilla pensylvanica L. [HC, HC2]
Mant. Pl. 76. 1767.
Pennsylvania cinquefoil

Potentilla atrovirens Rydb.
Potentilla glabella Rydb.
Potentilla pensylvanica L. var. *atrovirens* (Rydb.) Th. Wolf
Potentilla pensylvanica L. var. *pensylvanica* [HC2]
Potentilla pensylvanica L. var. *strigosa* Pursh, misapplied
Potentilla platyloba Rydb.
Potentilla strigosa (Pursh) Pall. ex Tratt.

Taxonomically challenging species closely allied to

var. *ovium* Jeps. [HC2]
Fl. Calif. [Jepson] 2: 184. 1936.
Jepson's cinquefoil

Presence in WA (as P. jepsonii var. kluanensisconfirmed by Barbara Ertter on the basis of Kruckeberg 6545 (WTU-280835), Okanogan County.

**Potentilla recta* L. [FNA9, HC, HC2]
Sp. Pl. 1: 497. 1753.
sulphur cinquefoil

Hypargyrium rectum Fourr.
Potentilla recta L. var. *obscura* (Nestler) W.D.J. Koch
Potentilla recta L. var. *pilosa* (Willd.) Ledeb.
Potentilla recta L. var. *sulphurea* (Lam. & DC.) Peyr.
Potentilla sulphurea Lam.

Potentilla rivalis Nutt. [FNA9, HC, HC2]
Fl. N. Amer. 1: 437. 1840.
brook cinquefoil, river cinquefoil

Potentilla leucocarpa Rydb.
Potentilla millegrana Engelm. ex Lehm.
Potentilla pentandra Engelm.
Potentilla rivalis Nutt. var. *millegrana* (Engelm. ex Lehm.) S. Watson
Potentilla rivalis Nutt. var. *pentandra* (Engelm.) S. Watson
Tridophyllum rivale Greene.

Potentilla supina L. [HC2]
Sp. Pl. 1: 497. 1753.
bushy cinquefoil

ssp. *paradoxa* (Nutt.) Soják [FNA9, HC2]
Folia Geobot. Phytotax. 4: 207. 1969.
bushy cinquefoil

Potenilla supina L. var. *paradoxa* (Nutt.) Th. Wolf
Potentilla nicolletii (S. Watson) Sheld.
Potentilla paradoxa Nutt. [HC]
Potentilla supina L. var. *nicoletti* S. Watson
Tridophyllum nicollettii Greene

Potentilla tweedyi (Rydb.) J.T. Howell [WTU]
Leafl. W. Bot. 4: 176. 1945.
Tweedy's mousetail

Horkelia tweedyi Nels & Macbr. var. *alpicola* Rydb.
Ivesia tweedyi Rydb.

Potentilla villosa Pall. ex Pursh [FNA9, HC, HC2]
Fl. Amer. Sept. (Pursh) 1: 353 (-354). 1813.
northern cinquefoil, villous cinquefoil

Potentilla fragiformis var. *villosa* Regel Tiling
Potentilla grandiflora var. *villosa* Kurtz
Potentilla nivea L. var. *villosa* (Pall. ex Pursh) Regel & Tiling
Potentilla villosa Pall. ex Pursh var. *parviflora* C.L. Hitchc. [HC]
Potentilla villosula Jurtzev, misapplied

Poteridium [HC2]
American burnet, western burnet

Poteridium annuum (Nutt.) Spach [HC2]
Ann. Sci. Nat., Bot. sér. 3, 5: 4. 1846.
annual burnet, prairie burnet

Poteridium occidentale Rydb. [FNA9]
Sanguisorba annua (Nutt.) Nutt.
Sanguisorba occidentalis Nutt. [HC]

**Poterium* [HC2]
fodder burnet, garden burnet, salad burnet, small burnet

**Poterium sanguisorba* L. [HC2]
Sp. Pl. 2: 994. 1753.
fodder burnet, small burnet

*var. *polygamum* (Waldst. & Kit.) Vis. [FNA9, HC2]
Fl. Dalmat. 3: 255. 1852.
burnet bloodwort, fodder burnet, small burnet

Poterium balearicum (Bourgeau ex Nyman) Bourgeau ex Porta
Poterium polygamum Waldst. & Kit.
Poterium sanguisorba L. ssp. *muricatum* (Spach) Rouy
Sanguisorba minor Scop. [HC]
Sanguisorba minor Scop. ssp. *balearicum* (Bourgeau ex Nyman) F. Muñoz Garmendia & C. Navarro
Sanguisorba minor Scop. ssp. *muricata* (Bonnier & Layens) Briq.

Draft FNA9: "The Poterium sanguisorba complex has been treated in various and complex ways in Europe; a consensus has not emerged as to the number of species or infraspecies taxa to be recognized. All North American material of Poterium belongs to P. sanguisorba var. polygamum. Reports of Sanguisorba minor or Poterium sanguisorba are using that in a broad sense, not distinguishing the varieties or subspecies variously recognized, and do not imply the occurrence of the typic infrataxon in North America. It is possible that the typical variety (or other infrataxa, as defined in the European literature) is present in North America."

Prunus [HC, HC2]
cherry, laurel, plum

Prunus americana Marshall [HC, HC2]

Arbust. Amer. 111. 1785.
American plum, wild plum

Prunus domestica L. var. *americana* Castiglioni

The origin of this species in WA is unclear, as the Suksdorf collection from Bingen, Klickitat County in 1920 is the only specimen of this species at WTU. H&C do not list WA as within the range of P. americana, though they would have known about this specimen at the time they wrote the flora.

**Prunus armeniaca* L. [HC2]
Sp. Pl. 1: 474. 1753.
apricot

**Prunus avium* (L.) L. [HC, HC2]
Fl. Suec. (ed. 2) 165. 1755.
sweet cherry

Cerasus avium (L.) Moench

**Prunus cerasifera* Ehrh. [HC2, JPM]
Beitr. Naturk. 4: 17. 1789.
cherry plum, Flowering plum

Prunus cerasifera Ehrh. var. *pissardii* (Carrière) L.H. Bailey

**Prunus cerasus* L. [HC, HC2]
Sp. Pl. 1: 474-475. 1753.
sour cherry

**Prunus domestica* L. [HC, HC2]
Sp. Pl. 1: 475. 1753.
cultivated plum

**Prunus dulcis* (Mill.) D.A. Webb [HC2, Stace 1997]
Feddes Repert. 74(1-2): 24. 1967.
almond

Prunus amygdalus Batsch

Prunus emarginata (Douglas) Eaton [HC, HC2, IFBC]
Man. Bot. (ed. 7) 463. 1836.
bitter cherry

Cerasus erecta Presl.
Cerasus mollis Dougl. Ex Hook.
Cerasus prunifolia Greene
Prunus emarginata (Douglas) Eaton var. *crenulata* (Greene) Kearney & Peebles
Prunus emarginata (Douglas) Eaton var. *emarginata* [HC]
Prunus emarginata (Douglas) Eaton var. *mollis* (Douglas ex Hook.) W.H. Brewer [HC]

**Prunus laurocerasus* L. [HC, HC2]
Sp. Pl. 1: 474. 1753.
laurel cherry, cherry-laurel, English laurel

Cerasus laurocerasus (L.) Dum. Cours.

**Prunus lusitanica* L. [HC2]
Species Plantarum 1: 473. 1753.
Portugal laurel

**Prunus mahaleb* L. [HC, HC2]
Species Plantarum 1: 474. 1753.
mahaleb cherry, perfumed cherry

**Prunus padus* L. [HC2]
Sp. Pl. 1: 473. 1753.
European bird cherry

**Prunus persica* (L.) Batsch [HC2]

Beytr. Entw. Gewächsreich 1: 30. 1801.
peach

Prunus ×pugetensis Jacobson & Zika [HC2]
Madrono 54: 74-85. 2007.
Puget Sound cherry

**Prunus spinosa* L. [HC, HC2]
Sp. Pl. 1: 475. 1753.
blackthorn

**Prunus tomentosa* Thunb. [HC2]
Syst. Veg. (ed. 14) 464. 1784.
Nanking cherry

Recently collected (2017 in Kittitas County).

Prunus virginiana L. [HC, HC2]
Sp. Pl. 1: 473. 1753.
common chokecherry, western chokecherry, white chokecherry

Cerasus demissa Nutt.
Cerasus demissa Nutt. var. *melanocarpa* A. Nelson
Padus demissa Roem.
Padus melanocarpa (A. Nelson) Shafer
Padus virginiana (L.) Mill. ssp. *melanocarpa* (A. Nelson) W.A. Weber
Padus virginiana (L.) Mill. var. *demissa* (Schneid.) Torr.
Prunus demissa (Nutt.) Walp.
Prunus demissa (Nutt.) D. Dietr. f. *leiodisca* Koehne
Prunus demissa (Nutt.) D. Dietr. f. *trichodisca* Koehne
Prunus demissa (Nutt.) Walp. var. *melanocarpa* (A. Nelson) A. Nelson
Prunus demissa var. *nuttallii* f. howellii
Prunus melanocarpa (A. Nelson) Rydb.
Prunus pinetorum Suksd.
Prunus virginiana L. ssp. *demissa* (Nutt.) Roy L. Taylor & MacBryde
Prunus virginiana L. ssp. *melanocarpa* (A. Nelson) Roy L. Taylor & MacBryde
Prunus virginiana L. var. *demissa* (Nutt.) Torr. [HC]
Prunus virginiana L. var. *melanocarpa* (A. Nelson) Sarg. [HC]

**Prunus yedoensis* Matsum. [HC2]
Bot. Mag. (Tokyo) 15: 100. 1901.
Yoshino cherry

Purshia [HC, HC2]
antelope-brush, bitter-brush

Purshia tridentata (Pursh) DC. [HC, HC2]
Trans. Linn. Soc. London 12(1): 158 [1818]. 1817.
antelope-brush, bitterbrush

Kunzia tridentate Spreng.
Tigarea tridentate Pursh

var. *tridentata*
Trans. Linn. Soc. London 12(1): 158 [1818]. 1817.
anteleope-brush, bitterbrush

**Pyracantha* [HC2]
firethorn

**Pyracantha coccinea* M. Roem. [HC2, IFBC]
Fam. Nat. Syn. Monogr. 3: 219-220. 1847.
firethorn, scarlet firethorn

Cotoneaster pyracantha (L.) Spach

Pyracantha fortuneana (Maxim.) H.L. Li [HC2]
J. Arnold Arbor. 25(4): 420. 1944.
Chinese firethorn

Pyrus [HC, HC2]
pear
(see also *Malus*)

Pyrus communis L. [HC, HC2]
Sp. Pl. 1: 479; 2: 1200. 1753.
common pear

Rosa [HC, HC2]
rose

Rosa canina L. [HC, HC2]
Sp. Pl. 1: 491. 1753.
dog rose

Rosa canina L. var. *dumetorum* (Thuill.) Poir.
Rosa corymbifera Borkh.

Rosa gymnocarpa Nutt. [HC, HC2]
Fl. N. Amer. 1(3): 461. 1840.
bald-hip rose

Rosa dasypoda Greene
Rosa prionota Greene

Rosa multiflora Thunb. [HC2, IFBC]
Syst. Veg. (ed. 14) 474. 1784.
multiflora rose, rambler rose

Rosa cathayensis (Rehder & E.H. Wils.) L.H. Bailey

Rosa nutkana C. Presl [HC, HC2]
Abh. Königl. Böhm. Ges. Wiss. ser. 5, 6: 563. 1851.
Nootka rose

Rosa nutkana C. Presl
Abh. Königl. Böhm. Ges. Wiss. ser. 5, 6: 563. 1851.
Nootka rose

ssp. *macdougalii* (Holz.) Piper [FNA9, HC2]
Contr. U.S. Natl. Herb. 11: 335. 1906.
bristly Nootka rose

Rosa anatonensis H. St. John
Rosa caeruleomontana St. John
Rosa columbiana Rydb.
Rosa jonesii H. St. John
Rosa macdougalii Holz.
Rosa megalantha G.N. Jones
Rosa nutkana C. Presl var. *alta* Suksd.
Rosa nutkana C. Presl var. *hispida* Fernald [HC]
Rosa nutkana C. Presl var. *macdougalii* M.E. Jones
Rosa nutkana C. Presl var. *pallida* Suksd.
Rosa rainierensis G.N. Jones
Rosa spaldingii Crép.
Rosa spaldingii Crép. var. *alta* (Suksd.) G.N. Jones
Rosa spaldingii Crépin var. *chelanensis* Jones
Rosa spaldingii Crép. var. *hispida* (Fernald) G.N. Jones
Rosa spaldingii Crép. var. *parkeri* (S. Watson) H. St. John

ssp. *nutkana* [FNA9, HC2]

Abh. Königl. Böhm. Ges. Wiss. ser. 5, 6: 563. 1851.
Nootka rose

Rosa durandii Crép.
Rosa muriculata Greene
Rosa nutkana C. Presl var. *muriculata* (Greene) G.N. Jones
Rosa nutkana C. Presl var. *nutkana* [HC]
Rosa nutkana C. Presl var. *setosa* G.N. Jones

ssp. *nutkana*

Rosa pisocarpa A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 8: 382. 1872.
clustered rose, peafruit rose

Rosa anacantha Greene
Rosa pringlei Rydb.

**Rosa rubiginosa* L. [HC2]
Mant. Pl. Altera 564. 1771.
sweetbrier rose, small-flowered sweetbrier

Rosa eglanteria L. [HC]
Rosa micrantha Borrer [HC, Stace 1997]

**Rosa rugosa* Thunb. [HC2, Stace 1997]
Syst. Veg. (ed. 14) 473. 1784.
rugosa rose

Rosa rugosa Thunb. var. *albiflora* Koidz.

Rosa woodsii Lindl. [HC, HC2]
Ros. Monogr. 21. 1820.
pearhip rose

Rosa arizonica Rydb.
Rosa arizonica Rydb. var. *granulifera* (Rydb.) Kearney & Peebles
Rosa covillei Greene
Rosa lapwaiensis H. St. John
Rosa pecosensis Cockerell
Rosa ultramontana (S. Watson) A. Heller
Rosa woodsii Lindl. ssp. *ultramontana* (S. Watson) Roy L. Taylor & MacBryde
Rosa woodsii Lindl. var. *arizonica* (Rydb.) W.C. Martin & C.R. Hutchins
Rosa woodsii Lindl. var. *granulifera* (Rydb.) W.C. Martin & C.R. Hutchins
Rosa woodsii Lindl. var. *ultramontana* (S. Watson) Jeps. [HC]
Rosa woodsii Lindl. var. *woodsii* [HC]

Hybridizes with R. nutkana where they co-occur.

Rubus [HC, HC2]
blackberry, bramble, raspberry

**Rubus allegheniensis* Porter [HC2]
Bull. Torrey Bot. Club 23(4): 153. 1896.
Allegheny blackberry, common blackberry

Rubus arcticus L. [HC2]
nagoonberry

Cylactis arctica (L.) Raf. ex B.D. Jacks. ssp. *acaulis* (Michx.) W.A. Weber
Manteia acaulis Raf.
Rubus acaulis Michx. [HC]
Rubus arcticus L. ssp. *acaulis* (Michx.) Focke [IFBC]
Rubus arcticus L. var. *acaulis* (Michx.) B. Boivin

**Rubus bifrons* Vest [FNA9, HC2]
Steiermark. Z. 3: 163. 1821.

Himalayan blackberry

Rubus armeniacus Focke, misapplied
Rubus discolor Weihe & Nees [HC], misapplied
Rubus procerus P.J. Müll. ex Boulay, misapplied
Rubus thyrsanthus Peck

FNA9: "Rubus bifrons lacks the strongly pruinose stems of the related R. ulmifolius, and has leaves that are usually much larger. It also lacks the stipitate-glandular trichomes and nearly round primocane terminal leaflets of the related R. vestitus. It also often has much broader inflorescences than either of the other two introduced species. This species, like its relatives Rubus ulmifolius and R. vestitus, can have extremely long floricane branches, sometimes in excess of 1 m, that end in flowering cymes, often appearing as if primocanes apically terminate their growth by flowering within the same year. As a result, the apical portion of long floricane branches are almost always represented in herbarium specimens, but that of true primocanes, or that of full floricanes including the adjacent portion of primocanes, are rare. L. H. Bailey (1945), M. L. Fernald (1950), Y. Helsop-Harrison (1968), and H. A. Gleason and A. Cronquist (1991) distinguished between Rubus bifrons and another species (referred to either as R. discolor or R. procerus, both often considered synonyms of R. armeniacus), variously based upon stem shape and pubescence, prickle shape and angle, leaf shape and margins, inflorescence shape, and petal color. Plants in North America identified either as R. bifrons or the other species can have considerable variation in any of these features, even within individual stems, making it impossible to distinguish between these species. Although Rubus discolor often has been treated as a synonym of R. armeniacus in our region, it is actually a synonym of R. ulmifolius (H. E. Weber 1985). Although widespread in North America, plants of this species complex are most abundant from northern California northward to British Columbia (particularly coastal areas), where it is a problematic weed. Along the West Coast this species can grow in great density over large areas, often to the exclusion of all other vegetation. The fruit is desirably edible and the floral displays can be attractive."

Rubus idaeus L. [HC, HC2]
Sp. Pl. 1: 492. 1753.
red raspberry

*ssp. *idaeus* [HC2]
red raspberry

ssp. *strigosus* (Michx.) Focke [HC2, IFBC]
Biblioth. Bot. 17(Heft 72[2]): 209. 1911.
grayleaf red raspberry

Rubus idaeus L. var. *gracilipes* M.E. Jones [HC]
Rubus idaeus L. var. *peramoenus* (Greene) Fernald [HC]
Rubus idaeus L. var. *strigosus* (Michx.) Maxim.
Rubus strigosus Michx.

Draft FNA9: "Hybrids between Rubus idaeus subsp. strigosus and R. occidentalis, including the cultivated purple raspberries have usually gone under the name R. xneglectus Peck. C. H. Peck (1871) did not treat R. neglectus as a hybrid, although his description, based on material from northeastern New York, acknowledged the material to be intermediate between the two taxa. L. H. Bailey (1945) suspected R. neglectus to be a "distinct species of local range"• with no "real resemblance"• to the cultivated purple raspberries. The third author of this treatment (Gerry Moore) has observed wild purple-fruited material from northwestern New York near the type locality and concurs with L. H. Bailey that the material appears to have little resemblance to the cultivated purple raspberries. The fruit of this material has a strikingly distinct taste, Peck noting that the locals referred to it as "cream berries."• Further study of this material is needed to better understand the proper application of the name Rubus neglectus and whether or not this name can be applied to hybrids between R. idaeus subsp. strigosus and R. occidentalis. M. L. Fernald (1900) misapplied the name R. idaeus Linnaeus var. anomalus Arrenhius to reduced, unarmed sterile material of Rubus idaeus subsp. strigosus with simple leaves on the floricane; this material was later described by Blanchard as R. egglestonii. Rubus viburnifolius (Rydberg) Greene (not Franchet) is an illegitimate name."

**Rubus laciniatus* Willd. [HC, HC2]
Hort. Berol. pl. 82. 1806.
cut-leaf blackberry, evergreen blackberry

Rubus vulgaris var. *laciniatus* Dippel.

FNA9: "No other species of Rubus within our region has leaflets so deeply lobed or dissected. The rare individual bearing relatively unlobed leaflets and perianth parts would appear most similar to R. vestitus, except that it lacks the apically flattened or cupulate glands of that species. Such unusual plants of R. laciniatus would be distinguished from the native blackberries by their cymose inflorescences, unlike the racemose or solitary inflorescences of the natives."

Rubus lasiococcus A. Gray [FNA9, HC, HC2]
Proc. Amer. Acad. Arts 17: 201. 1882.
roughfruit berry, dwarf bramble, hairy-fruit smooth dewberry

Comarobatia lasiococca (A. Gray) Greene

Draft FNA9: "Rubus lasiococcus is defined by its trailing, unarmed stems, simple 3-lobed to 3-foliate leaves, small white flowers, and densely hairy ovaries."

Rubus leucodermis Douglas ex Torr. & A. Gray [FNA9, HC, HC2]
Fl. N. Amer. 1: 454. 1840.
blackcap raspberry, dark raspberry, whitebark raspberry

Batidaea sandbergii Greene
Melanobatus leucodermis (Douglas ex Torr. & A. Gray) Greene
Rubus hesperius Piper
Rubus leucodermis Douglas ex Torr. & A. Gray var. *bernardinus* (Greene) Jeps.
Rubus leucodermis Douglas ex Torr. & A. Gray var. *trinitatis* A. Berger
Rubus occidentalis Linnaeus ssp. *leucodermis* (Douglas ex Torr. & A. Gray) Focke

Rubus nigerrimus (Greene) Rydb. [HC, HC2]
N. Amer. Fl. 22(5): 445. 1913.
dark raspberry, northwest raspberry

Rubus leucodermis Douglas ex Torr. & A. Gray var. *nigerrimus* (Greene) H. St. John

FNA9 synonymizes this species within R. leucodermis, however several regional botanists believe that this entity is worthy of species status. For this reason we diverge from the Draft FNA9 treatment and retain this taxon as a species.

Rubus nivalis Douglas ex Hook. [FNA9, HC, HC2]
Fl. Bor.-Amer. 1: 181. 1832.
snow dwarf bramble, snow dewberry

Cardiobatus nivalis (Douglas ex Hook.) Greene

Draft FNA9: "Rubus nivalis is defined by its trailing, prickly stems, simple to 3-foliate perennial leaves, broadly elliptic to ovate stipules, and small magenta to pink flowers. The closest relative of R. nivalis is likely the Mexican R. pumilus Focke. Asian species previously classified in subg. Chamaebatus are polyploid (M. M. Thompson 1997) and not phylogenetically close (L. A. Alice and C. C. Campbell 1999; L. A. Alice et al. 2008, pers. comm.)."

Rubus parviflorus Nutt. [FNA9, HC]
Gen. N. Amer. Pl. 1: 308-309. 1818.
thimbleberry

Rubus nutkanus Moc. ex Ser. [HC2]
Rubus nutkanus f. *lacera* Kuntze
Rubus nutkanus var. *nuttallii* T. & G.
Rubus nutkanus var. *parviflorus* Focke
Rubus nutkanus var. *scopulorum* Greene ex Focke
Rubus parviflorus f. *nuttallii* Fassett
Rubus parviflorus Nutt. var. *bifarius* Fernald
Rubus parviflorus Nutt. var. *fraserianus* Henry
Rubus parviflorus Nutt. var. *grandiflorus* Farw.
Rubus parviflorus Nutt. var. *heteradenius* Fernald
Rubus parviflorus Nutt. var. *hypomalacus* Fernald
Rubus parviflorus Nutt. var. *parviflorus*

Rubus parviflorus Nutt. var. *parvifolius* (A. Gray) Fernald
Rubus parviflorus Nutt. var. *scopulorum* Greene ex Focke
Rubus parviflorus Nutt. var. *velutinus* (Hook. & Arn.) Greene

Rubus parviflorus Nutt. (1818) is an illegitimate name due to prior publication of Rubus parviflorus Weston (1770) for a species occurring in Europe. However, a manuscript was published in 2019 to conserve the name Rubus parviflorus. Article 14A of the Botanical Code recommends using the name proposed for conservation until a decision is made by the Nomenclature Committee.

FNA9: "Rubus parviflorus is defined by its erect, unarmed stems, simple leaves, large white flowers, glabrous, clavate styles, and yellowish orange to red-stipitate glands covering most plant parts. Hybridization with R. odoratus is thought to occur in areas of overlap in northern Michigan. Several varieties and forms have been described based on pubescence and glandularity of stems, leaves, petioles, pedicels, and sepals (e.g., M. L. Fernald 1950). Different variants often occur mixed in the same population and generally do not correspond to definite geographic regions (N. C. Fassett 1941). Plants from coastal California (var. velutinus) tend to have densely hairy leaf abaxial surfaces; this variation is likely environmentally induced as other Rubus species show the same pattern (e.g., R. spectabilis var. franciscanus) in the area."

Rubus pedatus Sm. [FNA9, HC, HC2]
Pl. Icon. Ined. 3: plate 63. 1791.
strawberry bramble, strawberry-leaf raspberry

Ametron pedatum (Sm.) Raf.
Comaropsis pedata (Sm.) DC.
Dalibardia pedata Stephan.
Psychrobatia pedata (Sm.) Greene

FNA9: "Rubus pedatus is defined by its trailing, unarmed stems, pedately 3-foliate leaves, small white flowers, and glabrous ovaries."

**Rubus pensilvanicus* Poir. [Draft FNA, HC2]
Encycl. 6(1): 246. 1804.
Pennsylvania blackberry

FNA: "Rubus pensilvanicus as circumscribed here represents Bailey\\\'s (1941) Rubus sect. Arguti. L. H. Bailey (1945) recognized 109 species in this section." For this reason, the synonymy is too extensive to include here.

Rubus pubescens Raf. [FNA9, HC, HC2]
Med. Rep., ser. 3, 2: 333. 1811.
dwarf red blackberry, dwarf red blackberry raspberry, red raspberry

Cylactis pubescens (Raf.) W.A. Weber
Rubus pubescens Raf. var. *pubescens*
Rubus saxatilis L. var. *canadensis* Michx.
Rubus triflorus Richardson

FNA9: "Rubus pubescens is defined by its trailing, unarmed stems, ternate to pedate leaves, oblanceolate to obovate stipules, and small, white flowers. It is known to hybridize with R. arcticus subsp. acaulis in areas of sympatry, the hybrid referable to R. xparacaulis L. H. Bailey. These plants are similar to R. arcticus subsp. acaulis in having more obovate, rounded leaflets, and larger, pink to magenta petals; they are larger, creeping, and have hairy and stipitate-glandular pedicels and sepals like R. pubescens."

Rubus spectabilis Pursh [FNA9, HC, HC2]
Fl. Amer. Sept. 1: 348, plate 16. 1813.
salmonberry

Parmena spectabilis Greene
Rubus franciscanus Rydb.
Rubus spectabilis Pursh var. *fransiscanus* (Rydb.) J.T. Howell
Rubus spectabilis Pursh var. *spectabilis*
Rubus stenopetalus Cham.

FNA9: "Rubus spectabilis is a thicket-forming shrub that has large and desirably edible fruit, and is used as

an ornamental primarily for its robust, showy flowers. It is naturalized in parts of western Europe. It remains unclear as to whether the name Rubus menziesii Hooker, and possible combinations by Focke based on this name (R. ursinus var. menziesii), Greene (Parmena spectabilis), and S. Watson (Rubus spectabilis var. menziesii) apply to R. spectabilis or R. ursinus."

**Rubus ulmifolius* Schott [FNA9, HC2]
Isis oder encyclopädische Zeitung von Oken 1818(5): 821. 1818.
elm-leaf blackberry

Rubus discolor Weihe & Nees [HC]
Rubus ulmifolius Schott var. *anoplothyrsus* Sudre

Rubus ursinus Cham. & Schltdl. [FNA9, HC, HC2]
Linnaea 2: 11. 1827.
Pacific blackberry, trailing blackberry, dewberry, Douglasberry

Rubus eastwoodianus Rydb.
Rubus helleri Rydb.
Rubus macropetalus Douglas ex Hook.
Rubus ursinus Cham. & Schltdl. ssp. *macropetalus* (Douglas ex Hook.) Roy L. Taylor & MacBryde
Rubus ursinus Cham. & Schltdl. var. *eastwoodianus* (Rydb.) J.T. Howell
Rubus ursinus Cham. & Schltdl. var. *macropetalus* (Douglas ex Hook.) S.W. Br. [HC]
Rubus vitisolius ssp. *ursinus* Abrams

Draft FNA9: "Rubus ursinus is often reminiscent in habit of the predominantly eastern North American but non-sympatric R. flagellaris, and is likewise polymorphic. Of agricultural significance, R. ursinus is a parent of several important cultivars, including loganberry and boysenberry. See discussion under Rubus flagellaris for the superficially similar R. caesius. See discussion under R. spectabilis for the application of the name R. menziesii."

**Rubus vestitus* Weihe & Nees [FNA9, HC, HC2]
Comp. Fl. Germ. 1: 684. 1825.
European blackberry

FNA9"Rubus vestitus can be distinguished, especially from the closely related R. bifrons and R. ulmifolius, by its possession of long-stipitate-glandular trichomes, particularly in the inflorescence, and terminal primocane leaflets that are typically suborbiculate and abaxially densely tomentose. Rubus allegheniensis can possess similar glandular trichomes, but it does not have pink petals, inflorescences of cymes, and rounded and abaxially densely tomentose, often whitened terminal leaflets. Rubus vestitus is also reported from Washington state, although specimens we have examined from there identified as this species are actually R. bifrons. Because of the overall general similarity of R. vestitus to R. bifrons, we suspect that this potentially weedy species is widespread, but rare and possibly overlooked, from British Columbia south to California. "

Sanguisorba [HC, HC2]
burnet
(see also *Poteridium*, *Poterium*)

Sanguisorba menziesii Rydb. [FNA9, HC, HC2]
In N. L. Britton et al., N. Amer. Fl. 22: 387. 1908.
Menzies' burnet, small-head burnet

Sanguisorba media Hook.

FNA9: "Sanguisorba menziesii has sometimes been suggested to be a hybrid between S. officinalis and S. sitchensis. Some of its characteristics do suggest intermediacy and it is possible that it arose via hybridization, but it seems best to regard it as a species, as it forms populations separate from its possible parents and is fully fertile (P. S. Holloway and G. E. M. Matheke 2003)."

Sanguisorba officinalis L. [FNA9, HC, HC2]
Sp. Pl. 1: 116. 1753.
garden burnet, great burnet

Poterium officinale (L.) A. Gray
Sanguisorba microcephala C. Presl

Sanguisorba officinalis L. ssp. *microcephala* (C. Presl) Calder & Roy L. Taylor

FNA9: "Occurrences of Sanguisorba officinalis from eastern North America represent introductions from Eurasia; the species is native in western North America. There seem to be no consistent differences upon which to base a taxonomic distinction at any level between the native northwestern North American material (S. microcephala) and Eurasian S. officinalis in the strict sense."

Sanguisorba stipulata Raf. [FNA9, HC2]
Herb. Raf. 47. 1833.
Sitka burnet

Sanguisorba canadensis L., misapplied
Sanguisorba canadensis L. ssp. *latifolia* (Hook.) Calder & Roy L. Taylor
Sanguisorba canadensis L. var. *latifolia* Hook.
Sanguisorba canadensis L. var. *sitchensis* (C.A. Mey.) Koidz.
Sanguisorba sitchensis C.A. Mey. [HC]

FNA: "The taxonomic and nomenclatural treatment of this taxon has been variable. Material from northwest North America and northeast Asia is not taxonomically distinguishable, a conclusion also reached by C. L. Li, H. Ikeda, and H. Ohba (1994). The name Sanguisorba sitchensis has been customarily applied to North American material, but the oldest name available for a taxon bridging the Bering Strait is S. stipulata. An additional taxonomic question is the relationship of this taxon to eastern North American S. canadensis. While similar and undoubtedly closely related, the taxa differ in several morphologic characters, are strongly allopatric in distribution, and are here regarded as sibling species."

Sibbaldia [HC, HC2]
sibbaldia

Sibbaldia procumbens L. [HC, HC2]
Sp. Pl. 1: 284. 1753.
creeping-glow-wort, creeping sibbaldia

Potentilla procumberns Clairv.
Potentilla sibbaldii Haller f., orthographic variant

**Sorbaria* [HC2]
false spirea

Sorbus [HC, HC2]
mountain-ash, service tree, whitebeam

**Sorbus aucuparia* L. [HC, HC2]
Sp. Pl. 1: 477. 1753.
European mountain-ash

Pyrus aucuparia (L.) Gaertn.

**Sorbus hybrida* L. [HC2, Stace 1997]
Species Plantarum, Editio Secunda 1: 684. 1762.
Swedish mountain-ash, Swedish service-tree

Sorbus scopulina Greene [HC, HC2]
Pittonia 4(22): 130. 1900.
Greene's mountain ash, Cascade mountain-ash, western mountain-ash

Pyrus scopulina Longyear
Sorbus cascadensis G.N. Jones
Sorbus scopulina Greene var. *cascadensis* (G.N. Jones) C.L. Hitchc. [HC]
Sorbus scopulina Greene var. *scopulina* [HC]

Sorbus sitchensis M. Roem. [HC, HC2]
Syn. Rosifl. 139. 1847.
Sitka mountain-ash

Pyrus sitchensis (M. Roem.) Piper

var. *grayi* (Wenzig) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacific NW 3: 189 1961.
Sitka mountain-ash

Pyrus sambucifolia Cham. & Schltdl. var. *pumila* (Raf.) Sarg.
Sorbus occidentalis (S. Watson) Greene
Sorbus pumilus Raf.
Sorbus sambucifolia (Cham. & Schltdl.) M. Roem. var. *pumila* (Raf.) Koehne
Sorbus sitchensis M. Roem. ssp. *grayi* (Wenzig) Calder & Roy L. Taylor

var. *sitchensis* [HC, HC2]
Fam. Nat. Syn. Monogr. 3: 139. 1847.
Sitka mountain-ash

Sorbus americana Sudw. var. *sitchensis*

Spiraea [HC, HC2]
meadowsweet, spiraea, spirea

Spiraea douglasii Hook. [HC, HC2]
Fl. Bor.-Amer. (Hooker) 1(4): 172. 1832.
Douglas's spiraea, hardhack steeplebush

var. *douglasii* [FNA9, HC, HC2]
Fl. Bor.-Amer. 1: 172. 1832.
Douglas's spiraea

FNA9: "H. J. Scoggan (1978) identified two forma of var. douglasii based upon petal color: forma alba Scoggan (white) and forma douglasii (pink to deep rose). See discussion under var. menziesii for information that may also apply to var. douglasii."

var. *menziesii* (Hook.) C. Presl [FNA9, HC, HC2]
Abh. Königl. Böhm. Ges. Wiss., ser. 5, 6: 555. 1851.
Menzies's spiraea

Spiraea cuneifolia Raf.
Spiraea douglasii Hook. ssp. *menziesii* (Hook.) Calder & Roy L. Taylor
Spiraea menziesii Hook.
Spiraea subvillosa Rydb.

FNA9: "H. J. Scoggan (1978) identified two forma of var. menziesii based upon petal color: forma menziesii (Hooker) Voss (pink to deep rose) and forma pseudosalicifolia Boivin (white). These appear to be local forms that may be stable; petal color can be variable within varieties and species in Spiraea and the stability of these forms, within the variety and species as a whole, has not been fully assessed. A. R. Kruckeberg (1967) tested two strains of S. douglasii var. menziesii and found that one strain showed adaptation to soils derived from ultramafic rocks (serpentinite, peridotite, dunite) and one did not. Although not discussed by Kruckeberg, variation of flower color within the variety may be correlated with substrate."

Spiraea ×hitchcockii W.J. Hess & Stoynoff [HC2]
Sida 18(3): 827-830, f. 1. 1999.
Hitchcock's spiraea

Jepson Manual, 2nd Edition: "[According to the protologue (Sida 18: 827. 1999), Spiraea ×hitchcockii W. J. Hess & Stoynoff is a sterile (low pollen stainability; chromosomes mostly univalents), triploid (n = 27) hybrid between Spiraea douglasii Hook. var. menziesii (Hook.) C. Presl (a tetraploid, n = 18) and Spiraea splendens E. N. Baumann var. rosea (A. Gray) Kartesz & Gandhi (a diploid, n = 9)..."

Spiraea lucida Douglas ex Greene [FNA9, HC2]
Pittonia 2: 221. 1892.
shiny-leaf spiraea, shinyleaf spiraea

Spiraea betulifolia Pall. [HC], misapplied
Spiraea betulifolia Pall. ssp. *lucida* (Douglas ex Greene) Roy L. Taylor & MacBryde
Spiraea betulifolia Pall. var. *lucida* (Douglas ex Greene) C.L. Hitchc.

Draft FNA9: "Spiraea lucida has frequently been considered a variety of S. betulifolia based upon: (a) hypanthial vestiture, inflorescence shape, extent of leaf serration, and leaf texture (L. J. Uttal 1974); or (b) corymbiform panicles, white petals, plant nearly glabrous throughout (C. L. Hitchcock and A. Cronquist 1961; A. Cronquist et al. 1997; H. J. Scoggan 1978). Although these character states occur in the eastern Asian S. betulifolia, it has very different leaf architecture, which appears to be unique and not found in any North American taxa. Spiraea lucida has an extremely variable leaf morphology that seems related to the tendency for stems to die back annually and the consequent annual production of long shoots. Although C. Sterling (1966) did not examine all taxa of Spiraea, the character states of carpel morphology of S. stevenii (see discussion) and S. lucida were similar and differed slightly from those of S. betulifolia (although the provenance of his specimen is not clear from the text)."

Spiraea ×pyramidata Greene [FNA9, HC, HC2]
Pittonia 2: 221. 1892.
pyramid spiraea

Spiraea menziesii Hook. var. *pyramidata* (Greene) Piper
Spiraea tomentulosa Rydb.

Spiraea splendens Baumann ex K. Koch [HC2]
Monatsschr. Vereines Beford. Gartenbaues Konigl. Preuss. Staaten 18(7): 294. 1875.
rosy spiraea, subalpine spiraea

Spiraea betulifolia Pall. var. *rosea* A. Gray
Spiraea densiflora Nutt. ex Greenm. [HC]
Spiraea densiflora Nutt. ex Greenm. ssp. *splendens* (Baumann ex K. Koch) Abrams
Spiraea densiflora Nutt. var. *densiflora* [HC]
Spiraea densiflora Nutt. ex Greenm. var. *splendens* (Baumann ex K. Koch) C.L. Hitchc. [HC]
Spiraea lucida Dougl. ex Hook. var. *rosea* Greene
Spiraea splendens Baumann ex K. Koch ssp. *splendens* [ILBC]

Rubiaceae [HC, HC2] Madder Family

**Cruciata* [HC2]
bedstraw

**Cruciata pedemontana* (Bellardi) Ehrend. [Flora Europaea, HC2]
Ann. Naturhist. Mus. Wien 65: 18. 1962.
piedmont bedstraw

Galium pedemontanum (Bellardi) All.
Vallantia pedemontana Bellardi

Galium [HC, HC2]
bedstraw, cleavers

Galium aparine L. [HC, HC2]
Sp. Pl. 1: 108. 1753.
common bedstraw, common cleavers, goose-grass, sticky-willy

Galium agreste Wallr. var. *echinospermum* Wallr.
Galium aparine var. *aparine* [HC]
Galium aparine L. var. *echinospermum* (Wallr.) Farw. [HC]

Galium bifolium S. Watson [HC, HC2]
United States Geological Expolration [sic] of the Fortieth Parallel. Botany 134, pl. 14, f. 8. 1871.
twin-leaf bedstraw

Galium boreale L. [HC, HC2]
Sp. Pl. 1: 108. 1753.
northern bedstraw

*_Galium divaricatum_ Pourr. ex Lam. [HC2]
Encycl. [J. Lamarck & al.] 2(2): 580. 1788.
Lamarck's bedstraw

Galium kamtschaticum Steller ex Schult. & Schult. f. [HC, HC2]
Mant. 3: 186. 1827.
boreal bedstraw

Rare.

Galium mexicanum Kunth [HC2]
Mexican bedstraw

ssp. *asperulum* (A. Gray) Dempster [HC2, KZ99]
rough bedstraw

Galium asperrimum A. Gray [HC]
Galium asperulum (A. Gray) Rydb.
Galium filipes Rydb.
Galium mexicanum Kunth var. *asperulum* (A. Gray) Dempster [JPM]

*_Galium mollugo_ L. [HC, HC2]
Sp. Pl. 1: 107. 1753.
false baby's-breath, wild madder

*_Galium odoratum_ (L.) Scop. [HC2, IFBC]
Fl. Carniol., ed. 2. 1: 105. 1771.
sweet-scented bedstraw

Asperula odorata L. [HC]

Galium oreganum Britton [HC, HC2]
Bulletin of the Torrey Botanical Club 21(1): 31. 1894.
Oregon bedstraw

Galium kamtschaticum Steller ex Schult. & Schult. f. var. *oreganum* (Britton) Piper

Galium palustre L. [HC2, IFBC]
Sp. Pl. 1: 105. 1753.
common marsh bedstraw

Not in H&C; one specimen at WTU collected by Flett in 1902.

Galium serpenticum Dempster [HC2, JPM]
Brittonia 11(3): 120-121, f. 1D, 3-4. 1959.
intermountain bedstraw

Galium multiflorum Kellogg [HC], misapplied
Galium watsonii (A. Gray) A. Heller [KZ99], misapplied

Dempster and Ehrendorfer (1965) recognized 9 subspecies in their treatment of this species. They list several of these subspecies as occurring in Washington, the majority of which are parapatric to one or more of each other. Until further research is conducted on the distinctiveness of these infraspecific taxa, we will recognize G. serpenticum at the species level only. Dempster and Ehrendorfer: "The name G. serpenticum circumscribes a rather polymorphic assemblage of diploid and some tetraploid races having many characters in common and often so tightly connected by transitional forms that further specific subdivision seems impossible....It is possible that the pattern here outlined may be the result of primary geographical and ecological differentiation which has become blurred by secondary hybridizations. The disjunct group of western montane races may represent the remnants of an older, more grayanum-like northward push along the Cascades, which has become fractionated and more or less strongly infiltrated by eastern and central races during times of dryer and more continental climate."

Galium trifidum L. [HC, HC2]
small bedstraw

Galium cymosum Wiegand [HC]
Galium trifidum L. ssp. *columbianum* (Rydb.) Hultén [JPM2]
Galium trifidum L. ssp. *pacificum* (Wiegand) Piper

Galium trifidum L. ssp. *subbifolium* (Wiegand) Puff
Galium trifidum L. ssp. *trifidum* [KZ99]
Galium trifidum L. var. *pacificum* Wiegand [HC]
Galium trifidum L. var. *subbiflorum* Wiegand

Galium triflorum Michx. [HC, HC2]
Fl. Bor.-Amer. 1: 80. 1803.
fragrant bedstraw, three-flowered bedstraw

**Galium verum* L. [HC, HC2]
Sp. Pl. 1: 107. 1753.
lady's bedstraw, yellow spring bedstraw

Kelloggia [HC, HC2]
Kelloggia

Kelloggia galioides Torr. [HC, HC2]
Bot. Wilkes Exp. 17: 332, pl. 6. 1874.
milk kelloggia

**Sherardia* [HC, HC2]
blue fieldmadder, herb sherard, spurwort

**Sherardia arvensis* L. [HC, HC2]
Sp. Pl. 1: 102. 1753.
blue field-madder

Salicaceae [FNA7, HC, HC2] Willow Family

Treatment of Salicaceae here follows Flora of North America, Volume 7.

Populus [FNA7, HC, HC2]
Sp. Pl. 2: 1034. 1753; Gen. Pl. ed. 5, 456. 1754.
aspen, cottonwood, poplar

**Populus alba* L. [FNA7, HC, HC2]
Sp. Pl. 2: 1034. 1753.
white poplar

Populus alba L. var. *bolleana* Lauche [HC]
Populus alba L. var. *pyramidalis* Bunge [HC]

Commonly spreading from cultivation, primarily by root sprouts, on both the east and west sides of the Cascades.

Populus angustifolia E. James [FNA7, HC, HC2]
Account Exped. Pittsburgh. 1: 497. 1823.
narrow-leaved cottonwood

**Populus ×canescens* (Aiton) Sm. [Stace 1997]
gray poplar

recently collected in Thurston Co.

**Populus deltoides* W. Bartr. ex Marshall [FNA7, HC, HC2]
Arbust. Amer. 106. 1785. (as deltoide).
eastern cottonwood

*ssp. *monilifera* (Aiton) Eckenw. [FNA7, HC2]
J. Arnold Arbor. 58: 204. 1977.

Populus deltoides Bartr. ex Marshall var. *occidentalis* Rydb. [HC]

**Populus nigra* L. [HC, HC2, Stace 1997]
Sp. Pl. 2: 1034. 1753.
black cottonwood, lombardy poplar

Populus dilatata Aiton
Populus italica (Du Roi) Moench
Populus nigra L. var. *italica* Du Roi [HC]

H&C recognizes that this taxon occurs in our area as male clones. Since that time it has naturalized.

Populus tremuloides Michx. [FNA7, HC, HC2]
Fl. Bor. Amer. 2: 243. 1803.
quaking aspen

Populus tremula L. ssp. *tremuloides* (Michx.) Á. Löve & D. Löve

Populus trichocarpa Torr. & A. Gray [FNA7, HC, HC2]
Icon. Pl. 9: plate 878. 1852.
black cottonwood

Populus balsamifera L. [FNA7, HC2], misapplied
Populus balsamifera L. ssp. *trichocarpa* (Torr. & A. Gray) Brayshaw [JPM, KZ99]
Populus balsamifera L. var. *californica* S. Watson
Populus trichocarpa Torr. & A. Gray ex Hook. var. *cupulata* S. Watson
Populus trichocarpa Torr. & A. Gray var. *ingrata* (Jeps.) Parish

FNA7: "In addition to hybridizing with other North American species of sect. Tacamahaca, Populus trichocarpa also hybridizes with both native species of sect. Aigeiros. Populus ×generosa A. Henry (synonym P. ×interamericana van Broekhuizen), a hybrid between P. trichocarpa and P. deltoides, is rare in the far western area of the range for P. deltoides subsp. monilifera, where it overlaps with the more drought-tolerant inland P. trichocarpa (Idaho, Montana, Washington, and Wyoming) (J. E. Eckenwalder 1984). This hybrid has also been grown artificially, and such hybrids between coastal P. trichocarpa and P. deltoides subsp. deltoides are becoming increasingly important plantation trees in the Pacific Northwest from northern Oregon to British Columbia, as well as in Europe. They are perhaps the fastest growing of all poplars in volume, with the rapid height growth of P. trichocarpa added to the steady diameter growth of P. deltoides (R. F. Stettler et al. 1988)."

Salix [FNA7, HC, HC2]
Sp. Pl. 2: 1015. 1753; Gen. Pl. ed. 5, 447. 1754.
[name conserved]
willow

Salix amygdaloides Andersson [FNA7, HC, HC2]
Öfvers. Kongl. Vetensk.-Akad. Förh. 15: 114. 1858.
peach-leaf willow

Salix arctica Pall. [FNA7, HC, HC2]
Fl. Ross. 1(2): 86. 1788.
arctic willow

Salix arctica R. Br. ex Richardson, homonym (illegitimate)
Salix arctica Pall. ssp. *tortulosa* (Trautv.) Hultén
Salix arctica Pall. var. *araioclada* (C.K. Schneid.) Raup
Salix arctica Pall. var. *kophophylla* (C.K. Schneid.) Polunin
Salix arctica Pall. var. *tortulosa* (Trautv.) Raup

FNA7: "Salix arctica is polymorphic and nomenclaturally confusing. E. Hultén (1967, 1971) recognized three subspecies: 1) subsp. arctica (circumpolar from Iceland and the Faeroe Islands across northern Russia, Alaska and Canada to Greenland, south to the Hudson Bay shores of Ontario and the Gaspe Peninsula); 2) subsp. crassijulis (a North Pacific race ranging from Kamchatka and the Russian Far East to the Aleutian Islands, south central and southeastern Alaska along the coast to northern Washington); and 3) subsp. torulosa (ranging from the mountains of central Asia to Kamchatka and the Bering Straits, the Brooks Range and the Rocky Mountains in Alaska, south in the cordillera to southern British Columbia and Alberta). While formal recognition of the three races is appealing, they are actually very difficult or

impossible to separate morphologically and have strongly overlapping ranges. Some of the variability may be due to environmental modification (D. B. O. Savile 1964; G. W. Argus 1973; J. H. Soper and J. M. Powell 1985). On Attu Island, Alaska, there are plants to 2 m along with dwarf plants (C. Parker, pers. comm.). Their tall stature cannot be accounted for by habitat alone. The possibility that the complex morphological variability within S. arctica may be ecophenic or ecotypic deserves study."

Salix barclayi Andersson [FNA7, HC, HC2]
Öfvers. Kongl. Vetensk.-Akad. Förh. 15: 125. 1858.
barclay's willow

Salix barclayi Andersson var. *angustifolia* (Andersson) Andersson ex C.K. Schneid.
Salix barclayi Andersson var. *conjuncta* (Bebb) C.R. Ball ex C.K. Schneid.
Salix pyrolifolia Anderss. var. *hoyeriana* (Dieck) Dippel

Salix bebbiana Sarg. [FNA7, HC, HC2]
Gard. & Forest. 8: 463. 1895.
Bebb's willow, gray willow, long-beak willow

Salix bebbiana Sarg. var. *bebbiana* [HC]
Salix bebbiana Sarg. var. *capreifolia* (Fernald) Fernald
Salix bebbiana Sarg. var. *depilis* Raup
Salix bebbiana Sarg. var. *luxurians* (Fernald) Fernald
Salix bebbiana Sarg. var. *perrostrata* (Rydb.) C.K. Schneid. [HC]
Salix bebbiana Sarg. var. *projecta* (Fernald) C.K. Schneid.

Salix boothii Dorn [FNA7, HC2]
Canad. J. Bot. 53: 1505. 1975.
Booth's willow

Salix myrtillifolia Andersson [FNA7, HC, HC2], misapplied
Salix pseudocordata (Andersson) Rydb., misapplied
Salix pseudomyrsinites Andersson [FNA7], misapplied

FNA7: "Salix boothii forms natural hybrids with S. brachycarpa var. brachycarpa, S. eastwoodiae, S. glauca var. villosa, and S. wolfii. There are numerous intermediate specimens of S. boothii that suggest hybridization with S. arizonica, S. brachycarpa, S. eastwoodiae, S. lutea, or S. wolfii, but further study is needed. A DNA study of S. arizonica showed that a specimen from southwestern Utah previously identified as S. arizonica × S. wolfii probably was S. boothii × S. wolfii (J. T. Thompson et al. 2003). In Mountain Park, Alberta, and the Steens Mountains, Oregon, the putative hybrid Salix boothii × S. glauca var. villosa grew in thickets with both parents. Ovaries were sparsely hairy on the distal half or on the beak, leaves were glaucous abaxially, and floral bracts were mostly glabrous abaxially, but some with hairs proximally. One plant in fruit produced copious seed hairs but no seed."

Salix brachycarpa Nutt. [FNA7, HC, HC2, IFBC]
N. Amer. Sylv. 1: 69. 1842.
short-fruited willow

var. *brachycarpa* [FNA7, HC2]
N. Amer. Sylv. 1: 69. 1842.
short-fruited willow

Salix brachycarpa Nutt. var. *alticola* E.H. Kelso
Salix brachycarpa Nutt. var. *antimima* (C.K. Schneid.) Raup
Salix brachycarpa Nutt. var. *glabellicarpa* C.K. Schneid.
Salix brachycarpa Nutt. var. *sansonii* C.R. Ball
Salix chlorolepis Fernald var. *antimima* C.K. Schneid.
Salix desertorum Richardson var. *fruticulosa* Andersson
Salix desertorum Richardson var. *stricta* Andersson

FNA7: "Variety brachycarpa forms natural hybrids with Salix arizonica, S. barclayi, S. boothii, S. candida, S. chlorolepis, S. glauca var. villosa, and S. planifolia. Placement of specimens from Anticosti Island, Quebec, and North Point, James Bay, Ontario, with densely villous branchlets and relatively short petioles, thought to be hybrids with Salix glauca var. cordifolia, is dubious. Variety brachycarpa × Salix candida (S. ×argusii B. Boivin) is infrequent in Manitoba, Quebec, and Saskatchewan. Variety

brachycarpa × Salix chlorolepis (S. ×gaspeensis C. K. Schneider) resembles var. brachycarpa but has leaves only slightly pilose and ovaries with hairs only on the beaks (G. W. Argus 1965). Variety brachycarpa × Salix glauca var. villosa (S. ×wyomingensis Rydberg) is a frequent hybrid in southern Rocky Mountains. It is characterized by stipes 0.3 mm or longer, long-cylindrical catkins, ovaries with relatively long beaks, petioles more than three times the length of buds, and leaves sparsely hairy. The extent and nature of this hybridization needs to be studied (G. W. Argus 1965). Variety brachycarpa × Salix planifolia "var. monica" occurs in Steens Mountains, Oregon."

Salix candida Flüggé ex Willd. [FNA7, HC, HC2]
Sp. Pl. 4: 708. 1806.
sage willow, sage-leaf willow

Salix candida Flüggé ex Willd. var. *denudata* Andersson
Salix candida Flüggé ex Willd. var. *tomentosa* Andersson
Salix candidula Nieuwl.

FNA7: "Salix candida is geographically wide-ranging but limited to calcareous habitats and, for that reason, it is quite local or even rare in some parts of its range."

Salix cascadensis Cockerell [FNA7, HC, HC2]
Muhlenbergia. 3: 9. 1907.
Cascade willow

Salix brownii (Anderss.) Bebb var. *tenera* (Andersson) M.E. Jones
Salix cascadensis Cockerell var. *thompsonii* Brayshaw
Salix tenera Andersson

FNA7: "The morphological variability of Salix cascadensis is not well understood. Typically, it has leaves that are narrow, sharply pointed, and glaucous abaxially, catkins 15-43-flowered, dark brown floral bracts, and ovaries very densely hairy. Specimens with leaves not glaucous abaxially, catkins relatively few-flowered, and ovaries either sparsely hairy throughout, hairy only on beaks, or hairy in streaks, may be hybrids but the glabrous ovaried S. cascadensis var. thompsonii shows no obvious signs of hybridization. Hybrids: Salix cascadensis is suspected to hybridize with S. barclayi. Salix cascadensis × S. rotundifolia var. dodgeana resembles the former in its narrow, acute to acuminate leaves and the latter in leaves not glaucous abaxially, tawny floral bracts, relatively short catkins, and glabrous ovaries. The catkins are intermediate in being 6-7-flowered."

Salix commutata Bebb [FNA7, HC, HC2]
Bot. Gaz. 13: 110. 1888.
under-green willow, variable willow

Salix barclayi Andersson var. *commutata* (Bebb) Kelso
Salix commutata Bebb var. *denudata* Bebb
Salix commutata Bebb var. *puberula* Bebb

FNA7: "Salix commutata forms natural hybrids with S. barclayi, S. barrattiana, and S. eastwoodiae."

Salix drummondiana Barratt ex Hook. [FNA7, HC, HC2]
Fl. Bor.-Amer. 2: 144. 1838.
Drummond's willow

Salix drummondiana Barratt ex Hook. ssp. *subcaerulea* (Piper) A.E. Murray, orthographic variant
Salix drummondiana Barratt ex Hook. var. *bella* (Piper) C.R. Ball
Salix drummondiana Barratt ex Hook. var. *subcaerulea* (Piper) C.R. Ball, orthographic variant
Salix subcaerulea Piper, orthographic variant

FNA7: "Salix drummondiana is distinguished from the similar, but unrelated, S. sitchensis by having branches often strongly glaucous, branchlets sparsely hairy, largest medial blades lorate, narrowly elliptic, elliptic, or oblanceolate, usually narrower, 3-6.2 times as long as wide, margins slightly revolute, and surfaces with white hairs, sometimes also ferruginous; S. sitchensis has branches not glaucous or weakly so, branchlets usually moderately to very densely hairy, largest medial blades elliptic, narrowly oblanceolate, oblanceolate, or obovate, usually slightly broader, 2.1-3.1-4 times as long as wide, margins strongly revolute, and surfaces with white hairs. Vegetative specimens of Salix drummondiana are distinguished from S. geyeriana by having largest medial blade margins revolute, surfaces usually densely short-silky adaxially, and midribs glabrous; S. geyeriana has largest medial blade margins flat, surfaces

usually moderately densely long-silky adaxially, and midribs silky or glabrous. Salix drummondiana and S. lemmonii can be separated on the basis of variable characters including: branch glaucousness, leaf size, blade hair density and color, catkin size and shape, anther length, petiole length, and chromosome number. Hybridization is rare but may occur in Lassen and Sierra counties, California."

Salix eastwoodiae Cockerell ex A. Heller [FNA7, HC2]
Cat. N. Amer. Pl. ed. 3. 89. 1910. (as fastwoodiae). 1910.
Sierran willow

Salix californica Bebb

Not in H&C; apparently a portion of the S. commutata plants from WA should be C. eastwoodiae. FNA7: "Salix eastwoodiae and S. commutata are distinct species with different ploidal levels, the former tetraploid and the latter diploid; where they come into contact in the Pacific Northwest, hybrids occur and vegetative plants are often difficult to separate. See comparison below. The most important difference is that ovaries of S. eastwoodiae usually are silky turning glabrescent in age and those of S. commutata are glabrous. Populations occur in Oregon with both glabrous and hairy ovaries without any other evident differences. There are also unusual specimens, which are often tentatively identified as S. eastwoodiae, that have glabrous ovaries and patches of hairs at the base and on the sutures. The possibility that they are hybrids between S. eastwoodiae and S. boothii, S. commutata, or S. lemmonii needs study. Salix commutata is distinguished from S. eastwoodiae by having leaf blades sometimes amphistomatous, 1.5-3.4 times as long as wide, teeth 0-19 per cm, adaxial surfaces glabrous or pilose to villous, floral bracts tawny to brown, staminate and pistillate adaxial nectaries oblong to square, and ovaries glabrous; S. eastwoodiae has leaf blades hypostomatous, 1.8-5 times as long as wide, teeth 0-10 per cm, adaxial surfaces tomentose or long-silky, floral bracts brown to black, staminate and pistillate adaxial nectaries narrowly oblong to oblong, and ovaries silky to glabrescent. Hybrids: Salix eastwoodiae forms natural hybrids with S. arizonica, S. boothii, and S. commutata. Salix eastwoodiae × S. lasiandra was found in Sierra County, California, growing with both parents in a wetland along a disturbed roadside. It had leaf indumentum and hair color of S. eastwoodiae and leaf shape and margins of S. lasiandra. Catkins of this intersubgeneric hybrid were teratological and presumably infertile."

Salix exigua Nutt. [FNA7, HC, HC2]
N. Amer. Sylv. 1: 75. 1842.
coyote willow, narrow-leaf willow
(see also *Salix melanopsis*)

var. *exigua* [FNA7, HC, HC2]
N. Amer. Sylv. 1: 75. 1842.
coyote willow, narrow-leaf willow

Salix argophylla Nutt.
Salix exigua Nutt. ssp. *exigua* [HC]
Salix exigua Nutt. var. *luteosericea* (Rydb.) C.K. Schneid.
Salix exigua Nutt. var. *nevadensis* (S. Watson) C.K. Schneid.
Salix exigua Nutt. var. *stenophylla* (Rydb.) C.K. Schneid. [HC]
Salix exigua Nutt. var. *virens* Rowlee
Salix fluviatilis Nutt. var. *argophylla* (Nutt.) Sarg.
Salix interior Rowlee var. *luteosericea* (Rydb.) C.K. Schneid.
Salix longifolia Muhl. var. *argophylla* (Nutt.) Andersson
Salix longifolia Lam. var. *exigua* (Nutt.) Bebb
Salix longifolia Muhl. var. *opaca* Andersson
Salix luteosericea Rydb.
Salix malacophylla Nutt. ex C.R. Ball
Salix nevadensis S. Watson
Salix stenophylla Rydb.

FNA7: "Variety exigua forms natural hybrids with var. hindsiana, Salix columbiana, S. interior, and S. melanopsis. Variety exigua × var. hindsiana was reported by R. D. Dorn (1998). Inasmuch as the two varieties are subtly distinct, hybrids are difficult to recognize. Variety exigua × Salix interior probably occurs throughout their area of overlap; it is known to me from Alberta and Nebraska, where there are plants with leaves indistinctly toothed and more silky than in S. interior. R. D. Dorn (1998) reported it from Alberta, British Columbia, Colorado, Montana, Nebraska, New Mexico, Oklahoma, South Dakota,

Texas, and Wyoming. Variety exigua × Salix melanopsis is intermediate, with juvenile leaves densely hairy proximally, truncate floral bracts, and prominent stipules (R. D. Dorn 1998)."

Salix farriae C.R. Ball [FNA7, HC, HC2]
Contr. U.S. Natl. Herb. 22: 321 (as farrae). 1921.
Farr's willow

Salix farriae C.R. Ball var. *microserrulata* C.R. Ball
Salix hastata L. var. *farriae* (C.R. Ball) Hultén

Not reported for WA by FNA. However, one specimen from Okanogan County annotated as S. farriae by George Argus in 2005. FNA7: "Salix farriae is a cordilleran species ranging from Wyoming to central British Columbia with disjunct occurrences in northwestern British Columbia, western Northwest Territories, and southern Yukon. It is related to S. hastata, an amphiberingian species ranging from Scandinavia to southwestern Yukon and northwestern Northwest Territories. There may be reasons for treating these slightly different plants as S. hastata var. farriae, but R. D. Dorn (1975) maintained them as a species based on flavonoid differences. In a phenetic study (G. W. Argus 2007), the two taxa had dissimilarity values at the same level as other closely related species. They are treated here as species, primarily because their ranges are disjunct. They can be separated as follows: Salix farriae is distinguished from S. hastata by having largest medial blades narrowly elliptic to elliptic, pistillate nectaries oblong or ovate, stipules on early leaves absent or rudimentary (sometimes foliaceous), branches strongly to weakly glaucous or not, floral bract apices rounded, and plants of the cordillera in Alberta and British Columbia, in Idaho, Montana, Oregon, and Wyoming; S. hastata has largest medial blades narrowly elliptic to broadly elliptic or broadly obovate, pistillate nectaries square, stipules on early leaves foliaceous (sometimes rudimentary), branches not glaucous, floral bract apices acute or rounded, and plants of Alaska, Northwest Territories, and Yukon. Salix farriae and S. barclayi are sympatric in western Canada and the Pacific Northwest, where they are difficult to separate. Salix farriae can often be recognized by its largest medial leaves with at least some minute, ferruginous hairs on the adaxial midrib or blade surfaces; ferruginous hairs do not occur in S. barclayi. Its leaf margins also tend to be more nearly entire, but relatively short teeth are not infrequent. Such plants are sometimes interpreted as intergrades between S. farriae and S. barclayi (R. D. Dorn 1975). The variable leaf toothing also occurs in S. hastata and may not be a reliable indicator of intergradation. Salix farriae also differs from S. barclayi in usually having shorter anthers, 0.3-0.6 mm versus 0.6-1 mm in S. barclayi. See 61. S. barclayi."

**Salix fragilis* L. [FNA7, HC2]
Sp. Pl. 2: 1017. 1753.
crack willow

FNA7: "Salix ×fragilis Linnaeus: The hybrid white willow, S. alba Linnaeus × S. euxina I. Belyaeva, a European introduction, is the most commonly cultivated and naturalized tree-willow in the flora area. It is characterized by: trees, 3-20 m, stems erect or drooping; branches highly brittle at base; petioles with spherical or foliaceous glands distally, pilose or villous adaxially; largest medial leaf blade amphistomatous, very narrowly elliptic or narrowly elliptic, margins uniformly serrate or serrulate, abaxial surface glaucous, both surfaces sparsely long-silky to glabrescent, adaxial surface slightly glossy or dull; juvenile leaves at first densely long-silky soon glabrous; pistillate bract deciduous after flowering; stamens 2; anthers yellow; pistillate adaxial nectary shorter than or equal to stipe; stipe 0.3-0.5 mm; ovary pyriform, glabrous; ovules 6-12 per ovary; styles 0.4-1 mm; capsules 4.5-6 mm; 2n = 57, 76. Flowering is in late May-early June. Individual trees can persist for years by trunk suckering and spread vegetatively by shoot fragmentation along stream margins, shingle and sand beaches, sedge meadows, hardwood forests, and sand pits. It occurs from 0 to 2500 m."

Salix geyeriana Andersson [FNA7, HC, HC2]
Öfvers. Kongl. Vetensk.-Akad. Förh. 15: 122. 1858.
Geyer's willow

Salix geyeriana Andersson ssp. *argentea* (Bebb) A.E. Murray
Salix geyeriana Andersson var. *argentea* (Bebb) C.K. Schneid.
Salix geyeriana Andersson var. *geyeriana* [HC]
Salix geyeriana Andersson var. *meleiana* J.K. Henry [HC], orthographic variant
Salix geyeriana Andersson var. *meleina* J.K. Henry
Salix meleina (J.K. Henry) G.N. Jones

FNA7: "Salix geyeriana is characterized by its dark gray appearance, slender, dark branches, narrow

leaves long-silky on both surfaces, general absence of stipules, and small, subglobose catkins. Plants in the Pacific Northwest with foliaceous stipules may be hybrids or introgressants, but the other parent is unknown. Hybrids: Salix geyeriana forms natural hybrids with S. bebbiana, S. irrorata, S. lemmonii, S. ligulifolia, and S. pedicellaris. Alleged hybrids with S. sitchensis, based on plants from British Columbia with broader, more hairy leaves, and catkins longer than in S. geyeriana, but with the short stipes of S. sitchensis (J. K. Henry 1915), are unconvincing. Salix geyeriana × S. lemmonii is uncommon but in mixed stands of the parental species some plants resemble S. geyeriana in having relatively short, subspherical catkins, small anthers, and petioles sometimes with petiolar glands; and S. lemmonii in having leaf blades amphistomatous, margins serrulate, and foliaceous stipules on early leaves. Because the species have different chromosome numbers, hybrids may be infertile, but occasional seeds have been seen. This hybrid is known from California (Lassen and Sierra counties), Oregon (Jefferson and Lane counties), and near Victoria, British Columbia. Salix geyeriana × S. pedicellaris occurs in Washington. It has the white and ferruginous hairs on leaves and ovaries of S. geyeriana, and leaves glaucous adaxially with prominent 2 and 3 veins of S. pedicellaris."

Salix glauca L. [FNA7, HC, HC2]

Sp. Pl. 2: 1019. 1753.

gray willow

var. *villosa* Andersson [FNA7, HC2]

Proc. Amer. Acad. Arts. 4: 68. 1858.

glaucous willow, gray willow

Salix glauca L. ssp. *glabrescens* (Andersson) Hultén
Salix glauca L. var. *glabrescens* (Andersson) C.K. Schneid.
Salix pseudolapponum Seemen
Salix villosa D. Don ex Hook.
Salix wolfii Bebb var. *pseudolapponum* (Seemen) M.E. Jones

FNA7 by George Argus includes WA in the distribution of this taxon, however no specimens from WA are held in any PNW herbaria. The more conservative approach to this issue is including this on the checklist of WA vascular plants with the assumption that George Argus did see a specimen as part of preparing the FNA Salix treatment.

Salix hookeriana Barratt ex Hook. [FNA7, HC, HC2]

Fl. Bor.-Amer. 2: 145, plate 180. 1838.

coastal willow

Salix amplifolia Coville
Salix hookeriana Barratt ex Hook. var. *laurifolia* J.K. Henry
Salix hookeriana Barratt ex Hook. var. *tomentosa* J.K. Henry ex C.K. Schneid.
Salix piperi Bebb [HC]

S. piperi Bebb is treated as separate species in H&C.GA recognizes the glabrous-capsuled form common in the Puget Sound region which is called S. piperi; however, he chooses to treat it as synonymous with S. hookeriana. FNA7: "Salix hookeriana is primarily a coastal species occurring from northern California northward to Oregon, Washington, and southern Vancouver Island, with disjunct populations on Queen Charlotte Islands, British Columbia, and northward to Yakatut Bay, Turnagain Arm, and Kodiak, Alaska. It was treated by G. W. Argus (1973) and R. D. Dorn (2000) in a broad sense because of an absence of strong distinguishing characters and intergradation in characters that could be used to divide it. It is highly variable and three very similar taxa have been named: S. amplifolia, S. hookeriana (including vars. tomentosa and laurifolia), and S. piperi. Although extremes of these taxa sometimes are recognizable, the intergradation displayed is so great that even attempts to recognize them as varieties are thwarted. The amplifolia variant in Alaska is characterized by having only white leaf hairs, hairy ovaries, no stipules, and catkins often borne on distinct flowering branchlets, but variation can occur within the same population, and typical S. hookeriana on Vancouver Island sometimes displays the same characteristics. The piperi variant, an inland population in western Oregon and Washington, is usually recognized by local botanists as different from coastal populations. It is characterized by leaves and branchlets soon becoming glabrate and stipules prominent. These characteristics, however, sometimes appear in northern California coastal populations, and some inland populations in Oregon include very hairy individuals that are indistinguishable from coastal variants of S. hookeriana. In general, very hairy populations of S. hookeriana are probably an adaptation to marine coastal environments, but some variation may be due to hybridization

and introgression with S. scouleriana. Inland populations suggest the influence of S. lasiolepis. Two hexaploid chromosome numbers reported for S. hookeriana from Vancouver Island (R. L. Taylor and S. Taylor 1977) and Queen Charlotte Islands (R. L. Taylor and G. A. Mulligan 1968), British Columbia, indicate that hybridization has played a role in the evolution of this complex. It is possible that each variant of S. hookeriana has had a different, possibly even recurrent, polyploid origin. Further cytological and genetic study is indicated. The following comparisons may help to distinguish Salix hookeriana, S. lasiolepis, and S. scouleriana. Vegetative specimens of Salix hookeriana can be distinguished from S. lasiolepis by having floral buds ellipsoid, beaks distinctly long-tapered, densely long-hairy (villous), red-brown, blades usually pilose, villous, or woolly on abaxial surfaces, usually 18-63 mm wide, and 1.5-4.2 times as long as wide; S. lasiolepis has floral buds ovoid, beaks inconspicuous and blunt, sparsely to moderately densely short-hairy (velvety), yellowish to red-brown, blades usually tomentose on abaxial surfaces, usually 6-32 mm wide, and 3.2-9.6 times as long as wide. Salix hookeriana is distinguished from S. scouleriana by having branchlets with spreading hairs (woolly or tomentose to glabrate), petioles usually pilose to tomentose, blades typically narrowly elliptic but variable, stigmas 0.3-0.74, short in relation to styles (0.6-2.3 mm), and pistillate nectaries 0.5-1.4 mm, shorter or longer than stipes; S. scouleriana has branchlets usually with short, erect hairs (velutinous), sometimes spreading (villous or tomentose), petioles velvety or villous adaxially, blades typically oblanceolate but variable, stigmas 0.4-1.04 mm, long in relation to styles (0.2-0.6 mm), and pistillate nectaries 0.2-0.8 mm, shorter than stipes. Hybrids: Salix hookeriana forms natural hybrids with S. barclayi and S. scouleriana. Variation in some S. hookeriana populations suggests hybridization with S. lasiolepis but no positive identifications have been made. R. D. Dorn (2000) doubted that hybridization in California between these species with different chromosome numbers was possible, but species with different chromosome numbers do hybridize [for example, S. athabascensis (4x) × S. pedicellaris (2x)]; synthetic hybridization studies are indicated. Salix hookeriana × S. scouleriana: Plants from southern British Columbia with leaves similar to S. hookeriana but with prominent stipules, catkins both erect and recurving, and relatively long stigmas were thought by J. K. Henry (1915) to be this hybrid."

Salix lasiandra Benth. [FNA7, HC, HC2]
Pl. Hartw. 335. 1857.
Pacific willow

var. *caudata* (Nutt.) Sudw. [FNA7, HC, HC2]
Bull. Torrey Bot. Club. 20: 43. 1893.
gland willow, Pacific willow, shining willow

Salix lasiandra Benth. ssp. *caudata* (Nutt.) A.E. Murray
Salix lasiandra Benth. var. *fendleriana* (Andersson) Bebb
Salix lucida Muhl. ssp. *caudata* (Nutt.) A.E. Murray

var. *lasiandra* [FNA7, HC, HC2]
Pl. Hartw. 335. 1857.
Pacific willow

Salix lasiandra Benth. var. *abramsii* C.R. Ball
Salix lasiandra Benth. var. *lancifolia* (Andersson) Bebb
Salix lasiandra Benth. var. *lyallii* Sarg.
Salix lasiandra Benth. var. *macrophylla* (Andersson) Little
Salix lasiandra Benth. var. *recomponens* Raup
Salix lucida Muhl. ssp. *lasiandra* (Benth.) A.E. Murray

Salix lasiolepis Benth. [FNA7, HC, HC2]
Pl. Hartw. 335. 1857.
arroyo willow

Salix lasiolepis Benth. var. *bracelinae* C.R. Ball
Salix lasiolepis Benth. var. *falax* Bebb
Salix lasiolepis Benth. var. *lasiolepis*
Salix lasiolepis Benth. var. *sandbergii(Rydb.)C.R.Ball*
Salix lutea Nutt. var. *nivaria* Jeps.

FNA7: "Salix lasiolepis is polymorphic. Variety bigelovii has been recognized in coastal California and Oregon (G. W. Argus 1993). It differs mainly in density of leaf indumentum and in having leaves tending to be slightly broader; it may be a coastal ecotype and is not formally recognized here."

Salix maccalliana Rowlee [FNA7, HC2]
Bull. Torrey Bot. Club. 34: 158. 1907.
Maccalla's willow

FNA7: "The decaploid to dodecaploid chromosome number for Salix maccalliana, highest in the genus, suggests a complex origin. Relationships with subg. Chamaetia and subg. Salix were suggested by Rowlee and by H. M. Raup (1959). Staminate flowers with abaxial nectaries, tawny and persistent bracts, and villous ovaries suggest a link with S. glauca; leaves with coarse, ferruginous hairs and serrate margins suggest S. lucida (Rowlee). Although S. maccalliana is phenetically closer to sect. Salicaster than to (subg. Chamaetia) sect. Glaucae (G. W. Argus 1997), it is probable that because it incorporates genomes from more than one subgenus, its subgeneric placement is arbitrary."

**Salix matsudana* Koidz. [HC2]
corkscrew willow

Salix melanopsis Nutt. [FNA7, HC2]
N. Amer. Sylv. 1: 78, plate 21. 1842.
dusky willow

Salix bolanderiana Rowlee
Salix exigua Nutt. ssp. *melanopsis* (Nutt.) Cronquist [HC]
Salix exigua Nutt. var. *gracilipes* (C.R. Ball) Cronquist
Salix exigua Nutt. var. *tenerrima* (L.F. Hend.) C.K. Schneid.
Salix parksiana C.R. Ball
Salix sessilifolia Nutt. var. *vancouverensis* Brayshaw
Salix tenerrima (L.F. Hend.) A. Heller

FNA7: "Salix melanopsis forms natural hybrids with S. exigua var. exigua, S. sessilifolia, and S. sitchensis (R. D. Dorn 1998)."

Salix monochroma C.R. Ball [FNA7, HC2]
Bot. Gaz. 71: 431, fig. 1. 1921.
one-color willow

Salix eriocephala Michx. var. *monochroma* (C.R. Ball) Dorn

This taxa listed as a synonym for Salix rigida Muhl. var. mackenzieana in H&C.

Salix nivalis Hook. [FNA7, HC, HC2]
Fl. Bor.-Amer. 2: 152. 1838.
dwarf snow willow

Salix nivalis Hook. var. *nivalis* [HC]
Salix nivalis Hook. var. *saximontana* (Rydb.) C.K. Schneid. [HC]
Salix reticulata L. ssp. *nivalis* (Hook.) Á. Löve, D. Löve & B.M. Kapoor
Salix reticulata L. var. *nana* Andersson
Salix reticulata L. var. *nivalis* (Hook.) Andersson
Salix reticulata L. var. *saximontana* (Rydb.) Kelso

FNA7: "Because geographic overlap is small and evidence of intergradation is tenuous, Salix nivalis is best treated as a species separate from S. reticulata; S. nivalis was previously treated as a subspecies of S. reticulata (G. W. Argus 1986b, 1991)."

Salix pedicellaris Pursh [FNA7, HC, HC2]
Fl. Amer. Sept. 2: 611. 1813.
bog willow

Salix myrtilloides L. var. *hypoglauca* (Fernald) C.R. Ball
Salix myrtilloides L. var. *pedicellaris* (Pursh) Andersson
Salix pedicellaris Pursh var. *hypoglauca* Fernald
Salix pedicellaris Pursh var. *tenuescens* Fernald

FNA7: "Salix pedicellaris is very distinct with decumbent habit, leathery, glabrous leaves that are glaucous on both surfaces, loosely flowered catkins, ovaries reddish, glabrous and often glaucous, and stipes 2.1-3.2 mm. In the flora area, it hybridizes with six other species (see below). This compares with the closely related European S. myrtilloides Linnaeus, which is reported (B. Jonsell and T. Karlsson 2000+,

vol. 1) to hybridize with seven species. The distinctive appearance may make hybrids easily recognizable but it is complex cytologically."

Salix petrophila Rydb. [FNA7, HC2]
Bull. New York Bot. Gard. 1: 268. 1899.
alpine willow

Salix arctica Pall. ssp. *petraea* (Andersson) Á. Löve, D. Löve & B.M. Kapoor
Salix arctica Pall. var. *caespitosa* (P.B. Kenn.) Kelso
Salix arctica Pall. var. *graminifolia* (E.H. Kelso) Kelso
Salix arctica Pall. var. *petraea* Andersson [HC]
Salix arctica Pall. var. *petrophila* (Rydb.) Kelso
Salix brownei (Andersson) Bebb var. *petraea* (Andersson) Bebb
Salix caespitosa P.B. Kenn.
Salix petrophila Rydb. var. *caespitosa* (Kenn.) C.K. Schneid.

FNA7: "Salix petrophila is often included in S. arctica (G. W. Argus 1993), but southern cordilleran populations, extending as far north as southern British Columbia and Alberta, seem to be a distinct taxon (Argus 1997). The exact northern limit of this species still needs to be established, but in Alberta it does not seem to extend north of Waterton Lakes National Park, except for a population on springy slopes above Agness Lake, Banff National Park. Suitable alpine habitats between Waterton Lakes and Banff national parks, e.g., Mt. Armstrong, Tornado Mountain, and Crowsnest Pass, should be explored for S. arctica and S. petrophila."

Salix planifolia Pursh [FNA7, HC2]
Fl. Amer. Sept. 2: 611. 1813.
plane-leaf willow, tea-leaved willow

Salix phylicifolia L. [HC]
Salix planifolia Pursh var. *nelsonii* (C.R. Ball) C.R. Ball ex E.C. Sm.

FNA7: "Salix planifolia forms natural hybrids with S. alaxensis var. alaxensis, S. argyrocarpa, S. brachycarpa var. brachycarpa, S. candida, S. drummondiana, S. humilis, S. pellita, S. pulchra, and S. scouleriana. Hybrids with S. glauca var. cordifolia have been reported (C. K. Schneider 1921) but no convincing specimens have been seen."

var. *planifolia* [HC2]
diamondleaf willow

Salix phylicifolia L. ssp. *planifolia* (Pursh) Hiitonen
Salix phylicifolia L. var. *pennata* (C.R. Ball) Cronquist [HC]
Salix phylicifolia L. var. *planifolia* [HC]
Salix planifolia Pursh var. *pennata* (C.R. Ball) C.R. Ball ex Dutilly, Lepage & Duman

Salix prolixa Andersson [FNA7, HC2]
Monogr. Salicum. 94, plate 5, fig. 52. 1867.
Mackenzie's willow

Salix cordata Muhl. var. *mackenzieana* Hook.
Salix eriocephala Michx. ssp. *mackenzieana* (Hook.) Dorn
Salix eriocephala Michx. var. *mackenzieana* (Hook.) Dorn
Salix mackenzieana (Hook.) Barratt ex Andersson
Salix mackenzieana (Hook.) Barratt ex Andersson var. *macrogemma* C.R. Ball
Salix rigida Muhl. ssp. *mackenzieana* (Hook.) A.E. Murray
Salix rigida Muhl. var. *mackenzieana* (Hook.) Cronquist [HC]
Salix rigida Muhl. var. *macrogemma* (C.R. Ball) Cronquist [HC]

Salix pseudomonticola C.R. Ball [FNA7, HC2]
Contr. U.S. Natl. Herb. 22: 321. 1921.
false mountain willow

Salix barclayi Andersson var. *pseudomonticola* (C.R. Ball) Kelso
Salix monticola Bebb [FNA7, HC], misapplied

FNA7: "Salix pseudomonticola is characterized by precocious flowering; catkins sessile; juvenile leaf blades, petioles, and proximal midribs reddish; stipules prominent; and leaves and branchlets sparsely

hairy. Branches older than two years have a distinctive pattern, which consists of a series of longitudinal splits in epidermis produced as the branch expands. The edge of epidermis around the split, where it has separated from the branch, is yellow and contrasts with the red-brown branch to which the epidermis still adheres. Vegetative specimens of Salix pseudomonticola with yellow-brown branches can be confused with S. famelica. They may be separated by their juvenile leaf margins prominently and closely gland-dotted; stipules usually prominent, sometimes early deciduous; leaves broader (1.4-3 times as long as wide versus 2.6-7 in S. famelica); and petioles slender and often longer in relation to blade length. The possibility of hybridization needs study. Vegetative specimens of Salix pseudomonticola can be distinguished from S. pyrifolia by juvenile leaves reddish and almost always with some ferruginous hairs, versus yellowish-green and glabrous or with white hairs, and mature leaves usually dull adaxially versus glossy."

**Salix purpurea* L. [FNA7, HC2]
Sp. Pl. 2: 1017. 1753.
purple osier, basket willow, purple willow

Salix scouleriana Barratt ex Hook. [FNA7, HC, HC2]
Fl. Bor.-Amer. 2: 145. 1838.
Scouler's willow

Salix scouleriana Barratt ex Hook. var. *brachystachys* (Benth.) M.E. Jones
Salix scouleriana Barratt ex Hook. var. *coetanea* C.R. Ball
Salix scouleriana Barratt ex Hook. var. *crassijulis* (Andersson) C.K. Schneid.
Salix scouleriana Barratt ex Hook. var. *flavescens* (Nutt.) J.K. Henry
Salix scouleriana Barratt ex Hook. var. *poikila* C.K. Schneid.
Salix scouleriana Barratt ex Hook. var. *thompsonii* C.R. Ball
Salix stagnalis Nutt.

FNA7: "Western Salix scouleriana and eastern S. humilis are closely related and are sometimes difficult to separate. Although there is an apparent range disjunction between them in western Manitoba, it may be a collecting gap. In general, S. scouleriana differs from S. humilis in being a taller shrub, sometimes even tree-like, with broader leaves and longer catkins, floral bracts, stigmas, and styles, but these quantitative characteristics all overlap. The apparent difference in anther length (S. scouleriana 0.7-1.2 mm; S. humilis 0.4-0.6 mm) may be correlated with a difference in chromosome number. Salix scouleriana is tetraploid (Y. Suda and G. W. Argus 1968); S. humilis has been reported to be both diploid (Suda and Argus; L. Zsuffa and Y. Raj, unpubl.) and tetraploid (R. D. Dorn 1976). The latter count was from the same population as the one by Suda and Argus. Further chromosome counts are indicated. Salix scouleriana forms natural hybrids with S. hookeriana, S. planifolia, and S. pulchra."

**Salix ×sepulcralis* Simonk. [HC2]
weeping willow

Salix babylonica L. [FNA7, HC, HC2], misapplied
Salix ×pendulina Wender. [FNA7, HC2], misapplied

FNA7: "Salix ×pendulina Wenderoth: Weeping willow, S. babylonica × S. euxina, is introduced from Europe and grown throughout the world."

Salix sessilifolia Nutt. [FNA7, HC, HC2]
N. Amer. Sylv. 1: 68. 1842.
sessile-leaf willow

Salix exigua Nutt. var. *sessilifolia* (Nutt.) Dorn
Salix fluviatilis Nutall var. *sessilifolia* (Nutt.) Scoggan
Salix longifolia Muhl. var. *sessilifolia* (Nutt.) M.E. Jones
Salix macrostachya Nutt.
Salix macrostachya Nutt. var. *cusickii* Rowlee
Salix sessilifolia Nutt. var. *villosa* Andersson

FNA7: "Salix sessilifolia forms natural hybrids with S. columbiana and S. melanopsis."

Salix sitchensis Sanson ex Bong. [FNA7, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2: 162. 1832.
Sitka willow

Salix coulteri Andersson
Salix cuneata Nutt.
Salix sitchensis Sanson ex Bong. var. *congesta* Andersson
Salix sitchensis Sanson ex Bong. var. *denudata* (Andersson) Andersson
Salix sitchensis Sanson ex Bong. var. *parviflora* (Jeps.) Jeps.

FNA7: "Ovary hairiness in some Salix sitchensis populations varies from uniformly hairy to glabrescent, with intermediates with patchy or streaky hairiness. All three variations can occur together and do not seem to indicate hybridization. Both Salix sitchensis and S. scouleriana have similar variants with leaves having very densely curly hairs on abaxial surfaces [S. sitchensis forma coulteri (Andersson) Jepson and S. scouleriana forma poikila (C. K. Schneider) C. K. Schneider]. Plants resembling S. drummondiana but with similar indumentum probably are hybrids with S. alaxensis (see 84. S. drummondiana). The coulteri taxon resembles S. delnortensis in having stipules with adaxial surfaces glabrous and very sparsely glandular toward the base, densely hairy abaxially, and with gland-dotted margins; its branchlets have wavy to crinkly hairs. The possible hybrid origin of S. delnortensis needs study (R. D. Dorn 2000). Salix sitchensis forms natural hybrids with S. alaxensis var. longistylis and S. melanopsis. Hybridization with S. geyeriana reported by J. K. Henry (1915) is not based on convincing specimens."

var. *sitchensis* [HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2: 162. 1832.
Sitka willow

Salix tweedyi (Bebb ex Rose) C.R. Ball [FNA7, HC, HC2]
Bot. Gaz. 40: 377. 1905.
Tweedy's willow

Salix barrattiana Hook. var. *tweedyi* Bebb ex Rose
Salix rotundifolia Nutt., homonym (illegitimate)

Salix vestita Pursh [FNA7, HC, HC2]
Fl. Amer. Sept. 2: 610. 1813.
rock willow

Salix vestita Pursh ssp. *leiolepis* (Fernald) Argus
Salix vestita Pursh var. *erecta* Andersson [HC]
Salix vestita Pursh var. *humilior* Andersson

FNA7: "Salix vestita is an ancient amphiberingian species. Its distribution includes a series of isolated, disjunct populations in Central Siberia, the northern Rocky Mountains, the west coast of Hudson Bay, and the northeastern arctic and subarctic. Occurrence in Nunavut is on Akpatok Island in Ungava Bay and on the Belcher Islands in Hudson Bay. It may be extirpated in Washington. The flowering and vegetative branchlets sometimes have relatively short internodes. In subsequent years, branches have the appearance of short shoots similar to those in Alnus. Short shoots do not appear on all branches or in all years. The formation of short shoots may be related to adverse growing conditions."

Santalaceae [HC, HC2, JPM2] Sandalwood Family

Synonyms:
Comandraceae [JPM2] (Bastard Toadflax Family)
Viscaceae (Mistletoe Family)

Jepson Manual, 2nd Edition: "Segregated, along with other families, from otherwise paraphyletic Santalaceae"

Arceuthobium [HC, HC2]
dwarf mistletoe

Arceuthobium abietinum Engelm. ex Munz [HC2, KZ99]

Arceuthobium campylopodum Engelm. f. *abietinum* (Engelm.) Gill [HC]
Arceuthobium campylopodum Engelmann ssp. *abietinum* (Engelmann) Nickrent [FNA]

Arceuthobium occidentale Engelm. var. *abietinum* Engelm.

Arceuthobium americanum Nutt. ex Engelm. [HC, HC2]
lodgepole pine dwarf-mistletoe

Arceuthobium campylopodum Engelm. [HC, HC2]
western dwarf-mistletoe
(see also *Arceuthobium abietinum*, *Arceuthobium laricis*, *Arceuthobium tsugense*)

Arceuthobium campylopodum Engelm. f. *campylopodum* [HC]
Arceuthobium campylopodum Engelmann ssp. *campylopodum* [FNA]

Arceuthobium douglasii Engelm. [HC, HC2]
Douglas-fir dwarf-mistletoe

Arceuthobium laricis (Piper) H. St. John [HC2, KZ99]
larch dwarf-mistletoe

Arceuthobium campylopodum Engelm. f. *laricis* (Piper) L.S. Gill [HC]
Arceuthobium campylopodum Engelmann ssp. *laricis* (M. E. Jones) Nickrent [FNA]

Arceuthobium tsugense (Rosend.) G.N. Jones [HC2]
hemlock dwarf mistletoe

Arceuthobium campylopodum Engelm. f. *tsugensis* (Rosend.) Gill [HC]
Arceuthobium campylopodum Engelmann ssp. *tsugense* (Rosendahl) Nickrent [FNA]

ssp. *contortae* Wass & Mathiasen [HC2]

ssp. *tsugense* [HC2, KZ99]
hemlock mistletoe

Comandra [HC, HC2]
bastard toadflax
(see also *Geocaulon*)

Comandra umbellata (L.) Nutt. [HC, HC2]

ssp. *californica* (Eastw. ex Rydb.) Piehl [HC2, KZ99]
bastard toad flax

Comandra californica Eastw. ex Rydb.
Comandra umbellata (L.) Nutt. var. *californica* (Eastw. ex Rydb.) C.L. Hitchc. [HC]

ssp. *pallida* (A. DC.) Piehl [HC2, KZ99]
bastard toad flax

Comandra pallida A. DC.
Comandra umbellata (L.) Nutt. var. *angustifolia* (A. DC.) Torr.
Comandra umbellata (L.) Nutt. var. *pallida* (A. DC.) M.E. Jones [HC]

Geocaulon [HC2]
false toadflax

Geocaulon lividum (Richardson) Fernald [HC2, KZ99]
false toadflax

Comandra livida Richardson [HC]
Comandra lividum Richardson

Sapindaceae [HC2] Soapberry Family

Synonyms:
Aceraceae [HC] (Maple Family)
Hippocastanaceae (Horse Chestnut Family)

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/).

Acer [HC, HC2]
maple

**Acer campestre* L. [HC2]
Sp. Pl. 2: 1055. 1753.
field maple, hedge maple

Acer circinatum Pursh [HC, HC2, ILBC]
Fl. Amer. Sept. 1: 267 [1813]. 1814.
vine maple

Acer glabrum Torr. [HC, HC2]
Ann. Lyceum Nat. Hist. New York ii. 172. 1828.
Rocky Mountain maple

var. *douglasii* (Hook.) Dippel [HC, HC2]
Handb. Laubholzk. 2: 438. 1892.
Douglas maple

Acer douglasii Hook.
Acer glabrum Torr. ssp. *douglasii* (Hook.) Wesm.
Acer subserratum Greene [VPPNW3]

Acer macrophyllum Pursh [HC, HC2]
Fl. Amer. Sept. 1: 267 [1813]. 1814.
big-leaf maple

**Acer negundo* L. [HC, HC2]
Sp. Pl. 2: 1056. 1753.
box elder, box elder maple

Acer fraxinifolium Nutt. [VPPNW3]
Acer negundo L. var. *negundo*
Acer negundo L. var. *violaceum* (G. Kirchn.) H. Jaeger
Acer nuttallii Lyon [VPPNW3]
Negundo aceroides (L.) Moench
Negundo aceroides (L.) Moench ssp. *violaceum* (G. Kirchn.) W.A. Weber
Negundo negundo (L.) Karst.
Negundo nuttallii Rydb. Bull. [VPPNW3]
Rulac nuttallii Nieuwl. [VPPNW3]

**Acer platanoides* L. [HC2]
Sp. Pl. 2: 1055. 1753.
Norway maple

Acer platanoides L. var. *schwedleri* G. Nicholson

**Acer pseudoplatanus* L. [HC2, VPBC]
Sp. Pl. 2: 1054. 1753.
sycamore maple

**Acer saccharinum* L. [HC2]
Sp. Pl. 2: 1055. 1753.
silver maple

Acer dasycarpum Ehrh.
Acer saccharinum L. var. *laciniatum* Pax
Acer saccharinum L. var. *wieri* Rehder
Argentacer saccharinum (L.) Small

**Aesculus* [HC2]
horse chestnut

**Aesculus hippocastanum* L. [HC2, Stace 1997]
Sp. Pl. 1: 344. 1753.
horse-chestnut

Sarcobataceae [HC2, IMF2A] Greasewood Family

Molecular evidence indicates that Sarcobatus is more closely related to Nyctaginaceae and Phytolaccaceae than to Amaranthaceae (which includes Chenopodiaceae in our taxonomy).

Sarcobatus [FNA4, HC, HC2]
Reise Nord-Amer. 1: 510. 1839.
greasewood

Sarcobatus vermiculatus (Hook.) Torr. [FNA4, HC, HC2]
Not. Milit. Reconn. 149. 1848.
greasewood

Batis vermiculata Hook.
Fremontia vermiculata (Hook.) Torr.
Sarcobatus maximilianii Nees

FNA4: "Reports of Sarcobatus vermiculatus from British Columbia and Texas have not been verified by us. One of the most common of western North American shrubs in alkaline habitats, S. vermiculatus grows among other shrubs or in pure stands, often to great extent, especially in the Great Basin. It is frequently codominant with Allenrolfea in areas that support little else. Other, less alkali-tolerant associates may include species of Artemisia (even A. tridentata), Atriplex, Chrysothamnus, Grayia, Krascheninnikovia, Larrea, and Suaeda. Sarcobatus vermiculatus ranks among the important western browse plants, but it has a dark side. Range animals and wildlife feed on it; the plant's saline taste perhaps enhances its palatability. Under certain conditions, poisoning of animals, especially sheep, may result from the plant's content of sodium and potassium oxalates (10-22% of plant dry weight). Death may occur when sheep eat large amounts of S. vermiculatus---and little or nothing else---in a short time. A notable mass poisoning of sheep occurred in 1920 when 1700 ewes in transit were unloaded and allowed to browse in a pure stand of S. vermiculatus. The next morning 1000 were dead (J. M. Kingsbury 1964). Sarcobatus vermiculatus is allegedly a phreatophyte; its taproots are said to be able to penetrate as much as 57 feet below the surface. Large communities of greasewood coincide with areas where the water table is less than 15 feet below the surface, although the plant can survive with water table depth to 25 feet (H. N. Mozingo 1987)."

Sarraceniaceae [FNA8, HC, HC2] Pitcherplant Family

FNA8: "The North American pitcher plants are a fascinating group of carnivorous plants with leaves modified into tubular pitfall traps that attract, catch, and digest small invertebrate prey. The pitchers have no moving parts but contain downward-pointing hairs on the interior surfaces. The hoods keep out rainwater and prevent flying prey from escaping; only Sarracenia purpurea and S. rosea normally contain rainwater inside the pitchers. Darlingtoniacalifornica is found scattered in the Pacific Northwest (California and Oregon). Sarracenia occurs mainly in the southeastern United States, with one species (S. purpurea) occurring northward and westward across Canada to British Columbia, and naturalized in Switzerland, the British Isles, and Japan. Heliamphora Bentham, a tropical genus with about 15 species, is endemic to the Guayana Highlands of northern Brazil, western Guyana, and southern Venezuela. All species are characteristic of moist-to-wet, open, sunny, low-nutrient, acidic habitats. The evolutionary origins and relationships of the Sarraceniaceae are obscure, and there is only one (highly questionable) fossil record (Li H. Q. 2005). Molecular data suggest Ericalean affinities (R. J. Bayer et al. 1996). Some authors have suggested that Heliamphora is primitive in the family (B. Maguire 1978) because its pitcher structure is less complex. All three genera have specializations, and their pitcher morphologies are likely affected by adaptations to their wet environments and carnivorous habits. Because we cannot reliably ascertain which taxa are primitive in this family, the genera and species are presented in alphabetic order."

*_Darlingtonia_ [FNA8, HC, HC2]

Smithsonian Contr. Knowl. 6(4): 4, plate 12. 1853.

cobra-plant, California pitcher-plant

*_Darlingtonia californica_ Torr. [FNA8, HC, HC2]

Smithsonian Contr. Knowl. 6(4): 5, plate 12. 1853.

cobraplant

FNA8: "Within California, Darlingtonia californica is disjunct from Del Norte County in the northwest to Nevada County southeasterly in the Sierra Nevada, and introduced in Humboldt and Mendocino counties. In Oregon, it occurs in the coastal lowlands and inland mountains of Curry and Josephine counties northward to Tillamook County. It is introduced on Vancouver Island in British Columbia, and in southern Washington. It may form relatively large stoloniferous colonies on mountain slopes or meadows and in coastal lowlands, or in shallow streams and seepage bogs. The flowers are initiated in the fall and overwinter in the bud stage, protected by the bracts. The fruits mature in late summer to fall, with seed dispersal continuing throughout the winter. The long papillae on the seeds allow flotation. Darlingtonia californica is stunning in the wild, eagerly sought for cultivation, and difficult to grow outside its cool native range. It was discovered in 1841 on the Wilkes Expedition by the assistant botanist, W. D. Brackenridge, growing in a marsh bordering a tributary on the Sacramento River south of Shasta Peak. It is currently threatened by road building, draining, logging, ranching, drought, and unscrupulous collectors. Darlingtonia and some eastern American species of carnivorous plants have been transplanted into sites in northern California and the Pacific Northwest."

*_Sarracenia_ [FNA8, HC, HC2]

Sp. Pl. 1: 510. 1753; Gen. Pl. ed. 5, 226. 1754.

pitcher-plant

*_Sarracenia flava_ L. [FNA8, HC2]

Sp. Pl. 1: 510. 1753.

yellow pitcher plant, yellow trumpet

FNA8: "Sarracenia flava ranges from the southeastern coastal plain of Virginia and isolated piedmont localities in North Carolina through the coastal plain of North Carolina, South Carolina, Georgia, and the western Florida panhandle mostly near and west of the Ochlockonee River and west just into southeastern Alabama, with isolated sites in northeastern Florida. It is naturalized in Skagit County, Washington. Sarracenia flava is a striking plant, often forming large stands, at least historically. It is much less common with the advent of drainage and changing land use. It has one main flush of pitchers in spring to early summer. It is quite variable over its range with regard to vein patterns and markings on the pitchers, and at least seven varieties have been formally named (see D. E. Schnell 2002)."

*_Sarracenia leucophylla_ Raf. [FNA8, HC2]

Fl. Ludov. 14. 1817.

white-topped pitcher plant

FNA8: "Sarracenia leucophylla occurs on the coastal plain of the Florida panhandle west of the Ochlockonee River, and across southern Alabama to southeastern Mississippi; it is rare in southwestern Georgia, introduced and established in southeastern Virginia, and a rare escape in Skagit County, Washington. Sarracenia leucophylla is a striking plant, noticeable from a distance, and capable of forming extensive, nearly solid stands in open, wet meadows and seepage slopes and pine flatwoods across the Gulf Coast region. The number of populations has been severely reduced by development and fire suppression. Its spring pitchers are not as robust or profuse as the late-summer pitchers, the latter especially attracting moths. This species responds well to winter fires, resulting in abundant growth later that spring. In some managed areas, the attractive tubes are judiciously harvested and sold, fresh or dried, as "cut flowers" in florist shops. Pure white pitchers (no colored veins) with red petals or totally anthocyanin-free individuals with yellow petals occur. Capsules of Sarracenia leucophylla dehisce acropetally rather than basipetally as in all other species in the family. G. W. Folkerts and D. R. Folkerts (1989) hypothesized that this adaptation allows seeds to be released with less likelihood of being caught and held by the persistent style discs."

*_Sarracenia purpurea_ L. [FNA8, HC2]

Sp. Pl. 1: 510. 1753.

*ssp. _purpurea_ [FNA8, HC2]

Sp. Pl. 1: 510. 1753.
northern pitcher plant, purple pitcher plant

Sarracenia purpurea L. ssp. *gibbosa* (Raf.) Wherry
Sarracenia purpurea L. var. *ripicola* B. Boivin
Sarracenia purpurea L. var. *stolonifera* Macfarl. & Steckbeck
Sarracenia purpurea L. var. *terrae-novae* LaPylaie

FNA8: "Subspecies purpurea is introduced in California and Washington, in Europe in the British Isles and Switzerland, and in Japan. It is widespread and variable, and its adaptability is evidenced by the kinds of wetland habitats in which it grows. It is widely grown for ornament and teaching purposes and is the subject of much research on microorganisms and invertebrates, especially Wyeomyia Theobald mosquito larvae that live in the pitcher fluid."

Saxifragaceae [FNA8, HC, HC2] Saxifrage Family

FNA8: "Classification of Saxifragaceae has been varied and controversial (e.g., A. Cronquist 1981; H. G. A. Engler 1930; J. Hutchinson 1973; G. K. W. Schulze-Menz 1964b; A. L. Takhtajan 1997; R. F. Thorne 1992). Molecular phylogenetic data (D. R. Morgan and D. E. Soltis 1993; Soltis et al. 1993, 2001; Angiosperm Phylogeny Group 1998, 2003) reveal that genera of Saxifragaceae in the broad sense are allied with at least ten separate, often distantly related families of flowering plants. These data also suggest that Saxifragaceae in the narrow sense as treated here consists of about 38 genera worldwide, equivalent to subfamily Saxifragoideae, one of the 15 subfamilies recognized by Engler and one of the 17 recognized by Schulze-Menz of the broadly defined Saxifragaceae. Molecular phylogenetic data (Soltis et al. 2001) show that the narrowly defined Saxifragaceae fall into two major groups: Saxifraga, and the heucheroid clade encompassing all other genera. Molecular data further show that Saxifraga, as traditionally understood, is polyphyletic, comprising two distinct lineages (treated here as Saxifraga and Micranthes) and the monospecific North American Cascadia. The major split between Saxifraga and the heucheroid clade is supported not only by molecular data from six DNA regions but by differences in patterns of floral morphology. Saxifraga has a relatively uniform floral morphology (radially symmetric flowers, with bilateral symmetry restricted to one Asian group of species, which consistently have the same number of sepals, petals, stamens, and carpels). Almost all of the variation in the family in numbers of sepals, petals, stamens, and carpels occurs in the heucheroid clade. Radially symmetric flowers predominate there, but some bilateral flowers are found in Bensoniella, Micranthes, Tolmiea, and some species of Heuchera." NOTE: Past and contemporary research have indicated that Mitella is a polyphyletic group best treated as multiple genera. The treatment here reflects that view, which is also consistent with how these taxa were treated by Abrams in "Illustrated Flora of the Pacific States". FNA8: "Mitella is treated here in the broad sense; phylogenetic data indicate that it is polyphyletic (D. E. Soltis et al. 1990; Soltis and R. K. Kuzoff 1995). Historically, four or five genera have been recognized (including Mitella, Ozomelis Rafinesque, Pectiantia Rafinesque). Formal restructuring of generic boundaries is complicated by the presence of nearly a dozen Asian species (M. Wakabayashi 2001) and lack of a comprehensive understanding of the genus relative to the rest of Saxifragaceae. Mitella nuda and M. diphylla, both with ten stamens, form a clade that would comprise a narrowly defined Mitella. A second clade composed of M. diversifolia, M. stauropetala, M. trifida, and Conimitella williamsii would form a second, distinct genus. Molecular data suggest that M. breweri, M. caulescens, and M. pentandra also form a distinct clade and perhaps a third, distinct genus. The relationships of M. ovalis are less certain; some analyses suggest that it may be sister to the genus Tolmiea (Soltis and Kuzoff; Kuzoff and Soltis, unpubl.)."

Bolandra [FNA8, HC, HC2]

Proc. Amer. Acad. Arts. 7: 341. 1868.
bolandra

Bolandra oregana S. Watson [FNA8, HC, HC2]

Proc. Amer. Acad. Arts. 14: 292. 1879.
northern false coolwort

Bolandra oregana S. Watson var. *imnahaensis* (M. Peck) M. Peck

FNA8: "Bolandra oregana is found in northern Oregon and southern Washington in the vicinity of the Columbia River gorge and in the Snake River region of eastern Oregon and Idaho."

Boykinia [FNA8, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 7: 113. 1834.
boykinia

Boykinia intermedia (Piper) G.N. Jones [FNA8, HC2]
Bot. Surv. Olympic Penins. 168. 1936.
greater boykinia, Sierran brookfoam

Boykinia major A. Gray [FNA8, HC, HC2], misapplied
Boykinia major A. Gray var. *intermedia* Piper [HC]

FNA8: "Specimens considered to represent Boykinia intermedia from northern Idaho (R. Bacigalupi 1952; F. D. Johnson and R. Steele 1978) were regarded as B. major by R. J. Gornall and B. A. Bohm (1985); they require further study. Boykinia intermedia differs from that species in its stoloniferous habit, smaller stipules, a campanulate rather than saucer-shaped hypanthium, a shorter free-hypanthium, petals tapered rather than contracted abruptly to a claw and with plane rather than undulate margins, a more pyramidal inflorescence, and an absence of polymethylated flavonols."

Boykinia occidentalis Torr. & A. Gray [FNA8, HC2]
Fl. N. Amer. 1: 577. 1840.
coastal brookfoam

Boykinia cincinnata (Rosend. & Rydb.) Fedde
Boykinia elata (Nutt.) Greene [HC]
Boykinia vancouverensis (Rydb.) Fedde
Therofon cincinnatum Rosend. & Rydb.

FNA8: "The nomenclature of Boykinia occidentalis has been reviewed by R. J. Gornall and B. A. Bohm (1985). It is a polymorphic species but is not as variable as the extensive synonymy might suggest. Taxa have been described on the basis of variation in inflorescence shape, pubescence, stem color, and sepal orientation. It has been shown that these characters are subject to phenotypic plasticity or developmental age and, as such, provide no grounds for dividing the species (Gornall and Bohm). It is sometimes grown in gardens."

Brewerimitella
Taxon 70(2): 263?285. 2021.
bishop's-cap

Brewerimitella breweri (A.Gray) R.A.Folk & Y.Okuyama
Taxon 70(2): 263?285. 2021.
feathery bishop's-cap, Brewer's mitrewort

Mitella breweri A. Gray [FNA8, HC]
Pectiantia breweri (A. Gray) Rydb. [HC2, JPM2]

Brewerimitella ovalis (Greene) R.A.Folk & Y.Okuyama
Taxon 70(2): 263?285. 2021.
coastal bishop's-cap, coastal mitrewort

Mitella ovalis Greene [FNA8, HC]
Pectiantia ovalis (Greene) Rydb. [HC2, JPM2]

Cascadia [FNA8, HC2]
Amer. J. Bot. 14: 38, figs. 1, 2. 1927.

Cascadia nuttallii (Small) A.M. Johnson [FNA8, HC2]
Corr. Status Saxifraga nuttallii [textus s.n.]. 1927.
Nuttall's saxifrage

Saxifraga nuttallii Small [HC]

FNA8: "Johnson placed Saxifraga nuttallii in his monotypic genus Cascadia based on the unusual habit, free carpels, and spiny seeds. Molecular phylogenetic data (M. E. Mort and D. E. Soltis 1999; Soltis et al. 2001) placed Cascadia as sister to the southern South American (Tierra del Fuego) Saxifragodes D. M. Moore, both sister to Micranthes. Mort and Soltis considered the ovary of Cascadia to be superior because the two carpels are distinct to their bases; the hypanthium, fused to each carpel, gives the ovaries a

semi-inferior appearance. Ovules in Cascadia are bitegmic, as in Saxifraga; those of Micranthes are usually unitegmic. Cascadia nuttallii is found from the coastal mountains to the western slopes of the Cascade Range, from extreme northwestern California to southwestern Washington. The accepted species name was validated in a correction slip attached to reprints of Johnson\'s article describing Cascadia."

Chrysosplenium [FNA8, HC, HC2]
Sp. Pl. 1: 398. 1753; Gen. Pl. ed. 5, 189. 1754.
golden-carpet, golden-saxifrage, water-carpet

Chrysosplenium glechomifolium Nutt. [FNA8, HC2]
Fl. N. Amer. 1: 589. 1840.
Pacific golden-saxifrage, Pacific watercarpet

Chrysosplenium glechomaefolium Nutt. [HC], orthographic variant
Chrysosplenium oppositifolium L. var. *scouleri* Hook.
Chrysosplenium scouleri (Hook.) Rose

Chrysosplenium tetrandrum Th. Fr. [FNA8, HC, HC2]
Bot. Not. 1858: 193. 1859.
northern golden-saxifrage

Chrysosplenium alternifolium L. ssp. *tetrandrum* (Th. Fr.) Hultén
Chrysosplenium alternifolium L. var. *tetrandrum* (Th. Fr.) N. Lund ex Malmgren

FNA8: "As treated here, Chrysosplenium tetrandrum is circumpolar. In North America, disjunct populations occur in subalpine and alpine habitats in the Bitterroot Range of Idaho and Montana, and in the Front Range of Colorado. Some specimens from northern Europe and the Russian Far East that have been referred to C. alternifolium appear to be morphologically indistinguishable from C. tetrandrum."

Elmera [FNA8, HC, HC2]
N. Amer. Fl. 22: 97. 1905.
elmera

Elmera racemosa (S. Watson) Rydb. [FNA8, HC, HC2]
N. Amer. Fl. 22: 97. 1905.
Elmera

Heuchera racemosa S. Watson

FNA8: "Elmera racemosa is found at and above timberline in the Cascades of southwestern British Columbia, in the Okanogan and Cascade ranges, on the Olympic Peninsula, Mount Rainier, and Mount Adams in Washington, and in the Oregon Cascades south to northern Klamath County and adjacent Douglas County. It is occasionally cultivated." Hitchcock recognized two varieties based on the nature of the glandular pubescence in the inflorescence, petioles, and lower stems. Close examination of specimens assigned to these varieties shows the primary difference to be one of length and density of pubescence. Glandular pubescence in var. racemosa is longer and tends to often be broader at the base.

var. *puberulenta* C.L. Hitchc. [HC, HC2]
fuzzy elmera

var. *racemosa* [HC, HC2]
In N. L. Britton et al., N. Amer. Fl. 22: 97. 1905.
common elmera

Hemieva [HC2]

Hemieva ranunculifolia (Hook.) Raf. [HC2, JPM2]
Flora Telluriana 2: 70. [1837] 1836.
buttercup-leaf mock brookfoam

Boykinia ranunculifolia (Hook.) A. Gray
Saxifraga ranunculifolia Hook.
Suksdorfia ranunculifolia (Hook.) Engl. [FNA8, HC]

FNA8: "Suksdorfia ranunculifolia is found in the Cascade, Rocky, and Siskiyou mountains of the Pacific Northwest, near sea level in coastal British Columbia, and on Vancouver Island." "Suksdorfia has been

split into three monospecific genera by different authors. The work of R. J. Gornall and B. A. Bohm (1980, 1984, 1985) emphasized the similarities of the species in supporting a single genus concept. More recent, molecular data (D. E. Soltis et al. 1993; L. A. Johnson and Soltis 1994) suggest that S. violacea is more closely related to species of Bolandra, that S. ranunculifolia is more closely related to species of Boykinia, and that the two North American species indeed should be placed into monospecific genera. The South American species is S. alchemilloides (Grisebach) Engler of northern Argentina and Bolivia."

Heuchera [FNA8, HC, HC2]

Sp. Pl. 1: 226. 1753; Gen. Pl. ed. 5, 106. 1754.
alumroot, heuchera

Heuchera chlorantha Piper [FNA8, HC, HC2]

Contr. U.S. Natl. Herb. 16: 206. 1913.
green-flowered alumroot, meadow alumroot, tall alumroot

FNA8: "Heuchera chlorantha occurs in the Pacific Northwest north to the Queen Charlotte Islands of British Columbia. Inland, it occurs from the eastern base of the Cascade Mountains westward in Oregon and Washington. A putative hybrid between H. chlorantha and H. micrantha var. diversifolia, named H. ×easthamii Calder & Savile, has been reported in the Hazelton region of British Columbia. The leaf form and capsule size are intermediate between those of the two parents, both of which occur in the region."

Heuchera cylindrica Douglas [FNA8, HC, HC2]

Fl. Bor.-Amer. 1: 236. 1832.
lava alumroot, poker alumroot, roundleaf alumroot

Heuchera cylindrica Douglas var. *alpina* S. Watson [HC]
Heuchera cylindrica Douglas var. *cylindrica* [HC]
Heuchera cylindrica Douglas var. *glabella* (Torr. & A. Gray) Wheelock [HC]
Heuchera cylindrica Douglas var. *orbicularis* (Rosend., Butters & Lakela) Calder & Savile [KZ99]
Heuchera cylindrica Douglas var. *ovalifolia* (Torr. & A. Gray) Wheelock
Heuchera cylindrica Douglas var. *septentrionalis* Rosend., Butters & Lakela [KZ99]
Heuchera cylindrica Douglas var. *suksdorfii* (Rydb.) Dorn
Heuchera glabella Torr. & A. Gray
Heuchera ovalifolia Torr. & A. Gray
Heuchera ovalifolia Torr. & A. Gray var. *orbicularis* Rosend., Butters & Lakela
Heuchera ovalifolia Torr. & A. Gray var. *thompsonii* Rosend., Butters & Lakela
Heuchera saxicola E.E. Nelson
Heuchera suksdorfii Rydb.

FNA8: "Some features of Heuchera cylindrica show great variation, including the type and amount of indument on the leaves, petioles, and stems, lobation and shape of leaf base, difference in flower size, complicated by rapid growth of the hypanthium during and after anthesis, change in filament-to-anther ratio before and after anthesis, relative degree of development of bracts of flowering stems, degree of disc development, and relative length and degree of divergence of the beaklike styles of the fruit. We agree with P. K. Holmgren and N. H. Holmgren (1997) that there is no value in recognizing infraspecific taxa in H. cylindrica until a more thorough phylogenetic study can show some correlation between morphological variation and infraspecific categories. The Blackfoot Indians used decoctions of roots of Heuchera cylindrica for diarrhea and as an astringent. The Flathead infused or chewed roots for diarrhea and stomach cramps. The Kutenai used decoctions of roots for "aching bones" and tuberculosis. The Okanagan-Colville used decoctions of roots as a tonic for the "changing of the blood" and, especially for children and babies, to rinse out the mouth for sore throats. They applied a poultice of mashed, peeled roots to sores and cuts, and mixed roots with puffball spores as a salve for diaper rash. The Shuswap Indians took decoctions of leaves and roots for diarrhea. The Thompson Indians applied chewed leaves and roots on sores or wounds and drank an infusion of roots for liver trouble (D. E. Moerman 1998)."

Heuchera glabra Willd. ex Roem. & Schult. [FNA8, HC, HC2]

Syst. Veg. 6: 216. 1820.
alpine alumroot, smooth alumroot

FNA8: "euchera glabra occurs from near sea level in the Aleutian Islands and the Panhandle in Alaska to above the tree line on Mount Hood, Oregon, in the Cascades, Olympic Mountains, and Wenatchee Mountains in Washington, and in the Coast Mountains to the Selkirks Range in British Columbia. It

intergrades with H. micrantha where their ranges overlap in British Columbia, and where the two species probably hybridize. It tends to occur at higher elevations than does H. micrantha. The Tlingit used this species to treat inflammation of the testicles from syphilis (D. E. Moerman 1998)."

Heuchera grossulariifolia Rydb. [FNA8, HC, HC2]
Mem. New York Bot. Gard. 1: 196. 1900.
gooseberry-leaved alumroot

FNA8: "Heuchera grossulariifolia includes both diploids and autotetraploids. K. A. Segraves and J. N. Thompson (1999) analyzed floral traits and flowering phenology in diploid and autotetraploid plants. Overall, plant size was greater in tetraploids than in diploids; flowers of tetraploids were larger (average hypanthium 6.5 mm) than those of diploids (average hypanthium 5.5 mm) and had a slightly different shape and phenology, but the diploids and tetraploids were not assigned taxonomic status in their study. Diploids and tetraploids were mixed in some populations, where characters intergraded (D. E. Soltis, pers. comm.). The autotetraploids have had two to seven independent origins from diploid progenitors, and do not represent a monophyletic lineage (Segraves and Thompson; Segraves et al. 1999)."

var. *grossulariifolia* [HC, HC2]
gooseberry-leaved alumroot

var. *tenuifolia* (Wheelock) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacif. N. W. [C.L. Hitchcock & al.] 3: 13. 1961.
gooseberry-leaved alumroot

Heuchera tenuifolia (Wheelock) Rydb.

Heuchera micrantha Douglas ex Lindl. [FNA8, HC, HC2]
Edwards?s Bot. Reg. 15: plate 1302. 1830.
crevice alumroot, small-flowered alumroot

var. *diversifolia* (Rydb.) Rosend., Butters & Lakela [FNA8, HC, HC2]
Minnesota Stud. Pl. Sci. 2: 42. 1936.
small-flowered alumroot

Heuchera diversifolia Rydb.
Heuchera micrantha Douglas ex Lindl. var. *pacifica* Rosend., Butters & Lakela

FNA8: "Variety diversifolia occurs in the Coast Ranges, Cascade Range, and Klamath and Santa Lucia mountains."

var. *hartwegii* (S. Watson ex Wheelock) Rosend. [FNA8, HC2]
Bot. Jahrb. Syst. 37(2, Beibl. 83): 77. 1905.
Hartweg's small-flowered alumroot

Heuchera hartwegii (S. Watson ex Wheelock) Rydb.
Heuchera pilosissima Fisch. & C.A. Mey. var. *hartwegii* S. Watson ex Wheelock

FNA8: "Variety hartwegii occurs in the Coast Ranges."

var. *micrantha* [FNA8, HC, HC2]
Edwards\'s Bot. Reg. 15: plate 1302. 1830.
small-flowered alumroot

FNA8: "Variety micrantha occurs in the Coast Range, Cascade Range, Blue and Klamath mountains, northern Sierra Nevada, and the Columbia River gorge, and on wooded banks of the Columbia and its tributaries."

Leptarrhena [FNA8, HC, HC2]
Chlor. Melvill. 15. 1823.
false saxifrage, leatherleaf saxifrage

Leptarrhena pyrolifolia (D. Don) R. Br. ex Ser. [FNA8, HC, HC2]
Prodr. 4: 48. 1830.
leatherleaf saxifrage

Lepuropetalon amplexifolium (Sternb.) Ser.
Saxifraga amplexifolia Sternb.

Saxifraga pyrolifolia D. Don

FNA8: "The Aleuts of Alaska use an infusion of Leptarrhena pyrolifolia leaves to treat influenza, and the Thompson Indians of British Columbia apply a poultice of chewed leaves to wounds (D. E. Moerman 1998)."

Lithophragma [FNA8, HC, HC2]
Fl. N. Amer. 1: 583. 1840.
fringecup, lithophragma, prairiestar, woodlandstar

Lithophragma glabrum Nutt. [FNA8, HC2]
Fl. N. Amer. 1: 584. 1840.
bulbiferous prairie star, bulbous woodland star

Lithophragma bulbifera Rydb. [HC]
Lithophragma glabra Nutt. [HC], orthographic variant
Lithophragma glabrum Nutt. var. *bulbiferum* (Rydb.) Jeps.
Lithophragma glabrum Nutt. var. *ramulosum* (Suksd.) B. Boivin
Lithophragma tenellum Nutt. var. *floridum* Suksd.
Tellima bulbifera (Rydb.) Fedde
Tellima glabra (Nutt.) Steud.

FNA8: "The presence or absence of bulbils is the only feature distinguishing Lithophragma glabrum and L. bulbiferum; for this reason L. bulbiferum is not recog-nized in this treatment. Bulbil production is extremely variable within the same clone in L. heterophyllum (R. L. Taylor 1965)."

Lithophragma parviflorum (Hook.) Nutt. [FNA8, HC2]
Fl. N. Amer. 1: 584. 1840.
small-flower prairie star, small-flower woodland star

Lithophragma parviflora (Hook.) Nutt. [HC], orthographic variant
Lithophragma parviflorum (Hook.) Nutt. var. *parviflorum* [KZ99]
Tellima parviflora Hook.

FNA8: "Lithophragma parviflorum is easily identified throughout its range, although morphological variation is apparent when comparing specimens from different habitats and elevations in western North America. Some authors treat L. trifoliatum as a variety of L. parviflorum."

Lithophragma tenellum Nutt. [FNA8, HC2]
Fl. N. Amer. 1: 584. 1840.
slender prairie star, slender woodland star

Lithophragma australe Rydb.
Lithophragma brevilobum Rydb.
Lithophragma rupicola Greene
Lithophragma tenella Nutt. [HC], orthographic variant
Lithophragma tenella Nutt. var. *tenella* [HC], orthographic variant
Lithophragma tenella Nutt. var. *thompsonii* (Hoover) Hitchc. [HC]
Lithophragma tenellum Nutt. var. *thompsonii* (Hoover) C.L. Hitchc.
Lithophragma thompsonii Hoover
Tellima tenella (Nutt.) Steud.

FNA8: "Lithophragma tenellum usually occurs on the eastern side of the Cascade Mountains and in the Rocky Mountains, Nevada, and Utah into western North America. Taxonomy of Lithophragma tenellum is poorly understood because there are few collections from widely divergent geographical areas. The northwestern population (Washington, British Columbia) has been separated as a distinct species (L. thompsonii) based on the extent of the basal leaf lobation, which often shows considerable variation in all species. However, other populations in the Rocky Mountains, Nevada, and Utah have been observed with this lobation, as has Washington-British Columbia material having the more typical leaf form."

Micranthes [FNA8, HC2]
Syn. Pl. Succ. 320. 1812.
saxifrage

Micranthes apetala (Piper) Small [FNA8, HC2]
N. Amer. Fl. 22: 135. 1905.
Tiny swamp saxifrage, western swamp saxifrage

Saxifraga apetala Piper [KZ99]
Saxifraga columbiana Piper var. *apetala* (Piper) Engl. & Irmsch.
Saxifraga integrifolia Hook. var. *apetala* (Piper) M.E. Jones [HC]

Micranthes ferruginea (Graham) Brouillet & Gornall [FNA8, HC2]
J. Bot. Res. Inst. Texas. 1: 1020. 2007.
rusty saxifrage

Saxifraga ferruginea Graham [HC]
Saxifraga ferruginea Graham var. *ferruginea* [HC]
Saxifraga ferruginea Graham var. *foliacea* A.M. Johnson
Saxifraga ferruginea Graham var. *macounii* Engl. & Irmscher [HC]
Saxifraga ferruginea Graham var. *vreelandii* (Small) Engl. & Irmscher [KZ99]
Saxifraga vreelandii (Small) Fedde ex Just

FNA8: "Plants with bulbils replacing flowers are more common in the southern part (southern Alberta and British Columbia southwards) of the range of Micranthes ferruginea and have been called Saxifraga ferruginea var. macounii."

Micranthes fragosa (Suksd. ex Small) Small [FNA8, HC2]
N. Amer. Fl. 22: 137. 1905.
Clayton's saxifrage

Saxifraga claytoniifolia Canby ex Small
Saxifraga fragosa Suksd. ex Small
Saxifraga fragosa Suksd. ex Small ssp. *claytoniifolia* (Canby ex Small) Bacig.
Saxifraga integrifolia Hook. var. *claytoniaefolia* (Canby) Rosend. [HC]
Saxifraga nidifica Greene var. *claytoniifolia* (Canby ex Small) Elvander [KZ99]

FNA8: "Micranthes fragosa is restored to specific status here because a review of its differences with M. nidifica shows it to be more distinctive than previously thought, and for consistency in the application of criteria for species recognition within the rest of the genus. In the southernmost part of its range, M. fragosa converges in appearance with M. californica."

Micranthes gormanii (Suksd.) Brouillet & Gornall [FNA8, HC2]
J. Bot. Res. Inst. Texas. 1: 1020. 2007.
Gorman's saxifrage

Saxifraga gormanii Suksd.
Saxifraga occidentalis S. Watson var. *dentata* (Engl. & Irmscher) C.L. Hitchc. [HC]

Micranthes idahoensis (Piper) Brouillet & Gornall [FNA8, HC2]
J. Bot. Res. Inst. Texas. 1: 1020. 2007.
Idaho saxifrage

Saxifraga idahoensis Piper
Saxifraga marshallii Greene ssp. *idahoensis* (Piper) D.L. Krause & Beamish
Saxifraga marshallii Greene var. *idahoensis* (Piper) Engl. & Irmscher
Saxifraga occidentalis S. Watson var. *idahoensis* (Piper) C.L. Hitchc. [HC]

FNA8: "Micranthes idahoensis appears to hybridize with M. occidentalis where their ranges overlap. Intermediates are abundant in some populations along the Idaho-Montana border and in Montana. This phenomenon may explain the range of filament shapes found in M. occidentalis, from flattened to sightly club-shaped. The issue of the status of M. idahoensis with respect to M. marshallii (D. L. Krause and K. I. Beamish 1972) is best deferred until a thorough study of the whole complex over its entire range is done."

Micranthes integrifolia (Hook.) Small [FNA8, HC2]
N. Amer. Fl. 22: 137. 1905.
Columbian saxifrage, swamp saxifrage, whole-leaf saxifrage
(see also *Micranthes apetala*, *Micranthes fragosa*, *Micranthes nidifica*)

Saxifraga integrifolia Hook. [HC]

Saxifraga integrifolia Hook. var. *integrifolia* [HC]
Saxifraga laevicarpa A.M. Johnson

FNA8: "The occasional occurrence of sterile pollen has been noted in this as well as in other species of Micranthes (as Saxifraga, K. I. Beamish 1961). Some populations exhibit gynodioecism (P. E. Elvander 1982)."

Micranthes lyallii (Engl.) Small [FNA8, HC2]
N. Amer. Fl. 22: 143. 1905.
Lyall's saxifrage, red-stemmed saxifrage

Saxifraga lyallii Engl. [HC]
Saxifraga lyallii Engl. ssp. *hultenii* (Calder & Savile) Calder & Savile [KZ99]
Saxifraga lyallii Engl. ssp. *lyallii* [KZ99]
Saxifraga lyallii Engl. var. *hultenii* Calder & Savile
Saxifraga lyallii Engl. var. *laxa* Engl.

FNA8: "Although they have nearly disjunct sets of populations, the subspecies of Micranthes lyallii are difficult to distinguish from each other. The more northern plants tend to be larger with wider leaves and often have been called Saxifragalyallii subsp. or var. hultenii. Apparent hybrids with M. odontoloma occur in Alberta, British Columbia, and northern Idaho, and near Glacier National Park, Montana."

Micranthes nelsoniana (D. Don) Small [FNA8, HC2]
N. Amer. Fl. 22: 147. 1905.
dotted saxifrage

Saxifraga punctata L. [HC]

var. *cascadensis* (Calder & Savile) Gornall & H. Ohba [FNA8, HC2]
J. Bot. Res. Inst. Texas. 1: 1020. 2007.
Cascades dotted saxifrage, Nelson's saxifrage

Saxifraga nelsoniana D. Don ssp. *cascadensis* (Calder & Savile) Hultén
Saxifraga punctata L. ssp. *cascadensis* Calder & Savile
Saxifraga punctata L. var. *cascadensis* (Calder & Savile) C.L. Hitchc. [HC]

FNA8:"Variety cascadensis has sometimes been confused with Micranthes odontoloma, probably because the petal spots of var. cascadensis fade on herbarium specimens. The more deeply toothed leaves, the compactness of the inflorescence, and the tangled inflorescence hairs clearly distinguish it from M. odontoloma. This variety is present in the Coast and Cascade ranges."

Micranthes nidifica (Greene) Small [FNA8, HC2]
N. Amer. Fl. 22: 134. 1905.
Columbia saxifrage, swamp saxifrage

Micranthes plantaginea (Small) Small
Saxifraga columbiana Piper
Saxifraga integrifolia Hook. var. *columbiana* (Piper) C.L. Hitchc. [HC]
Saxifraga integrifolia Hook. var. *leptopetala* (Suksd.) Engl. & Irmscher [HC]
Saxifraga montana (Small) Fedde
Saxifraga nidifica Greene [KZ99]
Saxifraga plantaginea Small

FNA8: "Micranthes nidifica is polymorphic and merges to some extent with M. fragosa in limited areas of southern Washington and northern Oregon."

Micranthes occidentalis (S. Watson) Small [FNA8, HC2]
N. Amer. Fl. 22: 144. 1905.
mountain saxifrage, redwool saxifrage, western saxifrage
(see also *Micranthes gormanii*, *Micranthes idahoensis*, *Micranthes rufidula*)

Micranthes lata Small
Micranthes saximontana (E.E. Nelson) Small
Saxifraga occidentalis S. Watson [HC]
Saxifraga occidentalis S. Watson var. *allenii* (Small) C.L. Hitchc. [HC]
Saxifraga occidentalis S. Watson var. *occidentalis* [HC]

Saxifraga occidentalis S. Watson var. *wallowensis* M. Peck
Saxifraga reflexa Hook. ssp. *occidentalis* (S. Watson) Hultén

FNA8: "Micranthes occidentalis appears closely related to the little-known M. mexicana (Engler & Irmscher) Brouillet & Gornall from Chihuahua, Mexico. The latter is the only species of the genus that occurs in Mexico and not in the United States. Micranthes occidentalis is disjunct between the northern Rocky Mountains and the Cypress Hills of southeastern Alberta and southwestern Saskatchewan, and the Black Hills of South Dakota. It hybridizes with M. idahoensis where their ranges overlap."

Micranthes odontoloma (Piper) A. Heller [FNA8, HC2]
Muhlenbergia. 8: 60. 1912.
brook saxifrage, streambank saxifrage

Saxifraga arguta D. Don [HC]
Saxifraga odontoloma Piper [VPBC3, KZ99]
Saxifraga punctata L. ssp. *arguta* (D. Don) Hultén
Saxifraga punctata L. var. *arguta* (D. Don) Engl. & Irmsch.

Micranthes oregana (Howell) Small [FNA8, HC2]
N. Amer. Fl. 22: 138. 1905.
bog saxifrage, Oregon saxifrage

Micranthes arnoglossa Small
Micranthes brachypus Small
Saxifraga montanensis Small
Saxifraga oregana Howell [HC]
Saxifraga oregana Howell var. *montanensis* (Small) C.L. Hitchc. [HC]
Saxifraga oregana Howell var. *oregana* [HC]
Saxifraga oregana Howell var. *sierrae* (Coville) Engl. & Irmsch.

FNA8: "In both habitat and morphology, Micranthes oregana is similar to M. pensylvanica. A thorough investigation of the two species, especially the populations in Colorado that are disjunct from those in Montana, is needed to clarify relationships. The name Saxifraga integrifolia was misapplied to M. oregana by early California authors."

Micranthes rufidula Small [FNA8, HC2]
N. Amer. Fl. 22: 140. 1905.
rusty-hair saxifrage

Saxifraga aequidentata (Small) Rosend.
Saxifraga klickitatensis A.M. Johnson
Saxifraga occidentalis S. Watson ssp. *rufidula* (Small) Bacig.
Saxifraga occidentalis S. Watson var. *aequidentata* (Small) M. Peck
Saxifraga occidentalis S. Watson var. *rufidula* (Small) C.L. Hitchc. [HC]
Saxifraga rufidula (Small) Fedde [KZ99]
Saxifraga rufidula (Small) J.M. Macoun, invalid name

Micranthes tischii (Skelly) Brouillet & Gornall [FNA8, HC2]
J. Bot. Res. Inst. Texas. 1: 1021. 2007.
Olympic saxifrage

Saxifraga tischii Skelly

FNA8: "Micranthes tischii is known only from the Olympic Peninsula and from inland, mountainous Vancouver Island, British Columbia (Ogilvie & Beguin 798911, V). Closely related to M. rufidula, M. tischii appears to be highly specialized for its habitat. The unusual persistent, green, not clawed (versus deciduous, white, clawed) petals readily distinguish the two species."

Micranthes tolmiei (Torr. & A. Gray) Brouillet & Gornall [FNA8, HC2]
J. Bot. Res. Inst. Texas. 1: 1022. 2007.
alpine saxifrage, Tolmie's alpine saxifrage, Tolmie's saxifrage

Saxifraga tolmiei Torr. & A. Gray [HC]
Saxifraga tolmiei Torr. & A. Gray var. *ledifolia* (Greene) Engl. & Irmscher [HC]
Saxifraga tolmiei Torr. & Gray var. *tolmiei* [HC]

FNA8: Unlike those of most Micranthes species, the leaves of M. tolmiei are proximally cauline and the ovules have two integuments. The seeds have a loose, winglike testa."

Mitella [FNA8, HC, HC2]
Sp. Pl. 1: 406. 1753; Gen. Pl. ed. 5, 190. 1754.
bishops-cap, mitrewort
(see also *Mitellastra*, *Ozomelis*, *Pectiantia*)

Mitella nuda L. [FNA8, HC, HC2]
Sp. Pl. 1: 406. 1753.
bare-stemmed mitrewort

Mitella prostrata Michx.

Mitellastra [HC2]
mitrewort

Mitellastra caulescens (Nutt.) Howell [HC2, JPM2]
leafy mitrewort, star-shaped mitrewort

Mitella caulescens Nutt. [FNA8, HC]

Ozomelis [HC2]
mitrewort, ozomelis

Ozomelis diversifolia (Greene) Rydb. [HC2, JPM2]
angle-leaf bishop's-cap

Mitella diversifolia Greene [FNA8, HC]

Ozomelis stauropetala (Piper) Rydb. [HC2, JPM2]
cross-shaped mitrewort, side-flowered mitrewort

Mitella stauropetala Piper [FNA8, HC]
Mitella stenopetala Piper

FNA8: "Two varieties of Mitella stauropetala have been recognized. Plants from Oregon and Washington have been referred to var. stauropetala, characterized by hypanthium plus sepals often over 3 mm and petal blades with linear lobes. In northern Colorado, southeastern Idaho, eastern Utah, and Wyoming, var. stauropetala is replaced by var. stenopetala, with hypanthium plus sepals rarely over 3 mm and petal blades less deeply trifid (sometimes entire) and with broader lateral lobes. Variety stenopetala is morphologically similar in many respects to M. trifida. Mitella trifida and M. stauropetala require study to determine if plants referred to var. stenopetala are the result of hybridization or integradation between the two species."

Ozomelis trifida (Graham) Rydb. [HC2, JPM2]
, N. Amer. Fl. 22: 95. 1905.
three-toothed mitrewort

Mitella trifida Graham [FNA8, HC]
Mitella trifida Graham var. *trifida* [KZ99]
Mitella trifida Graham var. *violacea* (Rydb.) Rosend. [KZ99]
Mitella violacea Rydb.
Ozomelis anomala (Piper) Rydb.
Ozomelis micrantha (Piper) Rydb.

FNA8: "Mitella trifida varies in flower size, petal-blade lobing, and pubescence. Plants with relatively small flowers and petal blades entire or shallowly trifid and often purplish have been named var. violacea. Plants matching this description occur in British Columbia, Montana, and Washington and appear to represent a minor morphological variant that does not warrant recognition."

Pectiantia [HC2]
mitrewort

Pectiantia pentandra (Hook.) Rydb. [HC2, JPM2]
five-stamen bishop's-cap, alpine mitrewort

Mitella pentandra Hook. [FNA8, HC]

Saxifraga [FNA8, HC, HC2]
Sp. Pl. 1: 398. 1753; Gen. Pl. ed. 5, 189. 1754.
saxifrage
(see also *Cascadia*, *Micranthes*)

Saxifraga adscendens L. [FNA8, HC, HC2]
Sp. Pl. 1: 405. 1753.
wedge-leaf saxifrage

Muscaria adscendens (L.) Small
Saxifraga adscendens L. ssp. *oregonensis* (Raf.) Bacig. [KZ99, VPBC3]
Saxifraga adscendens L. var. *oregonensis* (Raf.) Breitung [HC]

FNA8: "Although the North American plants of Saxifraga adscendens have been known as subsp. oregonensis, expressions of the supposed distinguishing characters appear to overlap completely with the variation found in Europe. The plants produce bulbils on caudices."

Saxifraga austromontana Wiegand [HC2]
Bull. Torrey Bot. Club 27: 389. 1900.
matted saxifrage, spotted saxifrage

Ciliaria austromontana (Wiegand) W.A. Weber
Saxifraga bronchialis L. ssp. *austromontana* (Wiegand) Piper [FNA8]
Saxifraga bronchialis L. var. *austromontana* (Wiegand) M. Peck [HC]

Saxifraga cernua L. [FNA8, HC, HC2]
Sp. Pl. 1: 403. 1753.
nodding saxifrage

Saxifraga cernua L. var. *exilioides* Polunin
Saxifraga simulata Small

FNA8: "Saxifraga cernua plants rarely set seed; they bear bulbils among the basal leaves. Some reports of S. sibirica Linnaeus from Canada are misidentifications of this species."

Saxifraga cespitosa L. [FNA8, HC2]
Sp. Pl. 1: 404. 1753.
tufted alpine saxifrage, tufted saxifrage

Muscaria caespitosa (L.) Haw., orthographic variant
Saxifraga caespitosa L. [HC, KZ99], orthographic variant
Saxifraga caespitosa L. ssp. *caespitosa* [KZ99], orthographic variant
Saxifraga caespitosa L. ssp. *eucaespitosa* Engl. & Irmsch., orthographic variant
Saxifraga caespitosa L. var. *emarginata* (Small) Rosend. [HC], orthographic variant
Saxifraga caespitosa L. var. *lemmonii* Engl. & Irmsch., orthographic variant
Saxifraga caespitosa L. var. *minima* Blank. [HC], orthographic variant
Saxifraga caespitosa L. var. *subgemmifera* (Engl. & Irmsch.) C.L. Hitchc. [HC], orthographic variant

FNA8: "The North American representatives of Saxifraga cespitosa are very variable. It seems futile at this time to recognize any of the infrapecific taxa that have been described, although five are frequently distinguished as either subspecies or varieties. Expressions of all of the purported distinguishing characters overlap or have little apparent geographic or ecologic correlation. The only Southern Hemisphere representatives of Saxifraga are closely related to S. cespitosa."

Saxifraga hyperborea R. Br. [FNA8, HC2]
Chlor. Melvill. 16. 1823.
pygmy saxifrage

Saxifraga debilis Engelm. ex A. Gray [FNA8, HC], misapplied
Saxifraga flexuosa Sternb.
Saxifraga rivularis L. [FNA8, KZ99, WNHP], misapplied
Saxifraga rivularis L. ssp. *hyperborea* (R. Br.) Dorn
Saxifraga rivularis L. var. *flexuosa* (Sternb.) Engl. & Irmscher
Saxifraga rivularis L. var. *hyperborea* (R. Br.) Hook.

Saxifraga rivularis L. var. *purpurascens* Lange

FNA8: "Reports of Saxifraga hyperborea from Mount Washington, New Hampshire (e.g., Á. Löve and D. Löve 1964) require confirmation; all specimens examined from this location appear to be S. rivularis. C. L. Hitchcock (1961) treated all western material as S. debilis, including that of the Pacific Northwest that is included here. For Colorado, W. A. Weber (1990) appears to have applied the name S. rivularis to what we call S. hyperborea, and S. hyperborea subsp. debilis to what we call S. debilis. P. K. Holmgren and N. H. Holmgren (1997) included under their broad concept of S. rivularis both S. hyperborea and S. debilis, noting that the plants had gone usually under the latter name. Both species are present in the Rockies and the Intermountain Region."

Saxifraga mertensiana Bong. [FNA8, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2: 141. 1832.
Merten's saxifrage, woodland saxifrage

Saxifraga mertensiana Bong. var. *eastwoodiae* (Small) Engl. & Irmscher

FNA8: "Plants of Saxifraga mertensiana bear bulbils in the axils of basal leaves."

Saxifraga oppositifolia L. [FNA8, HC, HC2]
Sp. Pl. 1: 402. 1753.
purple saxifrage, twinflowered saxifrage

Antiphylla oppositifolia (L.) Fourr.

ssp. *oppositifolia* [FNA8, HC2]
Sp. Pl. 1: 402. 1753.
purple mountain saxifrage, purple saxifrage, twinflowered saxifrage

**Saxifraga tridactylites* L. [FNA8, HC, HC2]
Sp. Pl. 1: 404. 1753.
rue-leaved saxifrage

Saxifraga vespertina (Small) Fedde [FNA8, HC2]
Just?s Bot. Jahresber. 33(1): 613. 1906.
matted saxifrage, spotted saxifrage

Ciliaria vespertina (Small) W.A. Weber
Leptasea vespertina Small
Saxifraga bronchialis L. ssp. *vespertina* (Small) Piper [KZ99]
Saxifraga bronchialis L. var. *vespertina* (Small) Rosend. [HC]

Saxifragopsis [FNA8, HC2]
Bull. Torrey Bot. Club. 23: 19, plate 257. 1896.
strawberry saxifrage

Saxifragopsis fragarioides (Greene) Small [FNA8, HC2]
Bull. Torrey Bot. Club. 23: 20. 1896.
strawberry saxifrage

Saxifraga fragarioides Greene

FNA8: "Saxifragopsis fragarioides is nearly limited to the Siskiyou Mountains of California and Oregon; disjunct populations have been found in Washington (S. Gage 1992, 1995). The known colonies in Washington are at about 500 meters, lower than those in California and Oregon."

Suksdorfia [FNA8, HC, HC2]
Proc. Amer. Acad. Arts. 15: 41. 1879.
suksdorfia
(see also *Hemieva*)

Suksdorfia violacea A. Gray [FNA8, HC, HC2]
Proc. Amer. Acad. Arts. 15: 42. 1879.
violet mock brookfoam

FNA8: "Suksdorfia violacea is found from the mountains of Montana to the eastern slopes of the Cascade Mountains of British Columbia and Washington and to northwestern Oregon."

Sullivantia [FNA8, HC, HC2]
Amer. J. Sci. Arts. 42: 22. 1842.
coolwort, sullivantia

Sullivantia oregana S. Watson [FNA8, HC, HC2]
Proc. Amer. Acad. Arts. 14: 292. 1879.
Oregon coolwort

Tellima [FNA8, HC, HC2]
Narr. Journey Polar Sea. 765. 1823.
fringecup

Tellima grandiflora (Pursh) Douglas ex Lindl. [FNA8, HC, HC2]
Bot. Reg. 14: plate, 1178. 1828.
fragrant fringecup

Mitella grandiflora Pursh
Tellima odorata Howell

FNA8: "Tellima grandiflora is found in moist, shaded sites from Alaska and British Columbia to California south of San Francisco. It resembles species of Mitella in its finely pinnatifid petals but is distinguished from most of them by the two to three conspicuous, alternate, cauline leaves in Tellima. It is distinguished from M. caulescens by the latter\\'s basipetalous anthesis."

Tiarella [FNA8, HC, HC2]
Sp. Pl. 1: 405. 1753; Gen. Pl. ed. 5, 190. 1754.
coolwort, foamflower, laceflower, false mitrewort

Tiarella trifoliata L. [FNA8, HC, HC2]
Sp. Pl. 1: 406. 1753.
three-leaf foamflower

var. *laciniata* (Hook.) Wheelock [FNA8, HC, HC2]
Bull. Torrey Bot. Club. 23: 72. 1896.
cut-leaved foamflower

Tiarella californica (Kellogg) Rydb.
Tiarella laciniata Hook.

FNA8: "The terminal leaflet of var. laciniata is rhombic."

var. *trifoliata* [FNA8, HC, HC2]
Sp. Pl. 1: 406. 1753.
three-leaf foamflower

FNA8: "Variety trifoliata has slender roots and caudices."

var. *unifoliata* (Hook.) Kurtz [FNA8, HC, HC2]
Bot. Jahrb. Syst. 19: 378. 1894.
simple-leaved foamflower

Tiarella trifoliata L. ssp. *unifoliata* (Hook.) P.M. Kern
Tiarella unifoliata Hook.

FNA8: "Variety unifoliata is relatively uniform throughout its range. Locally in Alberta, it grades into a more deeply lobed leaf form."

Tolmiea [FNA8, HC, HC2]
Fl. N. Amer. 1: 582. 1840.
pig-a-back-plant, thousand mothers, youth-on-age

Tolmiea menziesii (Pursh) Torr. & A. Gray [FNA8, HC, HC2]
Fl. N. Amer. 1: 582. 1840.
piggyback-plant

Tiarella menziesii Pursh

FNA8: "Hybrids (with 2n = 21) between Tolmiea menziesii and Tellima grandiflora have been reported from Washington (D. E. Soltis and B. A. Bohm 1985). The Cowlitz Indians applied a poultice of fresh leaves to boils and the Mahak Indians ate raw sprouts in early spring (D. E. Moerman 1998)."

Scrophulariaceae [HC, HC2] Figwort Family

Synonyms:
Buddlejaceae [HC] (Butterfly-Bush Family)

Treatment here of Scrophulariaceae follows Olmstead et al., (2001). Members of Scrophulariaceae s. l. have been placed into the families Linderniaceae, Mazaceae, Orobanchaceae, Paulowniaceae, Phrymaceae, and Plantaginaceae. Castilleja, Cordylanthus, Triphysaria, and Orthocarpus are listed under Orobanchaceae.

**Buddleja* [HC, HC2]
butterfly-bush

**Buddleja davidii* Franch. [HC, HC2, JPM]
Nouv. Arch. Mus. Hist. Nat., sér. 2, 10: 65. 1887.
orange-eye butterfly-bush

Limosella [HC, HC2]
mudwort

Limosella acaulis Sessé & Moc. [HC2]
Flora Mexicana. 143. 1894.
stemless mudwort

Limosella aquatica L. [HC, HC2]
Sp. Pl. 2: 631-632. 1753.
awl-leaf mudwort

Scrophularia [HC, HC2]
figwort

Scrophularia californica Cham. & Schltdl. [HC, HC2]
Linnaea 2: 585. 1827.
California figwort, Oregon figwort

Scrophularia californica Cham. & Schltdl. var. *oregana* (Pennell) B. Boivin [HC]
Scrophularia oregana Pennell

Scrophularia lanceolata Pursh [HC, HC2]
Fl. Amer. Sept. 2: 419 [1813]. 1814.
lance-leaf figwort

Scrophularia nodosa L. var. *occidentalis* Rydb.
Scrophularia pectinata Raf.

**Verbascum* [HC, HC2]
mullein

**Verbascum blattaria* L. [HC, HC2]
Sp. Pl. 1: 178. 1753.
moth mullein

**Verbascum bombyciferum* Boiss.

**Verbascum densiflorum* Bertol.

**Verbascum thapsus* L. [HC, HC2]
Sp. Pl. 1: 177. 1753.

flannel mullein, great mullein

*ssp. *thapsus*

**Verbascum virgatum* Stokes [HC2]
A Botanical Arrangement of British Plants (ed. 2) 1: 227. 1787.
wand mullein

Simaroubaceae [HC, HC2] Quassia-Wood Family

Synonyms:
Leitneriaceae [FNA3]

**Ailanthus* [HC, HC2]
tree-of-heaven

**Ailanthus altissima* (Mill.) Swingle [HC, HC2, IFBC]
J. Wash. Acad. Sci. 6(14): 495. 1916.
tree-of-heaven

Ailanthus glandulosa Desf.

Solanaceae [HC, HC2] Potato Family

**Atropa* [HC, HC2]

**Atropa belladonna* L. [HC, HC2]
belladonna, deadly nightshade

Atropa bella-donna L., orthographic variant

**Datura* [HC, HC2]
jimson-weed

**Datura stramonium* L. [HC, HC2]
Sp. Pl. 1: 179. 1753.
jimsonweed

Datura stramonium L. var. *stramonium* [HC]
Datura stramonium L. var. *tatula* (L.) Torr. [HC]

**Datura wrightii* Regel [HC2, JPM]
Gartenflora pl. 260. 1859.
sacred thorn apple, jimson weed

**Hyoscyamus* [HC, HC2]
henbane

**Hyoscyamus niger* L. [HC, HC2]
Sp. Pl. 1: 179-180. 1753.
hog's bean, black henbane

Noxious weed.

**Lycium* [HC, HC2]
boxthorn, lycium, wolfberry

**Lycium barbarum* L. [HC2, IFBC]

Sp. Pl. 1: 192. 1753.
matrimony-vine

Lycium halimifolium Mill. [HC]

**Lycium chinense* Mill. [HC2]
Chinese wolfberry

Our plants were formerly misidentified as Lycium barbarum. Lycium chinense is scattered on both sides of the Cascades in Washington.

**Nicandra* [HC2]

**Nicandra physalodes* (L.) Gaertn. [HC2]
apple of Peru

Nicotiana [HC, HC2]
tobacco

**Nicotiana acuminata* (Graham) Hook. [Draft FNA, HC, HC2]
manyflower

*var. *multiflora* Reiche [HC2]
wild tobacco

**Nicotiana alata* Link & Otto [HC2]

Nicotiana attenuata Torr. ex S. Watson [HC, HC2]
Nomencl. Bot. 1: 554. 1821.
coyote tobacco

Rare

**Nicotiana sylvestris* Speg. & Comes [HC2]

**Physalis* [HC, HC2]
ground-cherry

**Physalis grisea* (Waterf.) M. Martiñez [HC2, KZ99]
low hairy ground cherry, strawberry-tomato

Physalis pruinosa L., misapplied
Physalis pubescens L. var. *grisea* Waterf. [HC]

**Physalis heterophylla* Nees [HC2]
ground cherry

Physalis heterophylla Nees var. *heterophylla*

Not in HC; KZ record based on PC with Richard Old

**Physalis longifolia* Nutt. [HC, HC2, JPM2]
ground-cherry, long-leaved ground-cherry, wild tomatillo

*var. *longifolia* [HC, HC2]

*var. *subglabrata* (Mack. & Bush) Cronquist [HC, HC2]

**Physalis philadelphica* Lam. [HC2]
tomatillo

Solanum [HC, HC2]
nightshade

**Solanum americanum* Mill. [HC2, KZ99]
American black nightshade

Solanum nigrum L. var. *americanum* (Mill.) O.E. Schulz
Solanum nigrum L. var. *virginicum* L. [HC]

Solanum carolinense L. [HC, HC2]
horse nettle

Solanum carolinense L. var. *carolinense*

HC does not name a variety

Solanum dulcamara L. [HC, HC2]
Sp. Pl. 1: 185. 1753.
felonwort, bittersweet nightshade, climbing nightshade

Solanum dulcamara L. var. *dulcamara*

HC does not name a variety

Solanum elaeagnifolium Cav. [HC, HC2]
white horse nettle, silver-leaf nightshade

Noxious; Not in HC; report based on PC with Richard Old

Solanum lycopersicum L. [HC2]
Sp. Pl. 1: 185. 1753.
tomato

Lycopersicon esculentum Mill.

Occasional waif generally near areas where cultivated.

Solanum nigrum L. [HC, HC2, JPM]
Sp. Pl. 1: 186. 1753.
European black nightshade
(see also *Solanum americanum*)

*ssp. *nigrum* [HC2]

Solanum nigrum L. var. *nigrum* [HC]

Solanum physalifolium Rusby [HC2]
hairy nightshade

Solanum sarrachoides Sendtn. [HC, JPM], misapplied

*var. *nitidibaccatum* (Bitter) Edmonds [HC2, JPM2]
ground-cherry nightshade

Solanum rostratum Dunal [HC, HC2]
Hist. Nat. Solanum 234-235, pl. 24. 1813.
buffalo bur, horned nightshade

Androcera rostrata (Dunal) Rydb.
Solanum cornutum Lam., misapplied

Noxious

Solanum triflorum Nutt. [HC, HC2]
Gen. N. Amer. Pl. 1: 128. 1818.
cut-leaf nightshade

H&C describe this as a native weedy species, however the nativity of S. triflorum is South America according to recent treatment in Jepson Manual, 2nd Edition.

Solanum tuberosum L. [HC2]
irish potato

KZ report based on a 1936 report from the Olympic Peninsula

Tamaricaceae [HC, HC2] Tamarisk Family

*_Tamarix_ [HC, HC2]
saltcedar, tamarisk

*_Tamarix chinensis_ Lour. × _Tamarix ramosissima_ Ledeb.
hybrid salt cedar, hybrid saltcedar, hybrid tamarisk

*_Tamarix parviflora_ DC. [HC, HC2, JPM2]
Prodr. 3: 97. 1828.
small-flower salt cedar, small-flower saltcedar, small-flower tamarisk

Tamarix tetrandra Pall. ex M. Bieb., misapplied

*_Tamarix ramosissima_ Ledeb. [HC2, JPM]
Fl. Altaic. 1: 424-426. 1829.
salt cedar, saltcedar, tamarisk

Tamarix pentandra Pall. [HC]
Tararix pentandra

Noxious in WA.

Theophrastaceae: see Primulaceae

Thymelaeaceae [HC2] Mezereum Family

*_Daphne_ [HC2]
mezereon, spurge-laurel

*_Daphne laureola_ L. [HC2]
Sp. Pl. 1: 356. 1753.
spurge-laurel

Not in HC; commonly naturalized; reported and collected by AJ and PZ

*_Daphne mezereum_ L. [FNA6, HC2]
Sp. Pl. 1: 356. 1753.
mezereon, paradise plant

Recently collected (2015) in Pend Oreille County and Pierce County (2017).

*_Thymelaea_ [HC2]
mezereon, spurge-flax

*_Thymelaea passerina_ (L.) Coss. & Germ. [HC2]
mezereon

Passerina annua Wikstr.

On WA Noxious Weed List (2017). Specimen at WS annotated by Richard Old and Mark Fishbein.

Ulmaceae [FNA3, HC, HC2] Elm Family

*_Ulmus_ [FNA3, HC, HC2]
Sp. Pl. 1: 225. 1753; Gen. Pl. ed. 5, 106, 1754.
elm

(see also *Ulmus americana*, *Ulmus parvifolia*, *Ulmus procera*, *Ulmus pumila*)

**Ulmus americana* L. [FNA3, HC2]
Sp. Pl. 1: 226. 1753.
American elm

Ulmus americana L. var. *aspera* Chapm.
Ulmus americana L. var. *floridana* (Chapm.) Little
Ulmus floridana Chapm.

FNA3: "Ulmus americana is reported as widely escaped in Idaho, which is not part of the natural range of this taxon. It is occasionally cultivated outside its native distribution, and it has escaped sporadically from cultivation. It is also reported as naturalized in Arizona, but I have seen no specimens."

**Ulmus parvifolia* Jacq. [FNA3, HC2]
Pl. Hort. Schoenbr. 3: 6, plate 262. 1798.
Chinese elm, little-leaved elm

**Ulmus procera* Salisb. [FNA3, HC2]
Prodr. Stirp. Chap. Allerton. 391. 1796.
field elm

**Ulmus pumila* L. [FNA3, HC2]
Sp. Pl. 1: 226. 1753.
Siberian elm

Ulmus campestris L. var. *pumila* Maxim.
Ulmus manshurica Nakai
Ulmus turkestanica Req.

Not in H&C. FNA3: "Planted for quick-growing windbreaks, Ulmus pumila has weak wood, and its branches break easily in mature trees. It is easily distinguished from other North American elms by its singly serrate leaf margins. Ulmus pumila is similar to U . parvifolia Jacquin with its small, singly serrate leaves. Ulmus parvifolia , however, has smooth bark that sheds from tan to orange, and it flowers and sets fruit in the fall."

Umbelliferae: see Apiaceae

Urticaceae [FNA3, HC, HC2] Nettle Family

Parietaria [FNA3, HC, HC2]
Sp. Pl. 2: 1052. ; Gen. Pl. ed.5. 1753; Gen. Pl. ed. 5, 471, 1754.
pellitory

**Parietaria judiaca* L. [FNA3, HC2]
Fl. Palaest. 32. 1756.
pellitory-of-the-wall

Recently collected in King Co. (Jacobson et al. 2001). FNA3: "Parietaria judaica , which, in North America, is most abundant in scattered localities in California, is the only long-lived perennial species of Parietaria in the flora. Because of confusion in Europe over the correct name, plants in North America have been called P . judaica , P . officinalis of authors, not Linnaeus, P . officinalis var. erecta (Mertens & Koch) Weddell, and P . officinalis var. diffusa (Mertens & Koch) Weddell. For a clarification of the nomenclature and taxonomy of this complex, see C.C. Townsend (1968). Parietaria judaica was first reported from Louisiana as P . diffusa Mertens & Koch, another name commonly used on herbarium specimens (J.W. Thieret 1969)."

Parietaria pensylvanica Muhl. ex Willd. [FNA3, HC, HC2]
Sp. Pl. 4(2): 955. 1806.

Pennsylvania pellitory

Parietaria obtusa Rydb. ex Small
Parietaria occidentalis Rydb.
Parietaria pensylvanica Muhl. ex Willd. var. *obtusa* (Rydb. ex Small) Shinners

FNA3:Some extremes of Parietaria pensylvanica with short, oblong or ovate leaf blades strongly resemble P . hespera var. hespera . Parietaria hespera is usually more delicate and has thinner leaves with the proximal pair of lateral veins arising at the junction of blade and petiole. Leaf shape and texture tend to overlap in the two species, but in P . pensylvanica the proximal pair of lateral veins clearly arise above the junction of blade and petiole. The extremes of P . pensylvanica frequently are found where the ranges of the two species approach or overlap. Examples of these intermediates are from Gila, Mohave, and Yuma counties, Arizona. A mixed collection from Rock Springs, Gila County, Arizona, suggests that the two species occasionally grow together."

Urtica [FNA3, HC, HC2]
Sp. Pl. 2: 983. 1753; Gen. Pl. ed. 5, 423, 1754.
nettle

Urtica dioica L. [FNA3, HC, HC2]
Sp. Pl. 2: 984. 1753.
stinging nettle

*ssp. *dioica* [FNA3, HC, HC2]
Sp. Pl. 2: 984. 1753.
stinging nettle

Urtica gracilis Aiton var. *latifolia* Farw.

ssp. *gracilis* (Aiton) Selander [FNA3, HC, HC2]
Svensk Bot. Tidskr. 41: 271. 1947.
stinging nettle

Urtica californica Greene
Urtica dioica L. var. *angustifolia* Schltdl. [HC]
Urtica dioica L. var. *californica* (Greene) C.L. Hitchc. [HC]
Urtica dioica L. var. *gracilis* (Aiton) R.L. Taylor & MacBryde [HC]
Urtica dioica L. var. *lyallii* (S. Watson) C.L. Hitchc. [HC]
Urtica dioica L. var. *procera* (Muhl. ex Willd.) Wedd. [HC]
Urtica gracilis Aiton

ssp. *holosericea* (Nutt.) Thorne [FNA3, HC2]
Aliso. 6: 68. 1967.
stinging nettle

Urtica dioica L. var. *holosericea* (Nutt.) C.L. Hitchc. [HC]
Urtica dioica L. var. *occidentalis* S. Watson
Urtica gracilis Aiton ssp. *holosericea* (Nutt.) W.A. Weber
Urtica gracilis Aiton var. *holosericea* (Nutt.) Jeps.
Urtica holosericea Nutt.

FNA3: "Urtica dioica subsp. holosericea is highly variable in leaf shape and degree of pubescence. The least pubescent plants appear to grade into U . dioica subsp. gracilis , and it is sometimes difficult to separate the two."

**Urtica urens* L. [FNA3, HC, HC2]
Sp. Pl. 2: 984. 1753.
burning nettle

Valerianaceae [HC, HC2] Valerian Family

*Centranthus [HC2]
valerian

*Centranthus ruber (L.) DC. [HC2, JPM]
Fl. Franç. (ed. 3) 4: 239. 1805.
Jupiter's-beard

Commonly naturalized in Seattle in disturbed areas such as roadsides, sidewalk cracks, and abandoned lots.

Plectritis [HC, HC2]
plectritis

Plectritis brachystemon Fisch. & C.A. Mey. [HC2, OFP]
Index Seminum [St.Petersburg (Petropolitanus)] 2: 47 (-48). 1836.
shortspur white plectritis

Plectritis congesta (Lindl.) DC. ssp. *brachystemon* (Fisch. & C.A. Mey.) Morey [JPM2]
Plectritis congesta (Lindl.) DC. var. *major* (Fisch. & C.A. Mey.) Dyal

Plectritis ciliosa (Greene) Jeps. [HC, HC2]
Nov. Gen. Sp. Pl. 1: 40. 1824.
long-spurred plectritis

Plectritis congesta (Lindl.) DC. [HC, HC2]
Prodr. 4: 631. 1830.
rosy plectritis, sea-blush

Plectritis congesta (Lindl.) DC. ssp. *congesta* [KZ99]

Plectritis macrocera Torr. & A. Gray [HC, HC2]
Fl. N. Amer. 2(1): 50. 1841.
long-horn plectritis, white plectritis

Plectritis macrocera Torr. & A. Gray ssp. *grayi* (Suksd.) Morey [KZ99]
Plectritis macrocera Torr. & A. Gray ssp. *macrocera* [KZ99]
Plectritis macrocera Torr. & A. Gray var. *collina* (A. Heller) Dyal
Plectritis macrocera Torr. & A. Gray var. *grayi* (Suksd.) Dyal
Plectritis macrocera Torr. & A. Gray var. *macroptera* Suksd.
Plectritis macrocera Torr. & A. Gray var. *mamillata* (Suksd.) Dyal

Valeriana [HC, HC2]
valerian

Valeriana columbiana Piper [HC, HC2]
Bot. Gaz. 22(6): 489-490. 1896.
Wenatchee valerian

Valeriana dioica L. [HC, HC2]
Sp. Pl. 1: 31. 1753.
woodland valerian

var. *sylvatica* S. Watson [HC, HC2]
Botany Fortieth Parallel 136. 1871.
northern valerian

Valeriana dioica L. ssp. *sylvatica* (S. Watson) F.G. Mey.

Valeriana edulis Nutt. ex Torr. & A. Gray [HC, HC2]
Fl. N. Amer. (Torr. & A. Gray) 2(1): 48. 1841.
tobacco-root, edible valerian

var. *edulis* [HC, HC2]
Fl. N. Amer. 2(1): 48. 1841.
tobacco root

Valeriana occidentalis A. Heller [HC, HC2]

Bulletin of the Torrey Botanical Club 25(5): 269-270. 1898.
small-flower valerian, western valerian

Valeriana scouleri Rydb. [HC, HC2]
Mem. New York Bot. Gard. 1: 377. 1900.
Scouler's valerian

Valeriana sitchensis Bong. ssp. *scouleri* (Rydb.) F.G. Mey.
Valeriana sitchensis Bong. var. *scouleri* (Rydb.) M.E. Jones

Valeriana sitchensis Bong. [HC, HC2]
Mém. Acad. Imp. Sci. Saint Pétersbourg (Sér. 7) 2(2): 145-146. 1832.
Sitka valerian

Valeriana sitchensis Bong. var. *hookeri* (Shuttlew.) G.N. Jones
Valeriana sitchensis Bong. var. *sitchensis*

**Valerianella* [HC, HC2]
corn-salad, valerianella

**Valerianella locusta* (L.) Laterr. [HC, HC2]
Sp. Pl. 1: 33-34. 1753.
lamb's-lettuce

Valerianella olitoria (L.) Pollich

Verbenaceae [HC, HC2] Verbena Family

Verbena [HC, HC2]
verbena, vervain

Verbena ×bingenensis Moldenke

Not in HC

**Verbena bonariensis* L. [HC2]
purpletop vervain

Verbena bracteata Lag. & Rodr. [HC, HC2]
Anales Ci. Nat. 4(12): 260-261. 1801.
carpet vervain

Verbena bracteosa Michx.

HC calls this taxa a native American weed

Verbena hastata L. [HC, HC2]
Sp. Pl. 1: 20. 1753.
wild hyssop, blue verbena

Verbena hastata L. var. *scabra* Moldenke [KZ99]

**Verbena officinalis* L. [HC2]
Sp. Pl. 1: 20. 1753.
herb of the cross, European vervain

Verbena stricta Vent. [HC, HC2]
Descr. Pl. Nouv. pl. 53. 1800.
hoary vervain

Violaceae [HC, HC2] Violet Family

There is no single contemporay resource for the taxonomy and floristics of the genus Viola in Washington. As a result, the treatment here lacks a consistent taxonomic concept for what occurs in the state. Considerable work has been done on Viola since H&C, rendering that resource largely obsolete. The Jepson Manual and Jepson Manual, 2nd Edition contain contemporary treatments based on the work of John Little, however many Viola taxa in WA do not occur in California. The Illustrated Flora of British Columbia treatment has been referenced here where possible, but it too does not contain treatments for all of the WA Viola taxa.

Viola [HC, HC2]
pansy, violet

Viola adunca Sm. [HC, HC2]
Cycl. [A. Rees], (London ed.) 37: Viola n. 63. 1817.
early blue violet, wild dog violet

Viola adunca Sm. ssp. *adunca* [JPM2]
Viola adunca Sm. var. *adunca* [HC, IFBC]
Viola adunca Sm. var. *bellidifolia* (Greene) H.D. Harr. [HC]
Viola adunca Sm. var. *cascadensis* (M.S. Baker) C.L. Hitchc. [HC]
Viola adunca Sm. var. *uncinulata* (Greene) C.L. Hitchc. [HC]

**Viola arvensis* Murray [HC, HC2]
Prodr. Stirp. Gott. 73. 1770.
European field pansy

Viola tricolor L. var. *arvensis* (Murray) DC.

Viola canadensis L. [HC, HC2]
Sp. Pl. 2: 936. 1753.
Canadian violet, rugose violet

var. *rugulosa* (Greene) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacific NW 3: 442. 1961.
rugose violet

Viola canadensis L. ssp. *rydbergii* (Greene) House
Viola rugulosa Greene
Viola rydbergii Greene

Viola flettii Piper [HC, HC2]
Erythea 6(7): 69. 1898.
Flett's violet, Olympic violet

Viola glabella Nutt. [HC, HC2]
Fl. N. Amer. 1(1): 142. 1838.
pioneer violet, stream violet

Viola howellii A. Gray [HC, HC2]
Proceedings of the American Academy of Arts and Sciences 22(2): 308. 1887.
Howell's violet

**Viola lanceolata* L. [HC, HC2]
Sp. Pl. 2: 934. 1753.
lance-leaved violet

Viola lanceolata L. ssp. *lanceolata* [KZ99]

Viola langsdorffii Fisch. ex Ging. [HC2]
Prodr. [A. P. de Candolle] 1: 296 (-297). 1824.
Alaska violet, Aleutian violet

Viola langsdorfii Fisch. ex Ging. [HC], orthographic variant
Viola simulata M.S. Baker
Viola superba M.S. Baker

Viola macloskeyi F.E. Lloyd [HC, HC2, JPM2]

small white violet

Viola macloskeyi F.E. Lloyd ssp. *macloskeyi*
Viola macloskeyi F.E. Lloyd ssp. *pallens* (Banks ex Ging.) M.S. Baker [KZ99]
Viola macloskeyi Lloyd var. *macloskeyi* [HC]
Viola macloskeyi F.E. Lloyd var. *pallens* (Banks ex Ging.) C.L. Hitchc. [HC]

Viola nephrophylla Greene [HC, HC2, JPM2]
Pittonia 3(15D): 144-145. 1896.
LeConte violet, northern bog violet

Viola nephrophylla Greene var. *cognata* (Greene) C.L. Hitchc. [HC]
Viola nephrophylla Greene var. *nephrophylla* [HC]
Viola sororia Willd. ssp. *affinis* (Leconte) R.J. Little [JPM]
Viola sororia Willd. var. *affinis* (Leconte) L.E. McKinney

Viola nuttallii Pursh [HC, HC2]
Fl. Amer. Sept. (Pursh) 1: 174. 1814.
Nuttall's violet

var. *bakeri* (Greene) C.L. Hitchc. [HC, HC2]
Vasc. Pl. Pacific NW 3: 447. 1961.
Baker's violet

Viola bakeri Greene [JPM]

var. *praemorsa* (Douglas ex Lindl.) S. Watson [HC, HC2]
Botany [Fortieth Parallel] 35. 1871.
canary violet, upland yellow violet

Viola linguifolia Nutt.
Viola nuttallii Pursh ssp. *praemorsa* (Douglas ex Lindl.) Piper
Viola nuttallii Pursh var. *linguifolia* (Nutt.) Jeps.
Viola praemorsa Douglas ex Lindl.
Viola praemorsa Douglas ex Lindl. ssp. *arida* M.S. Baker
Viola praemorsa Douglas ex Lindl. ssp. *flavovirens* (Pollard) Fabijan
Viola praemorsa Douglas ex Lindl. ssp. *linguifolia* (Nutt.) M.S. Baker & J.C. Clausen ex M. Peck [JPM]
Viola praemorsa Douglas ex Lindl. ssp. *oregona* M.S. Baker
Viola praemorsa Douglas ex Lindl. ssp. *praemorsa* [JPM, IFBC]
Viola praemorsa Douglas ex Lindl. var. *altior* Blank.
Viola praemorsa Douglas ex Lindl. var. *linguifolia* (Nutt.) M. Peck

var. *vallicola* (A. Nelson) H. St. John [HC, HC2]
Fl. S.-e. Washington (St. John) 262. 1937.
valley violet, yellow sagebrush violet

Viola nuttallii Pursh ssp. *vallicola* (A. Nelson) Roy L. Taylor & MacBryde
Viola nuttallii Pursh var. *major* Hook. [HC]
Viola vallicola A. Nelson var. *major* (Hook.) Fabijan [IFBC]
Viola vallicola A. Nelson var. *vallicola* [KZ99]

**Viola odorata* L. [HC2, IFBC, JPM]
Sp. Pl. 2: 934. 1753.
sweet blue violet

Not in H&C.

Viola orbiculata Geyer ex Holz. [HC, HC2]
London Journal of Botany 6: 73 1847.
darkwoods violet, evergreen yellow violet, round-leaved violet

Viola sempervirens Greene var. *orbiculata* (Geyer ex Holz.) J.K. Henry
Viola sempervirens Greene var. *orbiculoides* M.S. Baker

Viola palustris L. [HC, HC2]
Sp. Pl. 2: 934. 1753.
marsh violet

Viola palustris L. var. *brevipes* (M.S. Baker) R.J. Davis [KZ99]
Viola palustris L. var. *palustris* [KZ99]

Viola pluviae Marcussen, H.E.Ballard & Blaxland
Nordic J. Bot. 36(9)-e01931: 3. 2018.
rain violet

Allo-octoploid segregated from V. palustris. Putative parents are V. epipsila var. repens and the V. pallens / V. macloskeyi complex.

Viola purpurea Kellogg [HC, HC2]
Proc. Calif. Acad. Sci. 1: 56. 1855.
purplish violet

ssp. *venosa* (S. Watson) M.S. Baker & J.C. Clausen [HC2, KZ99]
goose-foot violet, purplish violet

Viola purpurea Kellogg var. *venosa* (S. Watson) Brainerd [HC]

Viola renifolia A. Gray [HC, HC2]
Proc. Amer. Acad. Arts 8: 288. 1870.
kidney-leaf white violet

Viola renifolia A. Gray var. *brainerdii* (Greene) Fernald

**Viola riviniana* Rchb. [HC2]
Iconogr. Bot. Pl. Crit. 1: 81?82, pl. 95. 1823.
dog violet, wood violet

Viola sempervirens Greene [HC, HC2]
Pittonia 4(20A): 8. 1899.
evergreen violet, redwood violet

Viola sheltonii Torr. [HC, HC2]
Pacif. Railr. Rep. 4(5): 67, pl. 2. 1857.
fan violet, shelton's violet

Viola sororia Willd. [HC2]
Hort. Berol. [Willdenow] 1(6): t. 72. 1806.
northern blue violet, northern woodland violet

Viola septentrionalis Greene [HC]

**Viola tricolor* L. [HC2, JPM]
Sp. Pl. 2: 935-936. 1753.
Johnny jump-up

*ssp. *tricolor* [HC2]

Viola trinervata (Howell) Howell ex A. Gray [HC, HC2]
Bot. Gaz. 11(11): 290. 1886.
desert pansy, 3-nerved violet, sagebrush violet

**Viola ×wittrockiana* Gams. [HC2]

Viscaceae: see Santalaceae

Vitaceae [HC, HC2] Grape Family

**Parthenocissus* [HC2]
Virginia creeper, woodbine

*_Parthenocissus vitacea_ (Knerr) Hitchc. [HC2, JPM2]
Key Spring Fl. Manhattan 26. 1894.
false Virginia creeper, thicket creeper

Parthenocissus inserta (Kern.) Fritsch, misapplied
Draft FNA treatment
Parthenocissus quinquefolia (L.) Planch., misapplied
Draft FNA treatment

*_Vitis_ [HC, HC2]
grape, grape-vine

*_Vitis labrusca_ L. [HC2]
fox grape-vine

*_Vitis riparia_ Michx. [HC, HC2]
Fl. Bor.-Amer. 2: 231. 1803.
river-bank grape

*_Vitis vinifera_ L. [HC, HC2]
Sp. Pl. 1: 202. 1753.
European grape

Zygophyllaceae [HC, HC2] Creosote-Bush Family

*_Tribulus_ [HC, HC2]
ground bur-nut, land caltrop, puncture-vine

*_Tribulus terrestris_ L. [HC, HC2]
puncture vine

Noxious

*_Zygophyllum_ [HC, HC2]
bean-caper

*_Zygophyllum fabago_ L. [HC, HC2]
Syrian bean-caper

Noxious

Monocots:

Acoraceae [FNA22, HC2] Sweet Flag Family

FNA22: "Acorus historically was recognized as an aberrant genus within Araceae, but much evidence supports its treatment as a separate family and the removal of this family from Arales (M. H. Grayum 1987). Other than the absence of a close association with Arales, the phylogenetic affinities of Acoraceae remain unclear. Evidence based on DNA sequences fails to show any close relationships between Acorus and other genera, and instead supports Acorus as the oldest extant lineage of monocotyledons (M. R. Duvall et al. 1993). The removal of Acorus from Araceae is supported by the absence of a spathe and the unique vasculature of the structure traditionally interpreted as a spathe (T. S. Ray 1987). The structure that has been called a spathe in Acorus is not morphologically equivalent to the spathe of Araceae; instead it is interpreted as the distal part of the sympodial leaf. The proximal part of the sympodial leaf is adnate to the peduncle, forming a 3-angled axis that bears the inflorescence.

Acorus [FNA22, HC, HC2]
Sp. Pl. 1: 324. 1753; Gen. Pl. ed. 5; 151, 1754.
sweet flag

Acorus americanus (Raf.) Raf. [FNA22, HC2]
New Flora and Botany of North America. 1: 57. 1836.
American sweetflag, several-vein sweetflag

Acorus calamus L. var. *americanus* Raf.
Acorus calamus L. var. *americanus* H. Wulff

Known only from Spokane Co. Taxonomy follows FNA, distinguishing North American and Eurasian taxa at the species level. They differ in their chromosome level, fertility, and leaf venation.

**Acorus calamus* L. [FNA22, HC, HC2]
Sp. Pl. 1: 324. 1753.
sweet flag

Recently collected in Clark Co.

Agavaceae: see Asparagaceae

Alismataceae [FNA22, HC, HC2] Water-Plantain Family

Synonyms:
Limnocharitaceae [FNA22]

Taxonomy follows FNA Vol. 22.

Alisma [FNA22, HC, HC2]
Sp. Pl. 1: 343. 1753; Gen. Pl. ed. 5; 160, 1754.
water-plantain

Alisma gramineum Lej. [FNA22, HC, HC2]
Flore des Environs de Spa. 1: 175. 1811.
grass-leaved water-plantain, narrow-leaf water-plantain

Alisma geyeri Torr. [Abrams]
Alisma gramineum Lej. var. *angustissimum* (DC.) Hendricks [HC]

Alisma gramineum Lej. var. *gramineum* [HC]

**Alisma plantago-aquatica* L. [FNA22, HC, HC2]
Sp. Pl. 1: 342. 1753.
European water plantain
(see also *Alisma triviale*)

Alisma plantago-aquatica L. var. *plantago-aquatica* [HC]

Introduced to western Washington and southwest British Columbia. FNA 22: "The name Alisma plantago-aquatica has been used in a variety of North American floras. We are following, however, the treatment of I. Björkqvist (1968), in which the native distribution of A. plantago-aquatica is restricted to Eurasia."

Alisma triviale Pursh [FNA22, HC2]
Flora Americae Septentrionalis. 1: 252. 1814.
northern water plantain

Alisma plantago-aquatica L. var. *americanum* Schult. & Schult. f. [HC]

Spelling corrected from A. trivialis Pursh in FNA Historically specimens of this species have been incorrectly assigned the name Alisma plantago-aquatica, which is a misapplied name. A. plantago-aquatica is restricted in distribution to Eurasia, with a few introduced populations reported from Alaska.

Damasonium [FNA22, HC2]
The Gardeners Dictionary (fourth edition). 1: 28. 1754.
damasonium, fringed water-plantain, star water-plantain

Machaerocarpus [HC]

Damasonium californicum Torr. [FNA22, HC2]
Plantas Hartwegianas imprimis Mexicanas. .. 341. 1857.
fringed water plantain, star water plantain

Machaerocarpus californicus (Torr.) Small [HC]

Sagittaria [FNA22, HC, HC2]
Sp. Pl. 2: 993. 1753; Gen. Pl. ed. 5; 429, 1754.
arrowhead

Sagittaria cuneata E. Sheldon [FNA22, HC, HC2]
Bulletin of the Torrey Botanical Club. 20:283, plate 159. 1893.
arumleaf arrowhead, northern arrowhead, Sagittaria cuneaire, wapato

Sagittaria arifolia Nutt. ex J.G. Sm.

Buckingham et al. (1995) consider this escaped and not native on the Olympic Penin., perhaps based on FPNW stating it is not known W of the Cascades Mts.

**Sagittaria graminea* Michx. [FNA22, HC2]
Flora Boreali-Americana. 2: 190. 1803.
grassy arrowhead

**ssp. graminea* [FNA22, HC2]
Flora Boreali-Americana. 2: 190. 1803.

Sagittaria cycloptera (J.G. Sm.) C. Mohr
Sagittaria eatonii J.G. Sm.
Sagittaria graminea Michx. var. *graminea* [KZ99]
Sagittaria macrocarpa J.G. Sm.

recently collected in WA, cited in FNA Vol. 22

Sagittaria latifolia Willd. [FNA22, HC, HC2]
Sp. Pl. 4(1): 409. 1805.
common arrowhead, duck potato, wapato

Sagittaria esculenta Howell
Sagittaria latifolia Willd. var. *obtusa* (Muhl.) Wiegand
Sagittaria latifolia Willd. var. *pubescens* (Engelm.) J.G. Sm.

Taxonomy follows FNA Vol. 22, lumping all varieties.

**Sagittaria platyphylla* (Engelm.) J.G. Sm. [FNA22, HC2]
N. Amer. Sagittaria. 29. 1894.
delta arrowhead

Sagittaria graminea Michx. var. *platyphylla* Engelm.

FNA22: "Sagittaria platyphylla has been accepted at the variety level, i.e., Sagittaria graminea var. platyphylla (C. Bogin 1955; J. W. Wooten 1973; E. O. Beal et al. 1982). After studying dozens of populations in the field from much of its range and hundreds of herbarium specimens, we have concluded that this taxon should be recognized at the specific level instead, a conclusion supported by cladistic analyses of morphologic characters (R. M. Kortright 1998)"

**Sagittaria rigida* Pursh [FNA22, HC2]
Flora Americae Septentrionalis. 2: 397. 1814.
sessile-fruited arrowhead

reported in FNA Vol. 22, mapped in nw. WA

**Sagittaria subulata* (L.) Buchenau [FNA22, HC, HC2]
Abhandlungen herausgegeben vom naturwissenschaftlichen Vereine zu Bremen. 2: 490. 1871.
awl-leaf arrowhead

taxonomy follows FNA Vol. 22 and lumps all varieties

Amaryllidaceae [HC2] Amaryllis Family

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

Allium [FNA26, HC, HC2]
Sp. Pl. 1: 294. 1753; Gen. Pl. ed. 5, 143. 1754.
garlic, onion

Allium acuminatum Hook. [FNA26, HC, HC2]
Fl. Bor.-Amer. 2: 184, plate 196. 1838.
taper-tip onion

Allium acuminatum Hook. var. *cuspidatum* Fernald
Allium cuspidatum (Fernald) Rydb.

Allium amplectens Torr. [FNA26, HC, HC2]
Pacif. Railr. Rep. 4(5): 148. 1857.
narrow-leaf onion

Allium acuminatum Hook. var. *gracile* Alph. Wood
Allium attenuifolium Kellogg
Allium attenuifolium Kellogg var. *monospermum* (Jeps.) Jeps.
Allium monospermum Jeps.
Allium occidentale A. Gray
Allium serratum S. Watson

FNA26: "All three chromosome races of Allium amplectens are widespread. The triploids are achiasmatic, causing a breakdown in the first meiotic division. This is followed by a normal second division resulting in pollen dyads that are, presumably, nonfunctional; seeds are produced by apomixis. The diploids and tetraploids produce normal pollen, in tetrads, that appears to be functional."

Allium campanulatum S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 14: 231. 1879.

rosy Sierra onion

Allium austinae M.E. Jones
Allium bidwelliae S. Watson
Allium campanulatum S. Watson var. *bidwelliae* (S. Watson) Jeps.

Not listed in WA by FNA.

Allium cernuum Roth [FNA26, HC, HC2]
Arch. Bot. (Leipzig). 1: 40. 1798.
nodding onion

Allium allegheniense Small
Allium oxyphilum Wherry
Allium recurvatum Rydb.

FNA26"Allium cernuum is the most widespread North American species of the genus. It is closely related to A. stellatum, and the character commonly used to differentiate them has been umbel orientation. In both species, the inflorescence is nodding in bud, but in A. stellatum it usually becomes erect by anthesis. In A. cernuum the peduncle remains permanently recurved near the apex, although the inflorescence may sometimes become erect overall, or nearly so. While this character is helpful in identification, an almost exclusive reliance on it (even by one of the present authors in his youth) has obscured other clearer distinctions between the species and has confused their geographic ranges. More reliable characters for differentiating these species are bulb shape (elongate in A. cernuum, ovoid in A. stellatum) and perianth shape (campanulate in A. cernuum, stellate in A. stellatum). Unfortunately, perianth shape is often difficult to see in herbarium specimens."

Allium columbianum (Ownbey & Mingrone) P. M. Peterson, Annable & Rieseberg [FNA26, HC2]
Syst. Bot. 13: 211. 1988.
Columbia onion

Allium douglasii Hook. var. *columbianum* Ownbey & Mingrone [HC]

Allium constrictum (Ownbey & Mingrone) P. M. Peterson, Annable & Rieseberg [FNA26, HC2]
Syst. Bot. 13: 211. 1988.
Grand Coulee onion

Allium douglasii Hook. var. *constrictum* Ownbey & Mingrone [HC]

Endemic to WA - Douglas, Grant, and Lincoln counties.

Allium crenulatum Wiegand [FNA26, HC, HC2]
Bull. Torrey Bot. Club. 26: 135, plate 355, fig. 1. 1899.
scalloped onion

Allium cascadense M. Peck
Allium vancouverense J. Macoun
Allium watsonii Howell

FNA26: "Allium crenulatum is known only from west of the Cascade Mountains from Vancouver Island to southwestern Oregon, in Jefferson Park, Oregon, and in the Wenatchee Mountains, central Washington. The disjunct populations of Allium crenulatum in western Oregon are markedly different among themselves and from the more typical representatives to the north. It has thus far proven impossible to draw meaningful taxonomic distinctions among these populations, hence we have followed historical precedent and have placed them all in a single, highly variable species."

Allium dictuon H. St. John [FNA26, HC, HC2]
Proc. Biol. Soc. Wash. 50: 3, fig. 1. 1937.
Blue Mountain onion

Endemic to WA. FNA26: A. dictuon "differs from A. acuminatum by its rhizomatous habit, in which it resembles A. bolanderi, and in the cellular pattern on the inner bulb coats."

Allium douglasii Hook. [FNA26, HC, HC2]
Fl. Bor.-Amer. 2: 184, plate 197. 1838.
Douglas' onion
(see also *Allium columbianum*, *Allium constrictum*, *Allium nevii*)

Allium douglasii Hook. var. *douglasii* [HC]

Allium fibrillum M.E. Jones ex Abrams [FNA26, HC, HC2]
Ill. Fl. Pacific States. 1: 393. 1923.
Cuddy Mountain onion, fringed onion

Allium geyeri S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 14: 227. 1879.
Geyer's onion

var. *geyeri* [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 14: 227. 1879.
Geyer's onion

Allium dictyotum Greene
Allium funiculosum A. Nelson
Allium pikeanum Rydb.

var. *tenerum* M.E. Jones [FNA26, HC, HC2]
Contr. W. Bot. 10: 28, fig. 55. 1902.
Rydberg's onion

Allium arenicola Osterh., homonym (illegitimate)
Allium fibrosum Rydb.
Allium geyeri S. Watson var. *graniferum* Hend.
Allium rubrum Osterh.
Allium rydbergii J.F. Macbr.
Allium sabulicola Osterh.

Allium macrum S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 14: 233. 1879.
rock onion

Allium nevii S. Watson [FNA26, HC2]
Proc. Amer. Acad. Arts. 14: 231. 1879.
Nevius's garlic, Nevius's onion

Allium douglasii Hook. var. *nevii* (S. Watson) Ownbey & Mingrone [HC]

Allium robinsonii L.F. Hend. [FNA26, HC, HC2]
Rhodora. 32: 22. 1930.
Robinson's onion

FNA26: "Allium robinsonii has been found along the Columbia River from Ferry County, northeastern Washington, to about the mouth of the John Day River, north-central Oregon, and is now possibly extirpated from Oregon."

*var. *sativum* [FNA26, HC2]
Sp. Pl. 1: 296. 1753.
garlic

Taxonomy follows FNA; recently collected wild in a hedgerow in Kitsap Co., but not naturalized; a garden plant rarely producing seed. Similar collections of Allium carinatum L., Allium triquetrum L, and Allium tuberosum Rottl. ex Spreng. are from plants spreading slightly from cultivation in irrigated areas in King Co., and are not naturalized.

Allium schoenoprasum L. [FNA26, HC, HC2]
Sp. Pl. 1: 301. 1753.
chives

Allium schoenoprasum L. var. *laurentianum* Fernald
Allium schoenoprasum L. var. *schoenoprasum* [KZ99]
Allium schoenoprasum L. var. *sibiricum* (L.) Hartm. [KZ99]
Allium sibiricum L.

Taxonomy follows FNA; native races on shorelines in Washington are not easily separable from introduced (European) garden material that occasionally escapes. Characters based on plant size, tepal shape or

color are unstable. FNA26: "Allium schoenoprasum is native in North America, but it is also cultivated and has widely escaped. It is an extremely polymorphic species, and throughout its range both large and small races occur. These plants have been known as A. sibiricum, A. schoenoprasum var. sibiricum, or A. schoenoprasum var. laurentianum, and many, largely unsuccessful, attempts have been made to distinguish the varieties. Until the variation can be worked out along natural lines, if any, instead of unstable features such as plant size, and color and shape of the tepals, recognition of these varieties is unsound. Because we are unable to separate native populations from many of the escaped ones, we cannot reliably map the native distribution of this taxon in the flora."

Allium scilloides Douglas ex S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 14: 229. 1879.
fragile onion, scilla-like onion

Endemic to WA.

Allium textile A. Nelson & J.F. Macbr. [FNA26, HC, HC2]
Bot. Gaz. 56: 470. 1913.
textile onion, white wild onion

Allium aridum Rydb.
Allium reticulatum Fraser ex G. Don
Allium reticulatum Fraser ex G. Don var. *playanum* M.E. Jones

FNA26 includes WA within the range of this species, however no specimens have been seen.

Allium tolmiei Baker [FNA26, HC, HC2]
Bot. Mag. 32: under plate 6227. 1876.
Tolmie's onion

var. *tolmiei* [FNA26, HC, HC2]
Bot. Mag. 32: under plate 6227. 1876.
Tolmie's onion

Allium anceps Kellogg var. *aberrans* M.E. Jones
Allium cusickii S. Watson
Allium douglasii Hook. var. *tolmiei* (Baker) Traub
Allium idahoense Traub
Allium platyphyllum Tidestr.
Allium pleianthum S. Watson [HC]
Allium tolmiei Baker var. *platyphyllum* (Tidestr.) Ownbey [HC]

Allium validum S. Watson [FNA26, HC, HC2]
Botany (Fortieth Parallel). 350. 1871.
Pacific onion, swamp onion

FNA26: "Allium validum is a Cascade-Sierran species extending east to northeastern Nevada, eastern Oregon, and western Idaho."

**Allium vineale* L. [FNA26, HC, HC2]
Sp. Pl. 1: 299. 1753.
wild chives, crow garlic, wild garlic

Allium vineale L. ssp. *vineale* [KZ99]

FNA26: "It is a noxious weed, apparently introduced from Europe in colonial times. The small, wheat-sized bulbils frequently contaminated wheat grown in infested areas. Bread made from such wheat was garlic-flavored, and cows grazing in infested pastures produce garlic-flavored milk."

**Galanthus* [FNA26, HC2]
Sp. Pl. 1: 288. 1753; Gen. Pl. ed. 5, 140. 1754.

**Galanthus nivalis* L. [FNA26, HC2]
Sp. Pl. 1: 288. 1753.
snowdrop

Recently collected as a garden escape, in Clallam and King Cos., not in H&C

Leucojum [FNA26, HC2]
Sp. Pl. 1: 289. 1753; Gen. Pl. ed. 5, 140. 1754.

Narcissus [FNA26, HC2]
Sp. Pl. 1: 289. 1753; Gen. Pl. ed. 5, 141. 1754.
daffodil, narcissus

Narcissus ×incomparabilis Mill. [FNA26, HC2]
Gard. Dict., ed. 8. n. 3. 1768.
nonesuch daffodil, hybrid daffofil

Narcissus poeticus L. [FNA26, HC2]
Sp. Pl. 1: 289. 1753.
pheasant's eye narcissus, poet's narcissus

Narcissus pseudonarcissus L. [FNA26, HC2]
Sp. Pl. 1: 289. (as pseudo narcissus). 1753.
daffofil

Araceae [FNA22, HC, HC2] Arum Family

Synonyms:
Lemnaceae [FNA22, HC] (Duckweed Family)

Arum [HC2]
lords-and-ladies

Arum italicum Mill. [HC2, JPM]
Gard. Dict. (ed. 8) 8: 2. 1768.
Italian arum, Italian lords and ladies

*ssp. *italicum*
Italian arum, Italian lords and ladies

Dracunculus [HC2]

Lemna [FNA22, HC, HC2]
Sp. Pl. 2: 970. 1753; Gen. Pl. ed. 5; 417, 1754.
duckweed

Lemna minor L. [FNA22, HC, HC2]
Sp. Pl. 2: 970. 1753.
common duckweed, lesser duckweed, water lentil

This species has often been misidentified. Many specimens previously identified as L. minor are in fact L. turionifera, which apparently is far more common in Washington than L. minor.

Lemna minuta Kunth [FNA22, HC2]
Nov. Gen. Sp. 1: 372. 1816.
least duckweed

Lemna minima Phil. [Abrams], invalid name
Lemna minuscula Herter [JPM]

Lemna trisulca L. [FNA22, HC, HC2]
Sp. Pl. 2: 970. 1753.
ivy duckweed, ivy-leaved duckweed, star duckweed

Lemna turionifera Landolt [FNA22, HC2]
Aquatic Botany. 1: 355, fig. 4g?h. 1975.
turion duckweed

Lysichiton [FNA22, HC2]
Oesterreichisches Botanisches Wochenblatt. 7: 62. 1857 (as Lysichitum).
skunk cabbage

Lysichitum [HC], orthographic variant

Lysichiton americanus Hulten & H. St. John [FNA22, HC2]
Svensk Botanisk Tidskrift. 25:455. (as *Lysichitum americanum*). 1931.
skunk cabbage, yellow skunk cabbage

Lysichitum americanum Hultén & H. St. John [HC], orthographic variant

**Peltandra* [FNA22, HC2]
Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts. 89:103. 1819.
[name conserved]
arrow arum

**Peltandra virginica* (L.) Schott [FNA22, HC2]
Meletemata Botanica. 19. 1832.
arrow arum, tuckahoe

Arum virginicum L.

Spirodela [FNA22, HC, HC2]
Linnaea. 13: 391. 1839.
greater duckweed

Spirodela polyrhiza (L.) Schleid. [HC, HC2]
Linnaea 13: 392. 1839.
duckmeal, common duckmeat, greater duckweed

Lemna polyrrhiza L.
Spirodela polyrrhiza (L.) Schleid. [FNA22], orthographic variant
Spirodela polyrrhiza (L.) Schleid. var. *masonii* Daubs

Wolffia [FNA22, HC, HC2]
Beitrage zur Botanik. 1: 233. 1844.
water-meal

Wolffia borealis (Engelm.) Landolt & Wildi ex Gandhi, Wiersema & Brouillet [FNA22, HC2]
Ber. Geobot. Inst. ETH Stiftung Rubel. 44:137. 1977.
northern watermeal

FNA22: "The name Wolffia punctata has been applied to this species in error."

Wolffia brasiliensis Wedd. [FNA22, HC2]
Annales des Sciences Naturelles, Botanique. sér. 3, 12: 170. 1849.
Brazilian watermeal

Wolffia papulifera C.H. Thomp.
Wolffia punctata Griseb. [HC]

Wolffia columbiana H. Karsten [FNA22, HC, HC2]
Botanische Untersuchungen. [Landwirthschaftliche Lehranstalt. Physiologisches Laboratorium] Berlin. 1: 103, figs. 2g, 3g. 1865.
Columbian watermeal

**Wolffiella* [FNA22, HC, HC2]
Botanische Jahrbucher fur Systematik, Pflanzengeschichte und Pflanzengeographie. 21: 303. 1895.

**Wolffiella gladiata* (Hegelm.) Hegelm. [FNA22, HC2]
Botanische Jahrbucher fur Systematik, Pflanzengeschichte und Pflanzengeographie. 21: 304. 1895.
sword bogmat, mud-midget

Wolffia gladiata Hegelm.
Wolffiella floridana (Donnell Sm.) C.H. Thomp. [HC]

Wolffiella gladiata (Hegelm.) Hegelm. var. *floridana* Donnell Sm.

Asparagaceae [HC2] Asparagus Family

Synonyms:
Agavaceae [FNA26]

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

**Asparagus* [FNA26, HC, HC2]
Sp. Pl. 1: 313. 1753; Gen. Pl. ed. 5, 147. 1754.
asparagus

**Asparagus officinalis* L. [FNA26, HC, HC2]
Sp. Pl. 1: 313. 1753.
asparagus

Asparagus officinalis L. ssp. *officinalis*
Asparagus officinalis L. ssp. *prostratus* (Dumort.) Corb.

Brodiaea [FNA26, HC, HC2]
Trans. Linn. Soc. London, Bot. 10: 2. 1811.
[name conserved]
brodiaea
(see also *Dichelostemma*, *Triteleia*)

Brodiaea coronaria (Salisb.) Engl. [FNA26, HC, HC2, JPM2]
Notizbl. Königl. Bot. Gart. Berlin. 2: 317. 1899.
crown brodiaea, harvest brodiaea

Brodiaea coronaria (Salisb.) Engl. ssp. *coronaria* [FNA26]
Brodiaea synandra (A. Heller) Jeps.

FNA splits B. coronaria into two subspecies (ssp. coronaria and ssp. rosea), however the most recent treatment in Jepson Manual 2nd Edition elevates ssp. rosea to the rank of species. We follow that treatment here. See notes under B. coronaria.

Brodiaea rosea (Greene) Baker [HC2]
Gard. Chron. ser. 3, 20: 214. 1896.
Indian Valley brodiaea

Brodiaea coronaria (Salisb.) Engl. ssp. *rosea* (Greene) T.F.Niehaus [FNA26]

var. *rosea* [HC2]
Indian Valley brodiaea

Brodiaea rosea (Greene) Baker ssp. *rosea*

The original Jepson Manual (1951), Abrams\\'s Illustrated Flora of the Pacific States, the most recent Jepson Manual (2012), and Preston (2013) all recognize B. rosea at the rank of species. The primary difference used by these authors to distinguish from B. coronaria is flower color (rose vs. violet-purple) and staminode shape (bottle-shape vs. oblong). Based on specimens at WTU flower color appears less reliable than staminode shape. Whether to treat this taxon at the rank of species, subspecies, or as a synonym of B. coronaria is unclear, however here we follow the predominant treatment for this taxon, which is to recognize it at the rank of species.

Camassia [FNA26, HC, HC2]
Edwards?s Bot. Reg. 18: plate 1486. 1832.
[name conserved]
camas

Camassia cusickii S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 22: 479. 1887.
Cusick's camas

Recently (2017) documented in Klickitat County.

Camassia leichtlinii (Baker) S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 20: 376. 1885.
great camas

ssp. *suksdorfii* (Greenm.) Gould [FNA26, HC2]
Amer. Midl. Naturalist. 28: 723. 1942.
Suksdorf's great camas

Camassia leichtlinii (Baker) S. Watson var. *suksdorfii* (Greenm.) C.L. Hitchc. [HC]
Camassia suksdorfii Greenm.
Quamasia suksdorfii (Greenm.) Piper

Taxonomy follows FNA.

Camassia quamash (Pursh) Greene [FNA26, HC, HC2]
Man. Bot. San Francisco. 313. 1894.
common camas

ssp. *azurea* (A. Heller) Gould [FNA26, HC2]
Amer. Midl. Naturalist. 28: 733. 1942.
blue camas, prairie camas

Camassia azurea A. Heller
Camassia quamash (Pursh) Greene var. *azurea* (A. Heller) C.L. Hitchc. [HC]

ssp. *breviflora* Gould [FNA26, HC2]
Amer. Midl. Naturalist. 28: 737, figs. 7, 10a, b. 1942.
eastern camas, small-flowered camas

Camassia quamash (Pursh) Greene var. *breviflora* (Gould) C.L. Hitchc. [HC]

ssp. *maxima* Gould [FNA26, HC2]
Amer. Midl. Naturalist. 28: 732, fig. 7. 1942.
dark camas

Camassia quamash (Pursh) Greene var. *maxima* (Gould) C.L. Hitchc. [HC, KZ99]

Found west of the Cascades.

ssp. *quamash* [FNA26, HC2]
Man. Bot. San Francisco. 313. 1894.
common camas

Camassia quamash (Pursh) Greene ssp. *teapeae* (H. St. John) H. St. John [KZ99]
Camassia quamash (Pursh) Greene var. *quamash* [HC]

Found east of the Cascades in Washington.

**Convallaria* [FNA26, HC2]
Sp. Pl. 1: 314. 1753; Gen. Pl. ed. 5, 383. 1754.

Dichelostemma [FNA26, HC2]
Enum. Pl. 4: 469. 1843.
snake-lily

Dichelostemma congestum (Sm.) Kunth [FNA26, HC2]
Enum. Pl. 4: 470. 1843.
ookow, northern saitas

Brodiaea congesta Sm. [HC]
Hookera congesta (Sm.) Jeps.

FNA26: "Dichelostemma congestum can be recognized by its congested racemose inflorescence and

deeply bifid perianth appendages that stand away from the anthers to form a corona."

**Hyacinthoides* [FNA26, HC2]
Enum. 2. 1759.
bluebells

**Hyacinthoides ×massartiana* Geerinck [HC2]
Belg. J. Bot. 129(1): 83. 1997.
common bluebell, garden bluebell, hybrid bluebell

Hyacinthoides ×variabilis P.D. Sell [Stace 1997]

**Hyacinthoides non-scripta* (L.) Chouard [FNA26, HC2]
Bull. Soc. Bot. France. 81: 625. 1934.
English bluebells

Hyacinthoides nonscripta (L.) Chouard, orthographic variant

Maianthemum [FNA26, HC, HC2]
Prim. Fl. Holsat. 14. 1780.
[name conserved]
false lily-of-the-valley, false Solomon's seal

Smilacina [HC]

Maianthemum dilatatum (Alph. Wood) A. Nelson & J.F. Macbr. [FNA26, HC, HC2]
Bot. Gaz. 61: 30. 1916.
wild lily-of-the-valley, may-lily, two-leaf false Solomon's-seal

Maianthemum bifolium (L.) F.W. Schmidt var. *dilatatum* Alph. Wood
Maianthemum bifolium (L.) F.W. Schmidt var. *kamtschaticum* (J.F. Gmel.) Jeps.
Maianthemum kamtschaticum (J.F. Gmel.) Nakai
Unifolium dilatatum (Alph. Wood) Greene
Unifolium kamtschaticum (J.F. Gmel.) Gorman

FNA26: "Variation in the gross morphology, karyology, and ecology of the North American populations has been documented (S. Kawano et al. 1971) and compared with that of disjunct populations in Japan (S. Kawano et al. 1968b)."

Maianthemum racemosum (L.) Link [FNA26, HC2]
Enum. Hort. Berol. Alt. 1: 343. 1821.
large false Solomon's seal, false spikenard

Smilacina racemosa (L.) Desf. [HC]

ssp. *amplexicaule* (Nutt.) LaFrankie [FNA26, HC2]
J. Arnold Arbor. 67: 418. 1986.
plumed Solomon's seal, plumed spikenard

Maianthemum amplexicaule (Nutt.) W.A. Weber
Maianthemum racemosum (L.) Link var. *amplexicaule* (Nutt.) Dorn
Smilacina amplexicaulis Nutt.
Vagnera amplexicaulis (Nutt.) Greene

Maianthemum stellatum (L.) Link [FNA26, HC2]
Enum. Hort. Berol. Alt. 1: 343. 1821.
star-flowered Solomon's-seal

Convallaria stellata L.
Smilacina liliacea (Greene) Wynd
Smilacina sessilifolia Nutt. ex Baker
Smilacina stellata (L.) Desf. [HC]
Unifolium liliaceum Greene
Unifolium sessilifolium (Nutt. ex Baker) Greene
Unifolium stellatum (L.) Greene
Vagnera liliacea (Greene) Rydb.

Vagnera sessilifolia (Nutt. ex Baker) Greene
Vagnera stellata (L.) Morong

**Muscari* [FNA26, HC2]
Gard. Dict. Abr., ed. 4 vol. 2. 1754.
grape-hyacinth

**Muscari armeniacum* Leichtlin ex Baker [HC2, Stace 1997]
The Gardeners' Chronicle ser. 2, 9(2). 1878.
garden grape-hyacinth

Recently collected as garden escapes in 5 counties in western WA.

**Muscari botryoides* (L.) Mill. [FNA26, HC2]
Gard. Dict., ed. 8 Muscari no. 1. 1768.
common grape-hyacinth

**Ornithogalum* [FNA26, HC2]
Sp. Pl. 1: 306. 1753; Gen. Pl. ed. 5, 145. 1754.
ornithogale, star-of-Bethlehem

**Ornithogalum umbellatum* L. [FNA26, HC2]
Sp. Pl. 1: 307. 1753.
nap-at-noon, garden star-of-Bethlehem

FNA26: "Planted as a garden ornamental, Ornithogalum umbellatum produces many offsetting bulblets that are transported in soil and can become rampant weeds. Adding to the vegetative vigor of this species may be its aneuploid-polyploid karyology (T. W. J. Gadella and L. van Raamsdonk 1981; L. van Raamsdonk 1984). The flowers are noteworthy for their regularity in opening just before noon and closing again before sunset. Two digitalis-like glycosides, convallatoxin and convalloside, poisonous to humans and livestock, are found throughout the plant, but are concentrated in the bulbs and the flowers (W. H. Blackwell 1990; K. F. Lampe and M. A. McCann 1985; D. G. Spoerke Jr. and S. C. Smolinske 1990)."

Triteleia [FNA26, HC2]
Edwards?s Bot. Reg. 15: under plate 1293. 1830.
brodiaea, triplet-lily, triteleia

Triteleia grandiflora Lindl. [FNA26, HC2]
Edwards?s Bot. Reg. 15: under plate 1293. 1830.
blue-lily, blue umber lily, large-flowered tritelia

var. *grandiflora* [HC2]
blue-lily, Douglas' brodiaea, blue umber lily, large-flowered tritelia

Brodiaea douglasii S. Watson [HC]
Triteleia grandiflora Lindl. ssp. *grandiflora* [JPM]

FNA26: "Triteleia grandiflora is the type species of the genus and, along with T. hyacinthina, is its most widely distributed member. Found throughout the region between the Cascade Range and the northern Rocky Mountains, in sagebrush steppe and adjacent woodlands, it is easily recognized by the shape of the perianth, which is rounded at the base instead of tapered as in other Triteleia species. M. E. Barkworth (1975, 1977) studied variation

var. *howellii* (S. Watson) Hoover [HC2]
Amer. Midl. Naturalist 25: 80. 1941.
Howell's large-flowered triteleia, Howell's triteleia

Brodiaea douglasii S. Watson var. *howellii* (S. Watson) M. Peck [Peck]
Brodiaea howellii S. Watson [HC]
Triteleia bicolor (Suksd.) A. Heller
Triteleia grandiflora Lindl. ssp. *howellii* (S. Watson) Hoover [JPM]
Triteleia howellii (S. Watson) Greene [ILBC6]

Triteleia hyacinthina (Lindl.) Greene [FNA26, HC2]
Bull. Calif. Acad. Sci. 2: 142. 1886.

white brodiaea, fool's-onion, wild hyacinth

Brodiaea dissimulata M. Peck [Peck]
Brodiaea hyacinthina (Lindl.) Baker [HC]
Hesperoscordum hyacinthinum Lindl. [Abrams]

Butomaceae [FNA22, HC, HC2] Flowering Rush Family

**Butomus* [FNA22, HC, HC2]
Sp. Pl. 1: 372. 1753; Gen. Pl. ed. 5; 174, 1754.
flowering-rush

**Butomus umbellatus* L. [FNA22, HC, HC2]
Sp. Pl. 1: 372. 1753.
flowering rush

Butomus junceus Turcz.
Butomus umbellatus L. f. *vallisneriifolius* (Sagorski) Glnck

Noxious.

Commelinaceae [FNA22, HC2] Spiderwort Family

FNA22: "The flowers lack nectar and are ephemeral, lasting only a few hours. Their structure is seldom preserved in dried specimens. In the absence of well-pressed flowers, mature buds can be readily dissected in situ, and the arrangement and degree of development of the androecium and gynoecium easily determined."

**Commelina* [FNA22, HC2]
Sp. Pl. 1: 40. 1753; Gen. Pl. ed.; 5:25, 1754.

**Murdannia* [FNA22, HC2]
Illustrations of the Botany ... of the Himalayan Mountains ... 403, plate 95, fig. 3. 1840.
[name conserved]

**Murdannia keisak* (Hassk.) Hand.-Mazz. [FNA22, HC2]
Symb. Sin. 7: 1243. 1936.
wart-removing-herb

Aneilema keisak Hassk.

FNA22: "I agree with C. P. Dunn and R. R. Sharitz (1990) that this species is still expanding its range since its introduction early this century."

Cyperaceae [FNA23, HC, HC2] Sedge Family

Originally based on draft treatment by Peter Zika, March 2000; next updated 2004 based on Flora of North America, Volume 23; most recent update in 2009 based on "Field Guide to the Sedges of the Pacific Northwest" (SPNW) [2008].

Amphiscirpus [FNA23, HC2]
Notes Roy. Bot. Gard. Edinburgh. 33: 308. 1974.
Nevada clubrush

Amphiscirpus nevadensis (S. Watson) Oteng-Yeb. [FNA23, HC2]
Notes Roy. Bot. Gard. Edinburgh. 33: 308. 1974.
Nevada bulrush

Schoenoplectus nevadensis (S. Watson) J. Sojak
Scirpus nevadensis S. Watson [HC]

FNA23: "Amphiscirpus nevadensis superficially resembles some dwarfed forms of Schoenoplectus pungens, with which it sometimes grows; S. pungens is readily distinguished by its trigonous culms and leaf blades, prominently 2-fid, awned scales, and beaked achenes. Amphiscirpus nevadensis differs from all North American species of Schoenoplectus in its wiry culms and leaves, prominently ciliate ligules, absence of evident internal aerenchyma, and beakless achenes. It has been reported from Delta, Manitoba."

Bolboschoenus [FNA23, HC2]
Syn. Deut. Schweiz. Fl., ed. 3. 3: 2531. 1905.
tuberous bulrush

Bolboschoenus fluviatilis (Torr.) Soják [FNA23, HC2]
Cas. Nár. Mus., Odd. Prír. 141: 62. 1972.
river bulrush

Schoenoplectus fluviatilis (Torr.) M.T. Strong [KZ99]
Scirpus fluviatilis (Torr.) A. Gray [HC]
Scirpus maritimus L. var. *fluviatilis* Torr.

FNA23: "Bolboschoenus fluviatilis frequently forms dense, monospecific, often entirely vegetative stands, and it is more common than recorded because vegetative colonies are often overlooked (E. W. Chester and B. E. Wofford 1992). The only record for Alabama is an 1870 collection from the East Fowl River in the Mobile Delta, where the species has not been collected since. It was intentionally introduced into New Hampshire (D. J. Padgett and G. E. Crow 1993). The report from New Mexico by M. L. Fernald (1950) cannot be confirmed because no specimen is known. Putative hybrids with Bolboschoenus maritimus occur in California. Bolboschoenus novae-angliae probably originated from B. fluviatilis × B. robustus (J. Browning et al. 1995). Introgression from B. maritimus and/or B. robustus is suggested by the larger exocarp cells (evident in surface view) in some North American plants. The Eurasian B. yagara (Ohwi) Y. C. Yang & M. Zhan differs from B. fluviatilis in its narrower leaves and smaller achenes."

Bolboschoenus maritimus (L.) Palla [FNA23, HC2]
Syn. Deut. Schweiz. Fl., ed. 3. 3: 2531. 1905.
seacoast tuberous bulrush

Schoenoplectus maritimus (L.) Lye [KZ99]
Scirpus maritimus L. [HC]

ssp. *paludosus* (A. Nelson) T. Koyama [FNA23, HC2]
Acta Phytotax. Geobot. 31: 148. 1980.
saltmarsh bulrush, seacoast bulrush

Scirpus campestris Britton
Scirpus maritimus L. var. *paludosus* (A. Nelson) Kük. [HC]
Scirpus pacificus Britton ex Parish
Scirpus paludosus A. Nelson

FNA23: "Bolboschoenus maritimus belongs to a difficult, worldwide complex, in which the delimitation of specific and infraspecific taxa is still unclear. The new lectotype and epitype from the Baltic coast of Sweden selected by S. G. Smith and I. Kukkonen (1999) are used here as the basis for redefining B. maritimus subsp. maritimus, which was previously defined to include B. yagara (Ohwi) Y. C. Yang & M. Zhan (J. Browning et al. 1996; Z. Hroudová et al. 1998). It seems likely that some populations of both Bolboschoenus maritimus subsp. maritimus and B. maritimus subsp. paludosus have been introduced into the flora from Eurasia. Many bipistillate specimens from Eurasia and Africa are very similar to American plants. Further study may show that these plants should be included in Bolboschoenus maritimus subsp. paludosus. Plants from seashores have bright brown floral scales and medium to dark brown achenes; plants from the western interior have bright brown to very pale floral scales and/or achenes. Around Chicago, Illinois, Bolboschoenus maritimus subsp. paludosus is

spreading with other halophytes in roadside ditches where salts accumulate; it is likely to occur elsewhere in similar conditions. Bolboschoenus maritimus subsp. paludosus is planted for waterfowl food (H. A. George 1963, as Scirpus robustus), and in California it is sometimes mixed with B. glaucus and hybrids. The tough inner vascular cores of the rhizomes are used by Native Americans of the Pacific Coast in making baskets."

Carex [FNA23, HC, HC2]
Sp. Pl. 2: 972. 1753; Gen. Pl. ed. 5, 420. 1754.
sedge

Carex abrupta Mack. [FNA23, HC2]
Bull. Torrey Bot. Club. 43: 618. 1917.
abrupt-beaked sedge

Carex albonigra Mack. [FNA23, HC, HC2, SPNW]
Fl. Rocky Mts. 137, 1060. 1917.
black-and-white-scaled sedge

Carex amplifolia Boott [FNA23, HC, HC2, SPNW]
Fl. Bor.-Amer. 2: 228, plate 226. 1839.
big-leaf sedge

FNA23: "Carex amplifolia is confined to temperate western North America, where it is usually uncommon or rare from coastal lowlands to middle elevations in the mountains."

Carex angustata Boott [FNA23, HC2, SPNW]
Fl. Bor.-Amer. 2: 218. 1839.
narrow-leaved sedge

Carex egregia Mack.
Carex eurycarpa T. Holm [HC]
Carex oxycarpa T. Holm

See L. Standley, 1985. FNA23: "Carex angustata is a member of the C. stricta complex based on the scabrous, red-brown, bladeless ladder-fibrillose sheaths, the veined perigynia, the hypostomic leaves, and the low chromosome numbers. It is distinguished from sympatric members of the group, C. nudata and C. senta, by the rhizomatous habit, the few-veined perigynia, and the scabrous stems and from the often-sympatric C. aquatilis by the scabrous, veined sheaths and the veined perigynia."

Carex anthoxanthea J. Presl & C. Presl [FNA23, HC2, SPNW]
Reliq. Haenk. 1: 203. 1828.
grassy-slope arctic sedge, yellow-flowered sedge

Carex aperta Boott [FNA23, HC, HC2, SPNW]
Fl. Bor.-Amer. 2: 218, plate 219. 1839.
Columbia sedge

Carex accedens T. Holm
Carex accutina L.H. Bailey var. *tenuior* L.H. Bailey
Carex aperta Boott var. *umbrosa* Kük.
Carex aperta Boott var. *viridans* Kük.
Carex stylosa C.A. Mey. var. *virens* L.H. Bailey
Carex turgidula L.H. Bailey

FNA23: "Carex aperta and C. haydenii appear to be a very closely related, allopatric pair of species that may not be closely related to other members of the section. This species-pair is distinguished by the inflated perigynia, the acute scales that are longer than the perigynia, and the unique chromosome number. Carex aperta is distinguished from C. haydenii by its rhizomatous habit, the dull brown achenes, and the entire beak. It is sometimes mistaken for the sympatric taxa that also lack veins on the perigynia, C. aquatilis and C. scopulorum; mature specimens can easily be identified by the inflated perigynia."

Carex aquatilis Wahlenb. [FNA23, HC, HC2]
Kongl. Vetensk. Acad. Nya Handl. 24: 165. 1803.
water sedge

var. *aquatilis* [FNA23, HC2, SPNW]

Kongl. Vetensk. Acad. Nya Handl. 24: 165. 1803.
water sedge

Carex acutinella Mack.
Carex interimus Maguire
Carex pachystoma T. Holm
Carex suksdorfii Kük.
Carex variabilis L.H. Bailey

FNA23: "Carex aquatilis is circumboreal and variable; four extensively intergrading varieties are recognized in North America. The species is distinguished by amphistomic (epistomic in var. dives) papillose leaves, glabrous sheaths with a concave apex, perigynia that lack veins and are usually brown-spotted on the proximal half, and have glossy achenes. The circumboreal Carex aquatilis var. aquatilis is very common in wetlands of the northern and montane portions of North America. The plants are usually rhizomatous; in very wet or flooded sites they may form cespitose clumps. Carex aquatilis var. aquatilis is distinguished from the sympatric Carex stricta by the sheaths not ladder-fibrillose, obovoid and veinless perigynia that are rounded at apex, glossy achenes, and amphistomic leaves. It is often confused with C. emoryi, and distinguished by perigynia that lack veins, concave sheath apex, glossy achenes, and amphistomic leaves. In western North America, it is often sympatric with C. scopulorum and may be distinguished by the pale brown perigynia, glossy achenes, and amphistomic leaves. Carex aquatilis and C. scopulorum occasionally hybridize; hybrids have been named as C. ×sphacelata T. Holm and C. ×chionophila T. Holm. Carex aquatilis var. aquatilis overlaps and may intergrade with C. aquatilis var. dives along the Pacific Coast, with var. minor along the Arctic coast, and with var. substricta in the Great Lakes-New England region. Much of var. aquatilis in the southern part of its range has been called var. altior (L. H. Bailey) Rydberg. The type for var. altior is a specimen of C. emoryi."

var. *dives* (T. Holm) Kük. [FNA23, HC2, SPNW]
Pflanzenr. 28[IV,20]: 311. 1909.
Sitka sedge

Carex dives T. Holm
Carex howellii L.H. Bailey
Carex panda C.B. Clarke
Carex sitchensis Prescott ex Bong. [HC, VPBC4]

Some authorities continue to treat C. sitchensis as a separate species e.g. A. Ceska in Illustrated Flora of British Columbia, 2001. FNA23: "Carex aquatilis var. dives is the most robust variety of C. aquatilis and the only member to have pendent spikes, ellipsoid perigynia, and epistomic leaves. Carex aquatilis var. dives intergrades with var. aquatilis and does not appear to be distinct at the specific level. It may hybridize with C. lyngbyei."

Carex arcta Boott [FNA23, HC, HC2, SPNW]
Ill. Carex. 155, plate 497. 1867.
northern clustered sedge

Carex canescens L. ssp. *polystachya* Boott
Carex canescens L. var. *oregana* L.H. Bailey
Carex heleonastes L. f. var. *scabriuscula* Kük.
Carex kunzei Olney

Carex atherodes Spreng. [FNA23, HC, HC2, SPNW]
Syst. Veg. 3: 828. 1826.
awned sedge, wheat sedge

FNA23: "Carex atherodes is a major wetland species in portions of the Midwest and West and becomes increasingly uncommon and local in the eastern portions of its range. It forms large clones and can tolerate deeper water than most Carex. Glabrous forms occur and seem to be more common in the western portion of the range. Carex atherodes rarely hybridizes with C. trichocarpa."

Carex athrostachya Olney [FNA23, HC, HC2, SPNW]
Proc. Amer. Acad. Arts. 7: 393. 1868.
slender-beak sedge

Carex atherostachya misspelled

FNA23: "Carex athrostachya intergrades with C. unilateralis."

Carex atrosquama Mack. [FNA23, HC2, SPNW]
Proc. Biol. Soc. Wash. 25: 51. 1912.
black-scale sedge

Carex apoda Clokey
Carex atrata L. ssp. *atrosquama* (Mack.) Hultén
Carex atrata L. var. *atrosquama* (Mack.) Cronquist [HC]
Carex viridior Mack.

Carex aurea Nutt. [FNA23, HC, HC2, SPNW]
Gen. N. Amer. Pl. 2: 205. 1818.
golden sedge, pumpkin sedge

Carex bebbii (L.H. Bailey) Olney ex Fernald [FNA23, HC, HC2, SPNW]
Proc. Amer. Acad. Arts. 37: 478. 1902.
Bebb's sedge

Carex tribuloides Wahlenb. var. *bebbii* L.H. Bailey

FNA23: "In addition to typical perennial behavior, Carex bebbii may reach reproductive stage from seed in a single season, thus behaving as a facultative annual. Carex athrostachya and C. crawfordii may share this reproductive feature."

Carex bolanderi Olney [FNA23, HC2, SPNW]
Proc. Amer. Acad. Arts. 7: 393. 1868.
Bolander's sedge

Carex deweyana Schwein. var. *bolanderi* (Olney) W. Boott

Segregated from C. deweyana in FNA.

Carex brevior (Dewey) Mack. ex Lunell [FNA23, HC, HC2, SPNW]
Amer. Midl. Naturalist. 4: 235. 1915.
Plains oval sedge, short-beaked sedge

Carex festucacea Schkuhr ex Willd. var. *brevior* (Dewey) Fernald
Carex straminea Willd. ex Schkuhr var. *brevior* Dewey

FNA23: "Carex brevior seems to display an unusually broad, aneuploid chromosome series that does not readily correlated with any features of external morphology (P. E. Rothrock and A. A. Reznicek 1998). The chromosome variation may, however, have a geographic relationship. Among the plants observed, the lowest number came from northeast Texas while the highest number (n = 34) came from Manitoba (Á. Löve and D. Löve 1981b). Records of Carex brevior from ruderal habitats east and south of its main range are likely introductions."

Carex breweri Boott [FNA23, HC, HC2, SPNW]
Ill. Carex. 142, plate 455. 1867.
Brewer's sedge
(see also *Carex engelmannii*)

Carex breweri Boott var. *breweri* [HC]

FNA23: "A. Cronquist (1969) considered Carex breweri and C. engelmannii conspecific; he distinguished them at the varietal level by a difference in pistillate scale characters. The correlated differences in perigynium shape and veins, the dimensions of most structures, and the foliar anatomy support their retention as distinct species."

Carex brunnescens (Pers.) Poir. [FNA23, HC, HC2]
Encycl., Suppl. 3: 286. 1813.
brown sedge

ssp. *brunnescens* [FNA23, HC2]
brown sedge

Carex brunnescens (Pers.) Poir. ssp. *alaskana* Kalela

Carex brunnescens (Pers.) Poir. ssp. *brunescens* [SPNW, FNA23], orthographic variant
Carex brunnescens (Pers.) Poir. ssp. *pacifica* Kalela
Carex brunnescens (Pers.) Poir. ssp. *vitilis* (Fr.) Kalela
Carex canescens L. var. *alpicola* Wahlenb.
Carex canescens L. var. *persoonii* (Sieber) H. Christ
Carex gebhardii Hoppe
Carex gracilis Ehrh.
Carex persoonii Sieber
Carex vitilis Fr.

FNA23: "Carex brunnescens is variable across its wide distribution; it deserves a monographic treatment. Many taxa have been described. Most variation is presumably of ecophenotypic nature; when growing in shady habitats the species is slender and weak and the scales are not or but little colored; in more exposed sites it is stiffer, and the scales become strongly brownish tinged. Only two subspecies are recognized here. Subspecies alaskana and subsp. pacifica (see A. Kalela 1965) seem to grade to the typical subsp. brunnescens. A short-leaved plant with short and red tinged perigynia from western United States (Colorado, Montana, Utah, Wyoming) may represent a southern subspecies and should be studied in greater detail. "

Carex buxbaumii Wahlenb. [FNA23, HC, HC2, SPNW]
Kongl. Vetensk. Acad. Nya Handl. 24: 163. 1803.
brown bog sedge, Buxbaum's sedge

Carex buxbaumii Wahlenb. var. *anticostensis* Raymond
Carex holmiana Mack.
Carex polygama Schkuhr

Carex californica L.H. Bailey [FNA23, HC, HC2, SPNW]
Mem. Torrey Bot. Club. 1: 9. 1889.
California sedge

Carex canescens L. [FNA23, HC, HC2]
Sp. Pl. 2: 974. 1753.
silvery sedge

ssp. *canescens* [FNA23, HC2, SPNW]
Sp. Pl. 2: 974. 1753.
grey sedge, silvery sedge

Carex canescens L. var. *robustina* Macoun
Carex canescens L. var. *robustior* Blytt ex Andersson
Carex subloliacea (Fernald) E.P. Bicknell

FNA23: "Carex canescens subsp. canescens is a variable taxon with a wide circumpolar distribution; it is found throughout the distibution range of the species, except the southernmost parts of southeastern United States. Many varieties and forms have been described in the subspecies. Slender, short plants with subglobose spikes and small, short-beaked perigynia have often been called var. subloliacea. Those plants represent both subspecies treated herein and to a minor part also C. lapponica. Tall, robust plants with stout, relative dark perigynia from mountainous regions (especially British Columbia and Alaska) may represent an ecotype and are often called var. robustior. Similar specimens have been collected from southern South America (Tierra del Fuego, Falkland Islands). The status of the taxon needs further study."

Carex capillaris L. [FNA23, HC, HC2, SPNW]
Sp. Pl. 2: 977. (as capillari). 1753.
hair sedge

Carex boecheriana Á. Löve, D. Löve & Raymond
Carex chlorostachys Steven
Carex fuscidula V.I. Kreczetovicz ex T.V. Egorova

FNA23: "Carex capillaris is somewhat variable and is often divided into two infraspecific taxa. Plants from the south are larger, have pale brown pistillate scales, and serrulate perigynium beaks. Northern plants are smaller, have medium brown pistillate scales, and smooth perigynium beaks. These characteristics are

only weakly correlated, making it difficult to assign individuals to these taxa except in a very arbitrary manner. When recognized, the southern plants are called subsp. capillaris (C. chlorostachya Steven, C. capillaris var. major Drejer ex Blytt), and the northern plants are called subsp. fuscidula (V. I. Kreczetovicz ex T. V. Egorova) Á. Löve & D. Löve. T. V. Egorova (1964) recorded the Asian species Carex delicata C. B. Clarke (as C. karoi) from Colorado; no specimens have been seen that confirm that report, and it seems likely an error because T. V. Egorova (1999) indicated the species is restricted to Asia. This species has dense lateral spikes with 15?30 perigynia, the perigynia rounded at the apex and abruptly beaked, with the beak 0.1?0.2 mm. Carex tiogana D. M. Taylor & J. Mastrogiuseppe from northern California cannot be satisfactorily distinguished from C. capillaris, although it possesses an uncommon combination of characteristics. It is probably best treated as a variety or subspecies of C. capillaris. Until a more satisfactory account of the variability in C. tiogana and its relationship with C. krausei is produced, its status must remain uncertain."

Carex capitata L. [FNA23, HC, HC2]
Syst. Nat. ed. 10. 2: 1261. 1759.
capitate sedge

Carex arctogena Harry Sm.
Carex capitata L. ssp. *capitata* [KZ99]
Carex capitata L. var. *arctogena* (Harry Sm.) Hultén

FNA says this species does not occur in WA. SPNW shows the range of this species to be well south of Washington. No vouchers at WTU. This species is considered excluded until further evidence appears indicating that it should be included in the Washington flora. FNA23: "In Scandinavia (L. Reinhammar 1999) and Russia (T. V. Egorova 1999), Carex arctogena is distinguished from C. capitata on ecologic and morphologic grounds and also by allozymes at the rank of species. In North America the distinctions are not clear; two taxa can be observed, but there are also numerous specimens of uncertain determination. When making new collections, it is important to evaluate the differences seen elsewhere and to pay close attention to habitat and habit (see below). Separate status at some rank may be appropriate for the taxon "arctogena"• in North America too. If C. antarctogena Roivainen from Tierra del Fuego is placed within C. capitata as D. M. Moore and A. O. Chater (1971) and D. M. Moore (1983) have done, then the species occurs at both the northern and the southern extremes of the Americas. Carex capitata and C. arctogena differ in habitat (boreal mires versus alpine heaths), habit (mat-forming versus tufted), and morphology of the pistillate scales (much shorter and narrower than perigynia and with narrow hyaline margins versus as long as perigynia and with broad hyaline margins) and perigynia (beak gradually formed and smooth versus beak and may be sparingly serrulate)."

Carex chordorrhiza Ehrh. ex L. f. [FNA23, HC2, SPNW]
Suppl. Pl. 414. 1782.
cordroot sedge, creeping sedge, rope-root sedge

FNA says this species does not occur in WA but WTU has vouchers collected from Okanogan County. Also recorded by Peter Zika as an introduced species in cranberry bogs in Oregon. FNA23: "Easily overlooked, Carex chordorrhiza is uncommon and local in much of its range, especially in districts with predominantly acidic soils. However, it can form extensive stands and be a dominant species in some boreal wetlands. Oregon collections represent occurrences in commercial cranberry bogs and are presumably introductions. The rhizomes are short and rarely collected; the leafy vegetative stems elongate dramatically as the season progresses. At first erect to ascending, the stems eventually lie flat and next season send out roots and shoots from the nodes. These horizontal stems typically become overgrown by moss or form networks in shallow water, thus appear to be rhizomes."

Carex circinata C.A. Mey. [FNA23, HC, HC2, SPNW]
Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans. 1: 209, plate 6. 1831.
coiled sedge

Carex comosa Boott [FNA23, HC, HC2, SPNW]
Proc. Linn. Soc. London. 1: 258. 1846.
bearded sedge, bristly sedge

FNA23: "Carex comosa is uncommon and local in the west and south of glaciated regions in the east except in some coastal areas. Carex comosa rarely forms sterile hybrids with C. pseudocyperus and C. hystericina."

Carex concinnoides Mack. [FNA23, HC, HC2, SPNW]
Bull. Torrey Bot. Club. 33: 440. 1906.
northwestern sedge, tetrastigmatic sedge

FNA23: "Carex cocinnoides is the only North American sedge with four stigmas per pistil. It is most similar to C. richardsonii; differs in its more closely aggregated, short-pedunculate pistillate spikes with very short-sheathing bracts. These close relatives are sympatric only at the northern and eastern edge of the range of C. concinnoides."

Carex cordillerana Saarela & B.A. Ford [FNA23, HC2, SPNW]
Syst. Bot. 26: 715, figs. 1C, 2C, 3C, 4C, 8. 2001.
cordilleran sedge

Carex saximontana Mack. [FNA23, HC2], misapplied

Vouchers of this species at WTU have historically been called C. backii.

Carex crawei Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts, ser. 2. 2: 246. 1846.
Crawe's sedge

Last collected in WA in 1841. FNA23: "Though widespread, Carex crawei is usually rare or local except near the shores of the Great Lakes, glades in the Interior Highlands, and prairie swales on parts of the Great Plains. Other authors have reported it from Nova Scotia (H. J. Scoggan 1978?1979, part 2; earlier mentioned by M. L. Fernald 1948 on the authority of J. M. Macoun 1899); no specimens to substantiate the reports have been found. The perigynia in Carex crawei are usually smaller than in C. microdonta. A few specimens from Ontario and New York with all other characteristics of C. crawei have larger and slightly beaked perigynia that approach those of C. microdonta."

Carex crawfordii Fernald [FNA23, HC, HC2, SPNW]
Proc. Amer. Acad. Arts. 37: 469, plate 1, figs. 12?14. 1902.
Crawford's sedge

Occurs as an introduced weed in coastal WA and OR cranberry bogs.

Carex cusickii Mack. ex Piper & Beattie [FNA23, HC, HC2, SPNW]
Fl. N.W. Coast. 72. 1915.
Cusick's sedge

Carex teretiuscula Gooden. var. *ampla* L.H. Bailey

FNA23: "Although infrequent or local in most parts of its range, Carex cusickii is fairly common in and west of the Cascade Mountains. Reports of C. cusickii from Utah probably are based on specimens of C. diandra. Carex cusickii is more similar to C. prairea than either species is to C. diandra. Both are typically more robust than the latter, having wider leaves and sometimes larger inflorescences and larger perigynia. The characteristics distinguishing the first two, although seemingly unimportant, are constant and appear to have populational significance. Furthermore, the geographic ranges of the species, although contiguous in the western part of the Cariboo Forest Region of southern British Columbia, are wholly discrete except for the remarkable occurrence of C. prairea in Flathead County, Montana. It remains to be determined if any real overlapping or recombining of characteristics occurs among the several species of section Heleoglochin, or whether the difficulty in drawing precise lines between them in the herbarium is merely the consequence of inadequate specimens and reliance on too few characters."

Carex davyi Mack. [FNA23, HC2]
Bull. Torrey Bot. Club. 43: 606. 1917.
Constance's sedge, Davy's sedge

Carex constanceana Stacey [FNA23]

Treated as a synonym of C. petasata by H&C. FNA23: "Carex constanceana, known from only one locality, has not been collected since the early 1900s. It has features of C. petasata and of C. davyi. In one flora C. constanceana was included in C. petasata (A. Cronquist 1969)."

Carex deflexa Hornem. [FNA23, HC2]
Fors. Oecon. Plantel. ed. 3. 1: 938. 1821.
mountain mat sedge

var. *boottii* L.H. Bailey [FNA23, HC2]
Mem. Torrey Bot. Club. 1: 43. 1889.
northern sedge

Carex brevipes W. Boott, illegitimate name
Carex globosa Boott var. *brevipes* W. Boott ex Mack.
Carex rossii Boott var. *brevipes* (W. Boott) Kük.

FNA23: "Carex defexa var. boottii is sometimes included in C. rossii. The varieties are said to differ in the degree of spreading of the rhizomes; var. boottii is more cespitose in habit and has stouter rootstocks than var. deflexa. That character varies considerably within each variety, and may be dependent on the compaction and particle size of the soil in which a plant is growing. These taxa clearly form a complex that requires further study. The name Carex brevipes was first proposed by W. Boott (in S. Watson 1876?1880, vol 2, p. 246) but then withdrawn (p. 485), so was not validly published by him. Subsequent authors used the name, attributing it to W. Boott. It was validly published at species rank by K. K. Mackenzie (1931?1935) and at varietal rank by L. H. Bailey."

Carex densa (L.H. Bailey) L.H. Bailey [FNA23, HC, HC2, SPNW]
Mem. Torrey Bot. Club. 1: 50. 1889.
dense sedge

Carex breviligulata Mack.
Carex brongniartii Kunth var. *densa* L.H. Bailey
Carex chrysoleuca T. Holm
Carex dudleyi Mack. [JPM]
Carex vicaria L.H. Bailey [KZ99]
Carex vicaria L.H. Bailey var. *costata* L.H. Bailey
Carex vulpinoidea Michx. var. *vicaria* (L.H. Bailey) Kük.

FNA23: "Carex densa has been subdivided into as many as four species. Variable characters of the taxon include the compaction of the inflorescence, the shape of the sheath apex, the size and number of veins on the perigynium, the length of the pistillate scale awn, and the development of spongy tissue basal and lateral to the perigynium. The morphologic variation shows no geographic or ecologic pattern and cannot be separated consistently by visual or statistical analyses. The most frequently recognized taxa, C. densa and C. dudleyi, are end-points along a morphologic continuum of spongy tissue development. The perigynium of typical C. densa has well-developed spongy tissue, giving an ovate shape and rounded base. In contrast, the typical C. dudleyi lacks development of spongy tissue, giving a rhombic shape and tapered base. These extremes are connected by a continuous range of intermediate forms that display the same range of variation found in C. vulpinoidea. A single species is here recognized; however, further study may clarify patterns of biological variation within the complex taxon."

Carex deweyana Schwein. [FNA23, HC, HC2]
Ann. Lyceum Nat. Hist. New York. 1: 65. 1824.
Dewey's sedge
(see also *Carex bolanderi*, *Carex infirminervia*, *Carex leptopoda*)

var. *deweyana* [FNA23, HC2, SPNW]
Ann. Lyceum Nat. Hist. New York. 1: 65. 1824.
Dewey's sedge

Carex diandra Schrank [FNA23, HC, HC2, SPNW]
Cent. Bot. Anmerk. 57 [49]. 1781.
lesser panicled sedge, lesser tussock sedge

FNA23: "Although common northward (but not at the highest latitudes except in District of Mackenzie and Yukon), this circumboreal sedge is occasional to rare throughout much of its United States range. Carex diandra was reported from Tennessee by J. K. Underwood (1945) and in lists of Tennessee plants on the basis of an old specimen that has been destroyed. H. A. Gleason and A. Cronquist\\'s (1963, 1991) report for Missouri, quoted in later floras and catalogues, is believed to be erroneous. See comments under C. prairea."

Carex disperma Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts. 8: 266. 1824.
short-leaf sedge

Carex tenella Schkuhr

**Carex divulsa* Stokes [FNA23, HC2]
Bot. Arr. Brit. Pl., ed. 2. 2: 1035. 1787.
Leers's sedge

*ssp. *leersii* (Kneuck.) W. Koch [HC2]
Mitt. Bad. Landesvereins Naturk. Naturschutz Freiburg 1(Heft 11): 259. 1923.
Leer's sedge

Planted as an ornamental and locally escaping in King Co.

Carex douglasii Boott [FNA23, HC, HC2, SPNW]
Fl. Bor.-Amer. 2: 213, plate 214. 1839.
Douglas's sedge

FNA23: "The stigmas of Carex douglasii are very long and form a tangled mat that persists essentially until the perigynia mature, giving a distinctive appearance to pistillate inflorescences of the species. Though the plants are uniform in appearance superficially, the perigynia are quite variable in shape and size."

Carex eburnea Boott [FNA23, HC2]
Fl. Bor.-Amer. 2: 226, plate 225. 1839.
bristle-leaved sedge

Known from Pend Oreille County. Reports of Carex krausei in WA belong here.

Carex echinata Murray [FNA23, HC2]
Prodr. Stirp. Goett. 76. 1770.
star sedge

Carex muricata L. [FNA23, HC], misapplied

ssp. *echinata* [FNA23, HC2, SPNW]
Prodr. Stirp. Goett. 76. 1770.
star sedge

Carex angustior Mack.
Carex ormantha (Fernald) Mack.

FNA23: "Carex echinata subsp. echinata is a complex, variable entity; plants of relatively sterile habitats from Newfoundland to Minnesota and south locally to the mountains of Tennessee and North Carolina have very narrow perigynia with the spikes either in congested heads or more laxly arranged and may be called C. echinata var. angustata (J. Carey) L. H. Bailey. Plants from the San Bernardino Mountains, Coast Ranges, Sierra Nevada, and some of the volcanic peaks in California, Oregon, and Washington tend to have very elongate inflorescences with widely spaced spikes and may be called C. echinata var. ormantha Fernald. In some areas these variants appear reasonably distinct, but over most of the species range intergrades between the extremes are frequent."

ssp. *phyllomanica* (W. Boott) Reznicek [FNA23, HC2, SPNW]
Contr. Univ. Mich. Herb. 14: 195. 1980.
coastal star sedge

Carex phyllomanica W. Boott [HC]

Carex engelmannii L.H. Bailey [FNA23, HC2, SPNW]
Proc. Amer. Acad. Arts. 22: 132. (as engelmanni). 1887.
Engelmann's sedge

Carex breweri Boott var. *paddoensis* (Suksd.) Cronquist [HC]
Carex engelmannii L.H. Bailey var. *paddoensis* (Suksd.) Kneucker
Carex paddoensis Suksd.

FNA23: "Carex engelmannii occurs north and east of the range of C. breweri; both species occur on Mt. Adams, Washington. Carex engelmannii is most similar to C. subnigricans. It differs in the inrolled scale margins, the larger, sessile perigynia, the stipitate achene, and leaf cross sectional shape. It occurs in drier habitats usually to the north and east of the range of C. subnigricans. Relationships among the three species placed in the section, as well as their relationships to other unispicate sections, should be studied further."

Carex exsiccata L.H. Bailey [FNA23, HC2, SPNW]
Mem. Torrey Bot. Club. 1: 6. 1889.
big inflated sedge

Carex vesicaria L. var. *major* Boott [HC]

FNA23: "Carex exsiccata is regarded by some authors, with some justification, as C. vesicaria var. major. It is a coarser plant with leathery, lanceolate perigynia gradually tapered to the apex that occurs at lower elevations and is usually readily distinguishable although some plants from the Cascades are difficult to place. In the west, typical C. vesicaria occurs mostly above 1400 m. Some authors (B. Boivin 1967?1979; T. M. C. Taylor 1983) treat all western plants as C. exsiccata, distinct from the eastern North American and Eurasian C. vesicaria. The Rocky Mountain, Cascade Range, and Sierra Nevada plants do not differ substantially from eastern plants, except that sometimes they have darker perigynia and scales."

Carex feta L.H. Bailey [FNA23, HC, HC2, SPNW]
Bull. Torrey Bot. Club. 20: 417. 1893.
green-sheath sedge

Carex straminea Willd. ex Schkuhr var. *mixta* L.H. Bailey

Carex filifolia Nutt. [FNA23, HC, HC2]
Gen. N. Amer. Pl. 2: 204. 1818.
thread-leaved sedge

var. *filifolia* [FNA23, HC2, SPNW]
Gen. N. Amer. Pl. 2: 204. 1818.
thread-leaf sedge

FNA separates C. filifolia into two varieties only one of which occurs in WA.

Carex flava L. [FNA23, HC, HC2, SPNW]
Sp. Pl. 2: 975. 1753.
yellow sedge, yellow-green sedge

Carex flava L. var. *fertilis* Peck
Carex flava L. var. *gaspensis* Fernald
Carex flava L. var. *laxior* (Kük.) Gleason
Carex laxior (Kük.) Mack.

FNA does not list for WA. but good voucher specimens can be found at WTU and perhaps other herbaria.

Carex fracta Mack. [FNA23, HC, HC2, SPNW]
Erythea. 8: 38. 1922.
fragile-sheath sedge

Carex geyeri Boott [FNA23, HC, HC2, SPNW]
Trans. Linn. Soc. London, Bot. 20: 118. 1846.
elk sedge, Geyer's sedge

Carex gynocrates Wormskjöld ex Drejer [FNA23, HC2, SPNW]
Naturhist. Tidsskr. 3: 434. 1841.
yellow bog sedge

Carex alascana Boeckeler
Carex dioica L. [HC], misapplied
Carex dioica L. var. *gynocrates* (Wormskjöld ex Drejer) Ostenf. [HC]

Carex halliana L.H. Bailey [FNA23, HC, HC2, SPNW]
Bot. Gaz. 9: 117. 1884.
Hall's sedge

Carex oregonensis Olney ex L.H. Bailey

Carex hassei L.H. Bailey [FNA23, HC2, SPNW]
Bot. Gaz. 21: 5. 1896.
false golden sedge

Carex saliniformis Mack.

SPNW: "Taxonomy of Carex hassei and relatives is controversial. It has often been merged with C. aurea and/or northern and eastern C. garberi. Even treated as a separate species, C. hassei has more variation than is typical of most Carex species. Variants include coastal CA plants called C. saliniformis; serpentine plants of NW CA and SW OR with a mix of 2 and 3 stigmas; small neat plants of alkaline springs in NV; and plae, robust plants of the San Bernadino Mts. of S CA."

Carex haydeniana Olney [FNA23, HC, HC2, SPNW]
Botany (Fortieth Parallel). 366. 1871.
cloud sedge, Hayden's sedge

Carex festiva Dewey var. *decumbens* T. Holm
Carex macloviana d'Urv. ssp. *haydeniana* (Olney) Roy L. Taylor & MacBryde
Carex nubicola Mack.

FNA lists for WA but its occurrence needs to be documented. KZ, 2004, reports a voucher at WS from Walla Walla, County. Identification needs to be verified. SPNW does not show this species occurring anywhere near Washington. Until a voucher is located confirming the Washington occurrence, this species is considered excluded.

Carex hendersonii L.H. Bailey [FNA23, HC, HC2, SPNW]
Proc. Amer. Acad. Arts. 22: 115. (as hendersoni). 1887.
Henderson's sedge

Carex heteroneura W. Boott [FNA23, HC2, SPNW]
Bot. California. 2: 239. 1880.
different-veined sedge, smooth-fruited sedge
(see also *Carex atrosquama*)

Carex atrata L. var. *erecta* W. Boott [HC]

FNA23: "Intermediates between Carex epapillosa and C. heteroneura occur in California, Nevada, and Utah."

Carex hoodii Boott [FNA23, HC, HC2, SPNW]
Fl. Bor.-Amer. 2: 211, plate 211. 1839.
Hood's sedge

Carex hystericina Muhl. ex Willd. [FNA23, HC2, SPNW]
Sp. Pl. 4(1): 282. 1805.
porcupine sedge

Carex hystricina misspelled [HC]

FNA does not list for WA but several vouchers exist at WTU and probably other herbaria. FNA23: "Carex hystericina is widespread and common, even weedy, in regions with calcareous substrates. It hybridizes uncommonly with C. pseudocyperus and more rarely with C. comosa, C. schweinitzii, C. utriculata, and C. vesicaria. Hybrids are sterile and intermediate in morphology. The species epithet is often, but not originally, spelled "hystricina."•

Carex illota L.H. Bailey [FNA23, HC, HC2, SPNW]
Mem. Torrey Bot. Club. 1: 15. 1889.
small-head sedge

FNA23: "Carex illota is unlike all other members of sect. Ovales in having perigynia lacking wings and margins consistently entire from perigynia base to beak tip."

Carex infirminervia Naczi [FNA23, HC2, SPNW]
Novon. 12: 528, fig. 7. 2002.
weak-veined sedge

Carex inops L.H. Bailey [FNA23, HC2]
Proc. Amer. Acad. Arts. 22: 126. 1886.
long-stolon sedge

ssp. *inops* [FNA23, HC2, SPNW]
Proc. Amer. Acad. Arts. 22: 126. 1886.
long-stolon sedge

Carex pensylvanica Lam. var. *vespertina* L.H. Bailey [HC]
Carex verecunda Holm
Carex vespertina (L.H. Bailey) Howell

Carex integra Mack. [FNA23, HC, HC2]
Bull. Torrey Bot. Club. 43: 608. 1917.
smooth-beaked sedge

WA population, on Mt. Adams, is disjunct and has not been seen since 1909.

Carex interior L.H. Bailey [FNA23, HC, HC2, SPNW]
Bull. Torrey Bot. Club. 20: 426. 1893.
inland sedge

Carex scirpoides Schkuhr ex Willd.

FNA23: "When Carex interior occurs with C. sterilis, C. echinata, and (rarely) C. atlantica, usually sterile intermediates, presumably hybrids, may occasionally be found."

Carex interrupta Boeckeler [FNA23, HC, HC2, SPNW]
Linnaea. 40: 432. 1876.
green-fruited sedge, interrupted sedge

Carex interrupta Boeckeler var. *distenta* Kük.

FNA23: "Carex interrupta, an uncommon species, is distinguished by the very small, green, glabrous perigynia distended and often split by the developing achenes. Relationships of the species with other members of the section are not clear; it shares distinctive characteristics with C. torta and C. endlichii, the next two species."

Carex jonesii L.H. Bailey [FNA23, HC, HC2, SPNW]
Mem. Torrey Bot. Club. 1: 16. 1889.
Jones' sedge

Carex nervina L.H. Bailey var. *jonesii* (L.H. Bailey) Kük.

FNA23: "The affinities and sectional placement of Carex jonesii are unclear. Although C. jonesii has often been considered to be part of the C. nervina-C. neurophora complex, it is distinguished from those species by numerous vegetative and reproductive characteristics, including basal leaves with short sheaths with rapidly disinte-grating hyaline fronts and perigynia with smooth beaks, oblique, rather than bidentate at the mouth. Carex jonesii is frequently confused with other western montane sedges that have capitate infloresences. It is most often confused with C. illota due to the strong similarity of the perigynia (somewhat shorter and more rounded apically in C. illota). Although C. illota is placed in sect. Ovales based on the gynecandrous spikes, that character can be very difficult to determine in mature plants due to the condensed inflorescence. The ovate, spongy-based perigynia of C. illota suggest a closer relationship with C. jonesii than with typical members of sect. Ovales."

Carex kelloggii W. Boott [HC2]
Bot. California [W.H.Brewer] 2: 240. 1880.
Kellogg's sedge, lakeshore sedge

var. *impressa* (L.H. Bailey) B. L. Wilson & Otting [HC2]
J. Bot. Res. Inst. Texas 7(1): 53. 2013.
few-ribbed sedge, mountain shore sedge

Carex interrupta Boeckeler var. *impressa* L.H. Bailey
Carex lenticularis Michx. var. *impressa* (L.H. Bailey) L.A. Standl. [FNA23, SPNW]
Carex limnaea Holm
Carex paucicostata Mack. [SPNW, FNA23]

var. *kelloggii* [HC2]
Kellogg's sedge, lakeshore sedge

Carex hindsii C.B. Clarke var. *brevigluma* Kük.
Carex lenticularis Michx. var. *lipocarpa* (Holm) L.A. Standl. [FNA23, SPNW]
Carex lenticularis Michx. var. *paullifructus* Kük.
Carex vulgaris L.H. Bailey var. *lipocarpa* Holm

var. *limnophila* (Holm) B. L. Wilson & R. E. Brainerd [HC2]
J. Bot. Res. Inst. Texas 7(1): 53. 2013.
coastal shore sedge

Carex goodenovii Gay var. *limnophila* (Holm) M.E. Jones
Carex hindsii C.B. Clarke
Carex lenticularis Michx. var. *limnophila* (Holm) Cronquist [FNA23, HC, SPNW]
Carex vulgaris L.H. Bailey var. *limnophila* Holm

**Carex kobomugi* Ohwi [FNA23, HC2, SPNW]
Mem. Coll. Sci. Kyoto Imp. Univ., Ser. B, Biol. 5(3): 2 1930.
Japanese sedge

FNA23: "Before Carex kobomugi was formally recognized it was included in C. macrocephala Willdenow ex Sprengel. Carex kobomugi was collected during the early 1900s from ballast and sand near Portland, Oregon, but recent collections are not known; the habitat there may no longer exist. Clones of C. kobomugi have been registered by the U.S. Soil Conservation Service and the New Jersey Agricultural Experiment Station for long-term stabilization of coastal sand dunes. Its introduced range will likely expand." SPNW reports it established in sand dunes in southwestern WA.

Carex lacustris Willd. [FNA23, HC2]
Sp. Pl. 4(1): 306. 1805.
lake sedge

Carex laeviculmis Meinsh. [FNA23, HC, HC2, SPNW]
Bot. Centralbl. 55: 195. 1893.
smooth-stemmed sedge

Carex deweyana Schwein. ssp. *sparsiflora* L.H. Bailey

FNA23: "Carex laeviculmis is divergent from the rest of the members of Carex sect. Deweyanae and may not belong to this section. Compared to the other taxa in the section, C. laeviculmis has shorter, more spreading perigynia, with lower length to width ratios and shorter beaks. In this flora, placement of C. laeviculmis in Carex sect. Deweyanae follows the recommendation of A. A. Reznicek and P. W. Ball (1980), although K. K. Mackenzie\'s (1931?1935, parts 2?3, pp. 99?114) placement of this species in Carex sect. Stellulatae may be correct. Reports of Carex laeviculmis from Colorado appear to be based on misidentifications."

Carex lasiocarpa Ehrh. [FNA23, HC, HC2, SPNW]
Hannover. Mag. 22: 132. 1784.
wiregrass sedge

Carex lanuginosa Michx. [HC]
Carex lanuginosa Michx. var. *americana* (Fernald) B. Boivin
Carex lasiocarpa Ehrh. ssp. *americana* (Fernald) D. Löve & J.-P.Bernard
Carex lasiocarpa Ehrh. var. *americana* Fernald [HC]

FNA23: "Carex lasiocarpa is a dominant of boreal wetlands, often forming huge stands. Large stands of the species are quite striking at a distance because of their pale straw color derived from the dried and faded, curly, filiform leaf apices of the vegetative shoots. Sometimes extensive stands occur without fertile culms. The reported hybrids between Carex lasiocarpa and C. stricta require confirmation (J. Cayouette and P. M. Catling 1992). North American plants have, on average, slightly smaller perigynia and shorter beak teeth than European and Asian plants and have been distinguished as subsp. americana (Fernald) Hultén."

Carex leporina L. [HC, HC2, SPNW]
Sp. Pl. 2: 973. 1753.
hare sedge, oval broom sedge, oval sedge

SPNW: "This ruderal species has been considered native to Europe and probably introduced to North America, but recent phylogenetic research suggests that C. leporina evolved in western North America and was introduced to Europe. Flip-flopping between names C. leporina and C. ovalis is due to confusion about which plant specimen should be considered the type for the name C. leporina."

Carex leporinella Mack. [FNA23, HC, HC2, SPNW]
Bull. Torrey Bot. Club. 43: 605. 1917.

Sierra hare sedge

Carex leptalea Wahlenb. [FNA23, HC, HC2, SPNW]
Kongl. Vetensk. Acad. Nya Handl. 24: 139. 1803.
delicate sedge, jelly bean sedge

Carex jimcalderi B. Boivin
Carex leptalea Wahlenb. ssp. *leptalea* [KZ99]
Carex leptalea Wahlenb. ssp. *pacifica* Calder & Roy L. Taylor
Carex leptalea Wahlenb. var. *harperi* (Fernald) Weath. & Griscom
Carex leptalea Wahlenb. var. *tayloris* B. Boivin

FNA23: "Carex leptalea has the widest geographic range of any North American sedge. Plants vary in color, stature, length of spikes, length, shape, and degree of overlap of perigynia, and color and shape of apex of pistillate scales (other minor characteristics are indicated in J. A. Calder and R. L. Taylor 1965 and B. Boivin 1967?1979). Three morphotypes probably warrant formal taxonomic recognition. Because they intergrade to some degree, the modern tendency is to treat them as only extreme phases in a wide-ranging, complex species. A major study is needed to clarify the taxonomy. The typical phase, Carex leptalea subsp. leptalea, tends to be a more slender plant with thinner culms, narrower leaves and smaller spikes and perigynia (2.5?3.5 mm) than subsp. harperi and subsp. pacifica. Its pistillate scales, which vary in shape of apex, are yellowish green to brownish, and its achenes are obtusely angled. That phase is quite uniform and occurs throughout much of the continent, extending south to the uplands of North Carolina, Tennessee, Missouri, South Dakota, New Mexico, and California. Small plants from Alaska, Yukon, Alberta, British Columbia, and eastward, var. tayloris, are extremes of the phase. The most distinct variant, Carex leptalea subsp. harperi [C. harperi, C. leptalea var. harperi], has longer [3.4?4.9(?5.4) mm], more slender perigynia that overlap more strongly and are subtended by whitish scales. Its spikes are, on the average, longer, and its achenes are sharply angled. The phase occurs from Florida to Texas, north to New Jersey, Pennsylvania, Indiana, and Missouri. Various authors have reported it from farther north, but it is doubtful whether subsp. harperi occurs beyond the range given. Carex leptalea subsp. pacifica [C. jimcalderi] resembles subsp. harperi in its longer perigynia [(3?)3.4?4.7 mm)] and proximal pistillate scales with the midvein excurrent into a cusp or awn, but differs in its brown-margined scales and obtusely angled achenes. This phase occurs only west of the Coast-Cascade Mountains from the Alaska Panhandle south through the offshore islands and mainland coast of British Columbia to Thurston County, Washington."

Carex leptopoda Mack. [FNA23, HC2, SPNW]
Fl. Rocky Mts. 124, 1060. 1917.
short-scaled sedge, slenderfoot sedge

Carex deweyana Schwein. ssp. *leptopoda* (Mack.) Calder & Roy L. Taylor
Carex deweyana Schwein. var. *leptopoda* (Mack.) B. Boivin

Split out as separate species from C. deweyana.

Carex limosa L. [FNA23, HC, HC2, SPNW]
Sp. Pl. 2: 977. 1753.
mud sedge

Carex livida (Wahlenb.) Willd. [FNA23, HC, HC2, SPNW]
Sp. Pl. 4(1): 285. 1805.
pale sedge

Carex limosa L. var. *livida* Wahlenb.
Carex livida (Wahlenb.) Willd. var. *grayana* (Dewey) Fernald
Carex livida (Wahlenb.) Willd. var. *radicaulis* Paine [KZ99]
Carex livida (Wahlenb.) Willd. var. *rufiniformis* Fernald [KZ99]

FNA23: "The distribution of Carex livida is very scattered; it is uncommon to rare over much of its range, especially in districts with predominantly acidic soils."

**Carex longii* Mack. [FNA23, HC2, SPNW]
Bull. Torrey Bot. Club. 49: 373. 1923.
Long's sedge

Carex luzulina Olney [FNA23, HC, HC2, SPNW]
Proc. Amer. Acad. Arts. 7: 395. 1868.

spring sedge, woodrush sedge

Carex ablata L.H. Bailey
Carex luzulina Olney var. *ablata* (L.H. Bailey) F.J. Herm. [FNA23]
Carex luzulina Olney var. *luzulina* [FNA23]
Carex owyheensis A. Nelson

Carex lyngbyei Hornem. [FNA23, HC, HC2, SPNW]
Fl. Dan. 11(32): 6, plate 1888.
Lyngbye's sedge

Carex cryptocarpa C.A. Mey.
Carex lyngbei Hornem. var. *cryptocarpa* (C.A. Mey.) Hultén
Carex lyngbyei Hornem. var. *robusta* (L.H. Bailey) Cronquist [HC]
Carex salina Wahlenb. var. *robusta* L.H. Bailey

FNA23: "Carex lyngbyei is the common sedge of the Pacific coastal salt marshes. It may easily be distinguished from sympatric species by the large, pendent, pedunculate spikes and the leathery, yellow-brown perigynia. Although the species is also reported to occur in Japan and Korea, some Asian collections show significant morphologic and habitat differences from the North American plants. It is probably most closely related to Carex paleacea and to the South American C. darwinii, and differs from C. paleacea primarily by having acute, rather than awned, scales. Previous reports from eastern North American were misidentifications (J. Cayouette 1987)."

Carex macloviana d\\'Urv. [FNA23, HC2]
Mém. Soc. Linn. Paris. 4: 599. 1826.
Falkland Islands sedge

Carex macrocephala Willd. ex Spreng. [FNA23, HC, HC2, SPNW]
Syst. Veg. 3: 808. 1826.
bighead sedge

Carex anthericoides J. Presl & C. Presl

Carex macrochaeta C.A. Mey. [FNA23, HC, HC2, SPNW]
Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans. 1: 224. 1831.
long-awn sedge

FNA23: "T. V. Egorova (1999) included Carex macrochaeta in sect. Scitae. The species commonly has a white or cream tomentum on many roots, although most individuals have at least some roots with a yellowish tomentum. The sectional placement of this species requires further investigation."

Carex magellanica Lam. [FNA23, HC2]
Encycl. 3: 385. 1792.
boreal bog sedge, poor sedge

ssp. *irrigua* (Wahlenburg) Hiitonen [FNA23, HC2, SPNW]
Suom. Kasvio. 161. 1933.
poor sedge

Carex limosa L. var. *irrigua* Wahlenburg
Carex magellanica Lam. var. *irrigua* (Wahlenb.) Britton, Sterns & Poggenb.
Carex paupercula Michx. [HC]

FNA23: "Carex magellanica is one of the bipolar disjunct species of Carex discussed by D. M. Moore and A. O. Chater (1971). Carex magellanica subsp. magellanica occurs in cool temperate regions of South America. It is distinguished from C. magellanica subsp. irrigua by the terminal spike being almost always gynecandrous, the lateral spikes with (2?)3?7 staminate flowers, and the pistillate scales (1.3?)1.6?2.3 mm wide."

Carex media R. Br. ex Richardson [FNA23, HC2, SPNW]
Narr. Journey Polar Sea. 750. 1823.
Montana sedge, Scandinavian sedge

Carex alpina Lilj. var. *inferalpina* Wahlenb.
Carex angarae Steud.
Carex norvegica Retz. [FNA23, HC, HC2], misapplied

Carex norvegica Retz. ssp. *inferalpina* (Wahlenb.) Hultén [KZ99]
Carex norvegica Retz. var. *inferalpina* (Wahlenb.) B. Boivin
Carex vahlii Schkuhr var. *inferalpina* (Wahlenb.) Fernald

FNA23: "Carex media is circumboreal with extensions southward to the mountains of Montana, Oregon, and Washington, the driftless area of Iowa and Wisconsin, and the maritime provinces of eastern Canada. It occurs together with C. norvegica only in Quebec and Newfoundland (Labrador), where intermediates are known. All references to C. norvegica west of Hudson Bay are to this species."

Carex mertensii J.D. Prescott ex Bong. [FNA23, HC, HC2, SPNW]
Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans. 2: 168. 1832.
Mertens' sedge

Carex columbiana Dewey

FNA23: "Carex mertensii is represented in Japan and the Russian Far East by the vicariant C. urostachys Franchet [C. mertensii J. D. Prescott var. urostachys (Franchet) Kükenthal]."

Carex micropoda C.A. Mey. [FNA23, HC2, SPNW]
Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans. 1: 210, plate 6. 1831.
timberline sedge

Carex crandallii Gand.
Carex jacobi-peteri Hultén
Carex pyrenaica Wahlenb. ssp. *micropoda* (C.A. Mey.) Hultén
Carex pyrenaica Wahlenb. var. *mondsii* Kelso

FNA23: "There is as much variation within the Rocky Mountain Carex crandallii as between C. crandallii and C. micropoda of Alaska and British Columbia. J. A. Calder and R. L. Taylor (1968) reported a weak distinction between a predominately distigmatic coastal race ("micropoda"•) and a tristigmatic one ("pyrenaica"•) from the interior. T. V. Egorova (1999) illustrated the shapes of perigynia for C. pyrenaica and C. micropoda, and the differences are consistent with what others have noted. Nevertheless, until a more reliable set of characters is found to distinguish these two taxa, all of the North American plants shall be treated as C. micropoda. W. A. Weber and R. C. Wittmann (1992) maintain the North American plants distinct from the European C. pyrenaica at the rank of species, a view that is accepted here. A thorough, worldwide review of relationships among taxa is warranted."

Carex microptera Mack. [FNA23, HC, HC2, SPNW]
Muhlenbergia. 5: 56. 1909.
small-winged sedge

Carex festivella Mack.
Carex limnophila F.J. Herm. [HC]
Carex macloviana d'Urv. ssp. *festivella* (Mack.) Á. Löve & D. Löve
Carex macloviana d'Urv. var. *microptera* (Mack.) B. Boivin
Carex microptera Mack. var. *crassinervia* F.J. Herm.
Carex microptera Mack. var. *limnophila* (F.J. Herm.) Dorn

FNA23: "In high montane habitats it is sometimes difficult to distinguish Carex microptera from C. haydeniana."

Carex nardina Fr. [FNA23, HC, HC2, SPNW]
Novit. Fl. Suec. Mant. 2: 55. 1839.
spikenard sedge

Carex elyniformis A.E. Porsild
Carex hepburnii Boott
Carex nardina Fr. ssp. *hepburnii* (Boott) Á. Löve, D. Löve & B.M. Kapoor [KZ99]
Carex nardina Fr. var. *atriceps* Kük.
Carex nardina Fr. var. *hepburnii* (Boott) Kük.
Carex stantonensis M.E. Jones

FNA23:"Much has been written about variation in Carex nardina, but little has been resolved. Russian taxonomists have long maintained that C. nardina is a species restricted to Iceland, Svalbard, Noway, and Sweden and is distinct at the rank of species from C. hepburnii (T. V. Egorova 1999). The differences of perigynia, cited by Egorova and well illustrated in A. Cronquist (1969), can define two taxa, which have

been viewed as minor variations (E. Hultén 1958) or good species. The Scandinavian material does appear to constitute a single taxon, C. nardina. In North America both forms occur, but without the clear geographic limits offered by A. E. Porsild (1943). Carex nardina and C. hepburnii differ in the following characteristics: perigynia shape: ovate or spindle-shaped versus obovate or broadly elliptic; size: (3?)3.5?5 × 1.4?1.6 mm versus 3?5 × 1.5?2mm; beak formation and size: gradually formed, 0.5 mm, obscure to 0.4 mm; stipe formation and size: distinct, 0.5?1 mm verusus obscure (less than 0.2 mm); and range: Iceland, Svalbard, Norway, North America, Russian Far East versus Sweden and possibly North America. In time, perhaps, a clearer picture of the taxa in North America will emerge. Carex nardina superficially resembles taxa in Carex sect. Filifoliae and can be confused with Kobresia myosuroides."

Carex nebrascensis Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts, ser. 2. 18: 102. 1854.
Nebraska sedge

Carex jamesii Torr.
Carex nebrascensis Dewey var. *eruciformis* Suksd.
Carex nebrascensis Dewey var. *praevia* L.H. Bailey
Carex nebrascensis Dewey var. *ultriformis* L.H. Bailey

FNA23: "Carex nebrascensis is a common low- to mid-elevation western species that is morphologically somewhat similar to C. aquatilis; it differs in the obovoid, distended, veined perigynia with a bidentate beak and the awned scales. The amphistomatous leaves of the species are glabrous and often glaucous even when mature. Cattle frequently graze on C. nebrascensis."

Carex neurophora Mack. [FNA23, HC, HC2, SPNW]
Ill. Fl. Pacific States. 1: 298, fig. 706. 1923.
alpine nerve sedge

Carex vernacula L.H. Bailey var. *hobsonii* Maguire

Carex nigricans C.A. Mey. [FNA23, HC, HC2, SPNW]
Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans. 1: 211, plate 7. 1831.
black alpine sedge

Carex nudata W. Boott [FNA23, HC, HC2, SPNW]
Bot. California. 2: 241. 1880.
torrent sedge

Carex acutina L.H. Bailey
Carex bishallii C.B. Clarke
Carex nudata W. Boott var. *anomala* L.H. Bailey
Carex suborbiculata Mack.
Carex tenacissima Suksd.

FNA23: "Carex nudata is also a member of the C. stricta group and is distinguished from sympatric members of the group by flowering from first-year shoots and having very narrow inflorescence bracts and somewhat elongated, heavily veined perigynia. It has a very distinctive growth form and habitat, dense tussocks among rocks in streambeds."

Carex obnupta L.H. Bailey [FNA23, HC, HC2, SPNW]
Proc. Calif. Acad. Sci., ser. 2. 3: 104. 1891.
slough sedge

Carex magnifica Dewey ex Piper

FNA23: "Carex obnupta occasionally hybridizes with C. nudata."

Carex obtusata Lilj. [FNA23, HC, HC2, SPNW]
Kongl. Vetensk. Acad. Nya Handl. 14: 69. 1793.
blunt sedge

FNA does not show this species ocurring in WA; specimens from WA at WTU.

Carex pachycarpa Mack. [HC2]
Bulletin of the Torrey Botanical Club 43: 616-618. 1917.
furrowed broomsedge

Carex multicostata Mack. [FNA23, HC], misapplied

Long confused with Carex multicostata, which is restricted to the mountains of California and adjacent Nevada.

Carex pachystachya Cham. ex Steud. [FNA23, HC, HC2, SPNW]
Syn. Pl. Glumac. 2: 197. 1855.
starry sedge, thick-headed sedge

Carex festiva Dewey var. *gracilis* Olney
Carex festiva Dewey var. *pachystachya* (Cham. ex Steud.) L.H. Bailey
Carex macloviana d'Urv. ssp. *pachystachya* (Cham. ex Steud.) Hultén
Carex macloviana d'Urv. var. *pachystachya* (Cham. ex Steud.) Kük.
Carex pachystachya Cham. ex Steud. var. *gracilis* (Olney) Mack.
Carex pachystachya Cham. ex Steud. var. *monds-coulteri* Kelso

**Carex pallescens* L. [FNA23, HC2, SPNW]
Sp. Pl. 2: 977. 1753.
pale green sedge

Carex pallescens L. var. *neogaea* Fernald

Populations in Clark Co. and in sw BC are recent introductions in disturbed sites. SPNW: "The idea that the NE WA and N ID populations of C. pallescens are native is plausible because they grow in relatively undisturbed wet meadows with other apparently native plants that are from eastern N America. Introduced populations are to be looked for in disturbed wet meadows elsewhere in the PNW."

Carex pansa L.H. Bailey [FNA23, HC, HC2, SPNW]
Bot. Gaz. 13: 82. 1888.
sand sedge

Carex arenicola Fr. Schmidt ssp. *pansa* (L.H. Bailey) T. Koyama & Calder

FNA23: "Carex pansa is striking not only for its sand-dune habitat, but its very dark scales, basal sheaths, and rhizomes scales. Although C. pansa is sometimes united with the east Asian C. arenicola as subsp. pansa, the North American species seems clearly closer to C. praegracilis. Carex arenicola, though occupying a similar habitat, differs in its usually more elongate, ellipsoid inflorescences, mostly bisexual spikes, pale and dull brown pistillate scales with an inconspicuous hyaline margins, usually larger perigynia (ca. 3.7?5.2 mm) that somewhat exceed the scales, anthers with very short apiculus (

Carex parryana Dewey [FNA23, HC, HC2]
Amer. J. Sci. Arts. 27: 239, fig. 65. 1835.
Parry's sedge

Carex pauciflora Lightf. [FNA23, HC, HC2, SPNW]
Fl. Scot. 2: 543, plate 6, fig. 2. 1777.
few-flowered sedge

FNA23: "Carex pauciflora is sometimes confused with C. microglochin, though C. pauciflora is easily distinguished by the lack of an evident rachilla. Compared to C. microglochin, the shoots of C. pauciflora tend to be more definitely tufted, the culms are more sharply 3-angled and roughened distally, and the achenes fill less of the perigynia. Carex pauciflora has a catapult dispersal mechanism (E. E. Hutton 1976) in contrast to the putative clinging mechanism of C. microglochin and presumably C. camptoglochin V. I. Kreczetowicz and C. parva Nees (see comments under the previous species). Dispersal by animals is possible for C. pauciflora as well. People walking through bogs may find perigynia attached to their clothing (L. Brouillet, pers. comm.)."

Carex pellita Muhl. ex Willd. [FNA23, HC2, SPNW]
Sp. Pl. 4(1): 302. 1805.
woolly sedge

C. lanuginosa Michx is misapplied in WA. FNA23: "Carex pellita is abundant and variable in much of its range and a common plant of roadside ditches and other early successional or disturbed habitats. It is sometimes subsumed under C. lasiocarpa, as var. latifolia (Boeckeler) Gilly, but it is distinct in the field and has a quite different biology and distribution. However, slender and depauperate individuals can be difficult to distinguish in the herbarium. The name Carex lanuginosa has been used for this species in many floras,

but the type of this name is C. lasiocarpa. Carex pellita hybridizes occasionally with C. hyalinolepis (= C. ×subimpressa) and rarely with C. lacustris, C. trichocarpa (= C. ×caesariensis, A. A. Reznicek and P. M. Catling 1985), and C. utriculata."

**Carex pendula* Huds. [FNA23, HC2, SPNW]
Fl. Angl. 352. 1762.
pendulous sedge

FNA23: "Carex pendula is a handsome, robust clump-forming species with glaucous foliage; it is sometimes cultivated, especially in water gardens. It has a propensity to self-sow and is beginning to appear outside of cultivation on roadsides and stream banks. Its potential as an invasive species is unknown."

Carex petasata Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts. 29: 246, plate W, fig. 72. 1836.
Liddon's sedge

Carex liddonii Boott

FNA23: "Much too broad a range has been ascribed previously to this taxon. Reports from the Rocky Mountains are based mostly on misidentifications of Carex petasata and C. tahoensis, both of which differ in having reddish brown pistillate scales and larger perigynia that are distinctly veined adaxially."

Carex phaeocephala Piper [FNA23, HC, HC2, SPNW]
Contr. U. S. Natl. Herb. 11: 172. 1906.
mountain hare sedge

FNA23: "Reports of Carex phaeocephala from northern Canada are based on other species, mostly C. tahoensis."

Carex pluriflora Hultén [FNA23, HC, HC2, SPNW]
Acta Univ. Lund., n. s. 38: 367, fig. 4a?d. 1942.
black bog sedge

Carex rariflora (Wahlenb.) Sm. var. *pluriflora* (Hultén) B. Boivin
Carex stygia T. Holm, ambiguous

FNA23: "The name Carex stygia has been incorrectly applied to specimens of C. pluriflora. T. V. Egorova (1999) treated C. pluriflora as a subspecies of C. rariflora."

Carex praeceptorum Mack. [FNA23, HC, HC2, SPNW]
N. Amer. Fl. 18: 95. 1931.
teacher's sedge

Carex canescens L. var. *dubia* L.H. Bailey
Carex heleonastes L. f. var. *dubia* (L.H. Bailey) B. Boivin
Carex praeceptorium Mack. [JPM], orthographic variant

Carex praegracilis W. Boott [FNA23, HC, HC2, SPNW]
Bot. Gaz. 9: 87. 1884.
clustered field sedge

FNA23: "Carex praegracilis is extensively and recently spreading east of its native range, especially along expressways to which road salt is applied in winter (A. A. Reznicek and P. M. Catling 1987)."

Carex praticola Rydb. [FNA23, HC, HC2, SPNW]
Mem. New York Bot. Gard. 1: 84. 1900.
northern meadow sedge

Carex piperi Mack. ex Piper & Beattie [KZ99]
Carex platylepis Mack.
Carex pratensis Drejer

KZ treats C. piperi as a separate species.

Carex preslii Steud. [FNA23, HC2, SPNW]
Syn. Pl. Glumac. 2: 242. 1855.
Presl's sedge

H&C treats C. preslii as a synonym of C. pachystachya. FNA23: "Carex preslii has been synonymized with C. pachystachya (A. Cronquist 1969; C. L. Hitchcock and A. Cronquist 1973; A. Cronquist et al. 1972+)."

Carex proposita Mack. [FNA23, HC, HC2, SPNW]
N. Amer. Fl. 18: 126. 1931.
Smoky Mountain sedge

Carex raynoldsii Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts, ser. 2. 32: 39. 1861.
Raynolds' sedge

Carex lyallii Boott

Carex retrorsa Schwein. [FNA23, HC, HC2, SPNW]
Ann. Lyceum Nat. Hist. New York. 1: 71. 1824.
retrorse sedge

FNA23: "Very rarely, specimens appear to be intermediate between Carex retrorsa and C. lupulina or C. lupuliformis; they are likely hybrids."

Carex rossii Boott [FNA23, HC, HC2, SPNW]
Fl. Bor.-Amer. 2: 222. 1839.
Ross' sedge

Carex deflexa Hornem. ssp. *media* L.H. Bailey
Carex deflexa Hornem. var. *farwellii* Britton
Carex deflexa Hornem. var. *rossii* (Boott) L.H. Bailey
Carex diversistylis A. Roach
Carex farwellii (Britton) Mack.
Carex novae-angliae Schwein. var. *rossii* (Boott) L.H. Bailey

Carex rostrata Stokes [HC, HC2, FNA23, SPNW]
Fl. Bor. -Amer. 2: 173. 1803, not Stokes 1787.
northern beaked sedge

Carex rostrata Stokes var. *ambigens* Fernald

C. rostrata misapplied to the taxon C. utriculata in H&C. FNA23: "Carex rostrata is infrequent and local in large portions of its range, often forming large colonies where found. Carex rostrata hybridizes with C. oligosperma and C. saxatilis; rare sterile intermediates with C. utriculata are likely hybrids. The vast majority of records of C. rostrata from North America are C. utriculata."

Carex saxatilis L. [FNA23, HC, HC2, SPNW]
Sp. Pl. 2: 976. 1753.
limestone sedge, russet sedge

Carex ambusta Boott
Carex compacta R. Br. ex Dewey
Carex miliaris Michx.
Carex physocarpa J. Presl & C. Presl
Carex ×physocarpoides Lepage [KZ99]
Carex rhomalea (Fernald) Mack.
Carex saxatilis L. ssp. *laxa* (Trautv.) Kalela

FNA23: "Carex saxatilis is highly variable in North America. Plants from western North America, often named C. physocarpa, tend to be robust with long peduncles on the pistillate spikes, wide leaves, and large perigynia. These characters decrease in size eastward across North America with successively smaller plants usually referred to as C. saxatilis and C. miliaris. This weak east/west cline is confounded by large amounts of variation within small geographic areas and phenotypic plasticity. B. A. Ford et al. (1991) and B. A. Ford and P. W. Ball (1992) have demonstrated that these segregates represent elements in a continuum rather than discrete taxa. Hybrids between Carex saxatilis and C. vesicaria (= C. ×stenolepis Lessing; = C. ×mainensis Porter ex Britton) and C. saxatilis and C. utriculata (= C. ×physocarpoides Lepage) have been found in North America (B. A. Ford et al. 1993). These hybrids are infrequent, largely sterile, and intermediate in morphology between the two parents."

Carex scirpoidea Michx. [FNA23, HC, HC2]

Fl. Bor.-Amer. 2: 171. 1803.
single-spike sedge

Carex scirpiformis Mack.
Carex scirpina Tuck.

ssp. *pseudoscirpoidea* (Rydb.) D.A. Dunlop [FNA23, HC2, SPNW]
Novon. 7: 355. 1998.
western single-spiked sedge

Carex pseudoscirpoidea Rydb.
Carex scirpoidea Michx. var. *pseudoscirpoidea* (Rydb.) Cronquist [HC]

ssp. *scirpoidea* [FNA23, HC2, SPNW]
Fl. Bor.-Amer. 2: 171. 1803.
northern single-spike sedge

Carex athabascensis F.J. Herm.
Carex michauxii Schwein.
Carex scirpoidea Michx. var. *europaea* Kük.
Carex scirpoidea Michx. var. *scirpiformis* (Mack.) O?Neill & Duman
Carex scirpoidea Michx. var. *scirpoidea* [HC]
Carex wormskioldiana Hornem.

FNA23: "Subspecies of Carex scirpoidea grow in a variety of habitats in northern North America. Taxa previously recognized as varieties or separate species are treated here as subspecies of C. scirpoidea. Within the C. scirpoidea complex, all subspecies have the same chromosome number, possess similar achene micromorphology and leaf anatomy, interbreed in greenhouse experiments, and have morphologic characteristics that mostly fall within the normal range for C. scirpoidea. Carex scirpoidea subsp. scirpoidea is the widest ranging of the subspecies and includes taxa formerly recognized by other caricologists. G. Kükenthal (1909) recognized C. scirpoidea var. europaea from a single locality in Norway. These plants are short in stature, like plants of C. scirpoidea subsp. scirpoidea from alpine habitats, and values for most morphologic characters fall within the normal range for subsp. scirpoidea. Another taxon, C. scirpiformis, was recognized by K. K. Mackenzie (1908) and treated at the varietal rank by H. O\'Neill and M. Duman (1941) based on wide, hyaline pistillate scale margins and light-colored pubescence. Width of the hyaline portion of the scale margins and the color of pubescence are extremely variable characters in the group. F. J. Hermann (1957) recognized C. athabascensis as a separate species based on the overall robust habit and small, ovoid achenes. Achenes from the type specimens fall at the wide end of the range of variation of achene width in C. scirpoidea. Carex scirpoidea subsp. scirpoidea is recognized by the lack of persistent leaf bases on the flowering shoots, ovate perigynia that are tightly enveloped by the perigynia on all sides, and leaves widely V-shaped in transverse section."

ssp. *stenochlaena* (Holm) Á. Löve & D. Löve [FNA23, HC2, SPNW]
Taxon. 13: 202. 1964.
Alaska singlespike sedge

Carex scirpoidea Michx. var. *stenochlaena* Holm [HC]
Carex stenochlaena (Holm) Mack.

FNA23: "Subspecies of Carex scirpoidea grow in a variety of habitats in northern North America. Taxa previously recognized as varieties or separate species are treated here as subspecies of C. scirpoidea. Within the C. scirpoidea complex, all subspecies have the same chromosome number, possess similar achene micromorphology and leaf anatomy, interbreed in greenhouse experiments, and have morphologic characteristics that mostly fall within the normal range for C. scirpoidea. Carex scirpoidea subsp. stenochlaena is distinguished by lanceolate perigynia that are longer than 3 mm, tapering gradually to a beak, and over 2.5 times as long as wide. The pistillate spikes are clavate, loosely flowered at the base and borne on slender, lax culms (the spikes droop). The pistillate scales are longer than 3 mm and subtend hirsute perigynia. Specimens of Carex scirpoidea subsp. stenochlaena from the Bitterroot Range in Ravalli County, Montana, best characterize the subspecies. Some specimens from Washington and northern British Columbia exhibit tendencies towards C. scirpoidea subsp. scirpoidea, in which perigynia are just 2.5 times as long as wide and spikes are less clavate, more loosely flowered. Carex scirpoidea subsp. stenochlaena from British Columbia and

Yukon have a tendency to intergrade with subsp. scirpoidea."

Carex scoparia Schkuhr ex Willd. [FNA23, HC, HC2]
Sp. Pl. 4(1): 230. 1805.
pointed broomsedge

Carex scoparia Schkuhr ex Willd. var. *scoparia* [FNA23, SPNW]

FNA23: "Carex scoparia is variable and may, in fact, be a complex of at least 2 species. Given current understanding, 2 varieties are recognized. Some populations of Carex scoparia from the central and southern Appalachian Mountains have unusually long beaks (greater than 3.7 mm). When long beaks occur in more robust plants with large spikes and spreading perigynia, the plants look remarkably different from typical lowland or western populations. Carex scoparia var. scoparia grows syntopically with other species from sect. Ovales and may form sterile hybrids. P. E. Rothrock et al. (1997) documented putative hybrids between C. scoparia and C. alata, C. hormathodes, C. straminea, and C. suberecta."

Carex scopulorum T. Holm [FNA23, HC, HC2]
Amer. J. Sci. 164: 422, figs. 1?6. 1902.
mountain sedge

var. *bracteosa* (L.H. Bailey) F.J. Herm. [FNA23, HC2, SPNW]
Leafl. W. Bot. 9: 16. 1959.
Sierra alpine sedge

Carex campylocarpa Holm
Carex gymnoclada Holm
Carex scopulorum T. Holm var. *scopulorum* [FNA23], misapplied

FNA23: "Carex scopulorum is the common species of sect. Phacocystis in subalpine, seasonally wet meadows in the western mountains. It is replaced on the western slope of the Cascade range by C. spectabilis, a member of sect. Scitae. Where sympatric with C. aquatilis, C. scopulorum occurs in drier portions of the habitat. Carex scopulorum is frequently confused with members of sect. Racemosae because of the similarity in habitat, size, inflorescence dimensions, and perigynium shape; it is distinguished by the two stigmas and flattened achenes. Carex scopulorum is probably most closely related to C. bigelowii, based on the similarity in vegetative morphology, hypostomic leaves, perigynia characteristics (absence of veins), and chromosome numbers. A common sedge of the central Rocky Mountains, Carex scopulorum var. bracteosa is distinguished from var. scopulorum by the scabrous stems and sheaths and by the narrower, more ellipsoid perigynia. It is usually distinguishable from var. prionophylla by the absence of bladeless, ladder-fibrillose sheaths; the two taxa may be difficult to identify in areas where both occur."

var. *prionophyllum* (Holm) L.A. Standl. [HC2]
Syst. Bot. Monogr. 7: 86. 1985.
firethread sedge

Carex scoparia Schkuhr ex Willd. var. *tessellata* Fernald & Wiegand [FNA23]
Carex scopulorum T. Holm var. *prionophylla* (Holm) L.A. Standl. [FNA23, SPNW], orthographic variant

FNA23: "Carex scopulorum var. prionophylla usually occurs at somewhat lower elevations than var. bracteosa. Where the two are sympatric, they can be distinguished by the bladeless, ladder-fibrillose basal sheaths and the narrower ellipsoid perigynia of var. prionophylla."

Carex sheldonii Mack. [FNA23, HC, HC2]
Bull. Torrey Bot. Club. 42: 618. 1915.
Sheldon's sedge

Recently (2015) collected in WA.

Carex siccata Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts. 10: 278, plate F, fig. 18. 1826.
dry-spike sedge

Carex aenea Fernald [HC], misapplied
Carex foenea Willd. [FNA23, HC2], misapplied
Carex foenea Willd. var. *enervis* D.K. Evans & Mohlenbr.
Carex foenea Willd. var. *foenea*, misapplied

Carex foenea Willd. var. *tuberculata* F.J. Herm.

Taxonomy and nomenclature follows SPNW. SPNW: "Carex siccata can be a community dominant in the herbaceous layer of open conifer forest. Where common, it can furnish good forage for cattle and horses, but it is rare in the PNW. It reduces erosion, especially in sandy soils, and has been used in the habitat restoration projects outside the PNW, sometimes on old mine sites. This species has been involved in a three-way confusion of names involving C. foenea and C. aenea. Carex siccata is the only one of the three actually known to grow in the PNW." FNA23: "Though most frequently smooth adaxially and more or less distinctly veined, the perigynia of Carex siccata are quite variable in venation and surface texture. Throughout the range of the species, plants with perigynia veinless or, essentially so, occur occasionally. Those plants have been designated as C. foenea var. enervis Evans & Mohlenbrock. Less commonly, the perigynia are tuberculate adaxially. Such plants have been designated as C. foenea var. tuberculata F. J. Hermann and specimens have been seen from Washington, Colorado, Arizona, and Wisconsin, and reported from Alberta and New Mexico. They probably occur sporadically throughout the range. Rarely, plants are both veinless and tuberculate. Carex siccata is a very common species of open pinelands in portions of its western range; it becomes very local in much of the easternmost portions of its range. The name Carex foenea has, unfortunately, commonly been misapplied to the species in some recent literature."

Carex simulata Mack. [FNA23, HC, HC2, SPNW]
Bull. Torrey Bot. Club. 34: 604. 1908.
analogue sedge

Carex spectabilis Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts. 29: 248, plate X, fig. 76. 1836.
showy sedge

Carex invisa L.H. Bailey
Carex nigella Boott
Carex spectabilis Dewey var. *superba* Holm
Carex tolmiei Boott
Carex tolmiei Boott var. *invisa* (L.H. Bailey) Kük.

Carex stenoptila F.J. Herm. [FNA23, HC2]
Leafl. W. Bot. 4: 194. 1945.
riverbank sedge

Recently (2013) collected for the first time in WA in Okanogan County. Previously only known from Rocky Mountains.

Carex stipata Muhl. ex Willd. [FNA23, HC, HC2]
Sp. Pl. 4(1): 233. 1805.
awl-fruited sedge, sawbeak sedge

var. *stipata* [FNA23, HC2, SPNW]
Sp. Pl. 4(1): 233. 1805.
awl-fruited sedge, sawbeak sedge

Carex stipata Muhl. ex Willd. var. *crassicurta* Peck
Carex stipata Muhl. ex Willd. var. *subsecuta* Peck

Carex straminiformis L.H. Bailey [FNA23, HC, HC2, SPNW]
Mem. Torrey Bot. Club. 1: 24. 1889.
Mt. Shasta sedge

Carex stylosa C.A. Mey. [FNA23, HC, HC2, SPNW]
Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans. 1: 222, plate 12. 1831.
long-style sedge

Carex beringiana Cham. ex Steud.
Carex nigritella Drejer
Carex stylosa C.A. Mey. var. *nigritella* (Drejer) Fernald

**Carex subbracteata* Mack. [FNA23, HC2]
Bull. Torrey Bot. Club. 43: 612. 1917 (as sub-bracteata). 1917.
small-bracted sedge

Carex harfordii Mack. [FNA, JPM2], misapplied

FNA23 lists this as endemic to California. Several collections in WA from San Juan County by Peter Zika, and found in British Columbia by Frank Lomer. These records represent introductions and not disjunct native populations. Carex subbracteata is very similar to and perhaps conspecific with C. gracilior (R. Whitkus 1988).

Carex subfusca W. Boott [FNA23, HC, HC2, SPNW]
Bot. California. 2: 234. 1880.
rusty sedge

Carex macloviana d'Urv. ssp. *subfusca* (W. Boott) T. Koyama
Carex teneraeformis Mack
Carex teneriformis Mack.

Both SPNW and FNA23 show this species occurring in WA.

Carex sychnocephala J. Carey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts, ser. 2. 4: 24. 1847.
many-headed sedge

FNA23: "Because Carex sychnocephala often lacks conspicuous rhizomes and has a small diffuse root system, it may appear to be annual. In some situations, it may actually grow as an annual."

**Carex sylvatica* Huds. [FNA23, HC2, SPNW]
Fl. Angl. 353. 1762.
European woodland sedge

Carex tahoensis Smiley [FNA23, HC2, SPNW]
Univ. Calif. Publ. Bot. 9: 119. 1921.
Lake Tahoe sedge

Carex eastwoodiana Stacey

FNA23: "Carex tahoensis resembles C. phaeocephala somewhat, but often occurs at lower elevations, has longer achenes, and more coriaceous perigynia that are clearly veined adaxially. Carex tahoensis was orginally described as a California endemic, but is much more widespread. The precise distribution is as yet unclear because of confusion with C. phaeocephala and C. petasata. Many reports of C. xerantica from the Rocky Mountain region are based on this species."

Carex tenera Dewey [FNA23, HC, HC2]
Amer. J. Sci. Arts. 8: 97. 1824.
quill sedge, slender sedge

Carex tenera Dewey var. *tenera* [FNA23, SPNW]

FNA23: "The name Carex straminea has been incorrectly applied at times to C. tenera var. tenera."

Carex tenuiflora Wahlenb. [FNA23, HC2, SPNW]
Kongl. Vetensk. Acad. Nya Handl. 24: 147. 1803.
sparse-flower sedge

**Carex tribuloides* Wahlenb. [FNA23, HC2]
Kongl. Vetensk. Acad. Nya Handl. 24: 145. 1803.
tribulation sedge

*var. *tribuloides* [FNA23, HC2, SPNW]
Kongl. Vetensk. Acad. Nya Handl. 24: 145. 1803.
blunt broom sedge

Carex projecta Mack. [FNA23, SPNW], misapplied

Native to eastern and central North America; naturalized in King and Pierce counties; not reported for WA in FNA.

Carex tumulicola Mack. [FNA23, HC, HC2, SPNW]
Bull. Torrey Bot. Club. 34: 154. 1907.
foothill sedge

Carex unilateralis Mack. [FNA23, HC, HC2, SPNW]
Erythea. 8: 43. 1922.
one-sided sedge

FNA23: "Carex unilateralis intergrades with C. athrostachya."

Carex utriculata Boott [FNA23, HC2, SPNW]
Fl. Bor.-Amer. 2: 221. 1839.
beaked sedge, inflated sedge, Northwest Territory sedge

Carex laevirostris (Blytt ex Fr.) Fr.
Carex rhynchophysa C.A. Mey.
Carex rostrata Stokes var. *utriculata* (Boott) L.H. Bailey

This taxon keys to C. rostrata in H&C. FNA23: "Carex utriculata is abundant and variable and is often a dominant of wetlands in subarctic, boreal, and north-temperate wetlands. American authors usually treat the taxon as part of the variation of Carex rostrata, but it is a very different plant with a quite different leaf shape in cross section and very different leaf anatomy. Plants from the western and northern portions of the range often have perigynia strongly tinged with purple, though that coloration can also occur rarely elsewhere. Rarely, Carex utriculata forms hybrids with C. exsiccata, C. hystericina, C. lacustris, C. pellita, C. rostrata, C. rotundata, C. saxatilis, and C. vesicaria. The hybrids are sterile and intemediate in morphology."

Carex vallicola Dewey [FNA23, HC, HC2, SPNW]
Amer. J. Sci. Arts, ser. 2. 32: 40. 1861.
valley sedge

Carex rusbyi Mack.
Carex vallicola Dewey var. *rusbyi* (Mack.) F.J. Herm.

Discovered in after publication of H&C

Carex vernacula L.H. Bailey [FNA23, HC2, SPNW]
Bull. Torrey Bot. Club. 20: 417.1893. 1893.
foetid sedge

Carex foetida All. [HC]
Carex foetida All. var. *vernacula* (L.H. Bailey) Kük. [HC]

FNA23: "Carex vernacula is very similar to and often united with the European C. foetida Allioni, which has serrulate-margined perigynium beak and proportionately longer leaves. The numerous distinctions drawn between these two by K. K. Mackenzie (1931?1935, parts 2?3, pp. 29?30) have not proved consistent with examination of more material."

Carex vesicaria L. [FNA23, HC, HC2, SPNW]
Sp. Pl. 2: 979. 1753 (as vesicariu). 1753.
inflated sedge, oxbow sedge
(see also *Carex exsiccata*)

Carex vesicaria L. var. *vesicaria* [HC]

FNA23: "Carex vesicaria hybridizes with C. saxatilis and, very rarely, with C. hystericina and C. utriculata. Carex vesicaria as here treated broadly as a variable circumpolar species. K. K. Mackenzie (1931?1935) recognized a small segregate, Carex raeana Boott, but specimens referred here are either depauperate C. vesicaria or hybrids. T. V. Egorova (1999) recognized C. vesicaria as a Eurasian and North American species but also recognized a primarily North American C. monile, occuring locally in Asia as well. The two species were differentiated by characteristics of perigynium length and width, pistillate spike size, and beak and beak teeth size and proportions. The North American material is so variable in perigynium size and shape and inflorescence size that recognizing the two entities seems difficult. Further study of variation in North American material and the relationships of North American and Eurasian material are needed. Indeed, the complex is in need of detailed systematic study on a worldwide scale."

Carex viridula Michx. [FNA23, HC2]
Fl. Bor.-Amer. 2: 170. 1803.
green sedge

ssp. *viridula* [FNA23, HC2, SPNW]

Fl. Bor.-Amer. 2: 170. 1803.
greenish sedge, little green sedge

Carex chlorophila Mack.
Carex irregularis Schwein.
Carex oederi Ehrh. [HC]
Carex oederi Retz. var. *pumila* (Cosson & Germain) Fernald
Carex oederi Retz. var. *viridula* (Michx.) Kük. [HC]
Carex pulchella (Lönnroth) Lindm.
Carex scandinavica E.W. Davies
Carex serotina Mérat
Carex subglobosa Miel.
Carex viridula Michx. var. *viridula* [FNA23]

FNA23: "Carex viridula subsp. viridula includes numerous variants, some of which have been treated as distinct species, such as C. serotina and C. scandinavica. The variation patterns are continuous across all of the segregates. Because of its ecologic amplitude, the taxon may occur with other members of the section, and in areas of sympatry hybrids often are formed. Hybrids between C. viridula and other species in the section are sterile hybrids among the subspecies of C. viridula are partially fertile (B. Schmid 1982)."

Carex vulpinoidea Michx. [FNA23, HC, HC2, SPNW]
Fl. Bor.-Amer. 2: 169. 1803.
fox sedge

Carex microsperma Wahlenb.
Carex multiflora Willd.
Carex multiflora Willd. var. *microsperma* (Wahlenb.) Dewey
Carex scabrior Dewey
Carex vulpinoidea Michx. var. *microsperma* (Wahlenb.) Dewey
Carex vulpinoidea Michx. var. *pycnocephala* F.J. Herm.
Carex vulpinoidea Michx. var. *scabrior* (Dewey) Alph. Wood
Carex vulpinoidea Michx. var. *segregata* Farw.
Carex vulpinoidea Michx. var. *setacea* (Dewey) Kük.
Carex vulpinoidea Michx. var. *vulpinoidea* [KZ99]

FNA23: "Carex vulpinoidea is widely distributed in North America and frequently grows as a weed in wet roadside ditches and fields. It is quite variable, particularly in the degree to which the spongy tissue lateral to the achene is developed. The development of that tissue determines the shape of the perigynium and the degree to which the perigynium appears to contract into the achene, as discussed by F. M. B. Boott (1858?1867). The flowering stems shorter than the leaves, the pale brown, elliptic perigynia, and the preference for moist substrates of C. vulpinoidea readily distinguish it from C. annectens."

Carex zikae E.H. Roalson & M.J. Waterway [HC2]
Botanical Journal of the Linnean Society 179: 18. 2015.
short-stemmed sedge, Zika's sedge

Carex brevicaulis Mack. [FNA23, HC, SPNW], illegitimate name
Carex deflexa Hornem. var. *brevicaulis* (Mack.) B. Boivin

Cyperus [FNA23, HC, HC2]
Sp. Pl. 1: 44. 1753; Gen. Pl. ed. 5, 26. 1754.
cyperus, flatsedge

Cyperus acuminatus Torr. & Hook. [FNA23, HC, HC2]
Ann. Lyceum Nat. Hist. New York. 3: 435. 1836.
sharp-pointed flatsedge, taper-tip flatsedge

Cyperus acuminatus Torr. & Hook. var. *cyrtolepis* (Torr. & Hook.) Kük.
Cyperus cyrtolepis Torr. & Hook.

Cyperus bipartitus Torr. [FNA23, HC2]
Ann. Lyceum Nat. Hist. New York. 3: 257. 1836.
shining cyperus, shining flatsedge

Cyperus niger Ruiz & Pav. var. *rivularis* (Kunth) V.E. Grant
Cyperus rivularis Kunth [HC]

**Cyperus diandrus* Torr. [FNA23]
Cat. Pl. New York. 90. 1819.
umbrella flatsedge

**Cyperus eragrostis* Lam. [FNA23, HC2]
Tabl. Encycl. 1: 146. 1791.
tall flatsedge

Cyperus vegetus Willd.

FNA8: "The distributions of Cyperus eragrostis in British Columbia, Alabama, Pennsylvania, South Carolina, and Texas represent introduced populations."

Cyperus erythrorhizos Muhl. [FNA23, HC, HC2]
Descr. Gram. 20. 1817.
redroot flatsedge

Cyperus cupreus J. Presl & C. Presl
Cyperus erythrorhizos Muhl. var. *cupreus* (J. Presl & C. Presl) Kük.
Cyperus halei Torr. ex Britton
Cyperus occidentalis Torr.
Cyperus washingtonensis Gand.

Cyperus esculentus L. [FNA23, HC, HC2]
Sp. Pl. 1: 45. 1753.
yellow nut-grass

var. *leptostachyus* Boeckeler [FNA23, HC2]
Linnaea. 36: 290. 1870.
yellow nutgrass

Chlorocyperus phymatodes (Muhl.) Palla
Cyperus esculentus L. var. *angustispicatus* Britton
Cyperus esculentus L. var. *phymatodes* (Muhl.) Kük.
Cyperus fulvescens Liebm.
Cyperus phymatodes Muhl.
Cyperus repens Elliott
Cyperus tuberosus Pursh

FNA23: "Cyperus esculentus var. leptostachyus is the most common of the varieties nearly throughout the range of the species in North America. Cyperus esculentus is a widespread and polymorphic species. Although seven varieties have been recognized (G. Kükenthal (1935?1936), recent studies based primarily on spikelet features provided support for four varieties (P. Schippers et al. 1995). Cyperus esculentus var. esculentus is restricted to the Old World."

**Cyperus fuscus* L. [FNA23, HC2]
Sp. Pl. 1: 46. 1753.
brown flatsedge, brown galingale

Cyperus lupulinus (Spreng.) Marcks [FNA23, HC2]
Trans. Wisconsin Acad. Sci. 62: 271. 1974.
Great Plains flatsedge

Scirpus lupulinus Spreng.

ssp. *lupulinus* [FNA23, HC2]
Trans. Wisconsin Acad. Sci. 62: 271. 1974.
Great Plains flatsedge

Cyperus bushii Britton

Cyperus lupulinus (Spreng.) Marcks × ***Cyperus schweinitzii*** Torr. [HC2]

Cyperus schweinitzii Torr. [FNA23, HC, HC2]
Ann. Lyceum Nat. Hist. New York. 3: 276. 1836.

sand flatsedge

Cyperus alterniflorus Schwein.

FNA23 states that: "Cyperus schweinitzii is introduced, but not naturalized, in Massachusetts and Washington." This statement is incorrect as it relates to Washington. Publication of that volume in the FNA series predated digitization of specimens in the Pacific Northwest.

Cyperus squarrosus L. [FNA23, HC2]
Cent. Pl. II. 6. 1756.
awned flatsedge

Chlorocyperus inflexus (Muhl.) Palla
Cyperus aristatus Rottb. [HC]
Cyperus aristatus Rottb. var. *runyonii* O?Neill
Cyperus inflexus Muhl.
Dichostylis aristata (Rottb.) Palla
Mariscus squarrosus (L.) C.B. Clarke

FNA8: "Cyperus squarrosus can be recognized by its small size and annual habit combined with its oblong-lanceolate floral scales bearing five to eleven conspicuous ribs and excurved awns. Some collections have been misidentified as C. acuminatus, an annual species of subg. Pycnostachys that has ovate-lanceolate, three-ribbed floral scales and digitately clustered spikelets."

Cyperus strigosus L. [FNA23, HC, HC2]
Sp. Pl. 1: 47. 1753.
false flatsedge, straw-colored flatsedge

Cyperus hansenii Britton
Cyperus stenolepis Torr.
Cyperus strigosus L. var. *hansenii* (Britton) Kük.
Mariscus stenolepis (Torr.) C.B. Clarke
Mariscus strigosus (L.) C.B. Clarke

FNA23: "Cyperus strigosus is usually among the more common Cyperus species throughout its range. Small individuals flowering the first year may be difficult to distinguish from C. polystachyos, C. odoratus, C. erythrorhizos, and C. esculentus, which may be sympatric. Cyperus strigosus has trigonous achenes and three stigmas, unlike C. polystachyos; C. strigosus has flattened spikelets, unlike the subcylindric ones of C. odoratus; C. strigosus has floral scales usually 3 mm or more, unlike the smaller (1.2?1.5 mm) ones of C. erythrorhizos; C. strigosus has deciduous floral scales and a cormlike stem base with stolons, unlike C. esculentus. Cyperus strigosus appears to be closely related to the neotropical C. camphoratus Liebmann; both species have deciduous floral scales and deciduous spikelets (G. C. Tucker 1994). Plants segregated as C. stenolepis cannot be distinguished consistently from C. strigosus on any single charcter, rather they appear to be merely large individuals of C. strigosus with long floral scales and frequently septate inflorescence bracts (M. L. Horvat 1941)."

Dulichium [FNA23, HC, HC2]
Syn. Pl. 1: 65. 1805.
dulichium

Dulichium arundinaceum (L.) Britton [FNA23, HC, HC2]
Bull. Torrey Bot. Club. 21: 29. 1894.
three-way sedge

Cyperus arundinaceus L.
Dulichium arundinaceum (L.) Britton var. *arundinaceum* [FNA23]
Dulichium arundinaceum (L.) Britton var. *boreale* Lepage [FNA23]

Eleocharis [FNA23, HC, HC2]
Prodr. 224. 1810.
spike-rush

Eleocharis acicularis (L.) Roem. & Schult. [FNA23, HC, HC2]
Syst. Veg. 2: 154. 1817.

needle spikerush

Eleocharis acicularis (L.) Roem. & Schult. var. *gracilescens* Svenson
Eleocharis acicularis (L.) Roem. & Schult. var. *occidentalis* Svenson
Eleocharis acicularis (L.) Roem. & Schult. var. *porcata* S.G. Sm.
Eleocharis acicularis (L.) Roem. & Schult. var. *submersa* (Nilsson) Svenson
Scirpus acicularis L.

FNA8: "Eleocharis acicularis is abundant and ecologically important throughout much of its range. It occurs in a wide variety of habitats, including acid waters. I have not seen voucher specimens for reports from Alabama and Florida. I have not seen vouchers for the reported chromosome numbers of 2n = 30?38 or 50?58. Eleocharis acicularis often forms large rooted mats or floating masses, which when submerged, are often non-flowering. Submerged, usually nonflowering plants are abundant throughout much of the range of the species (H. K. Svenson 1929; P. E. Rothrock and R. H. Wagner 1975). They have been called E. acicularis forma fluitans (Doellinger) Svenson; E. acicularis forma inundata Svenson; E. acicularis forma longicaulis (Desmazières) Hegi; E. acicularis forma submersa (Nilsson) Norman; and E. acicularis var. submersa (Nilsson) Svenson. The culms of the submerged plants are terete, smooth, soft to flaccid, translucent, and the partitions of the air cavities within are clearly visible. Submerged plants may closely resemble aquatic forms of some other species, especially Eleocharis parvula, E. robbinsii, and Schoenoplectus subterminalis (Torrey) Sojak (N. C. Fassett 1957; E. G. Voss 1967, 1972?1996, vol. 3). Although E. acicularis is very variable, recognition of varieties is premature pending a worldwide taxonomic revision of subg. Scirpidium. Much of the variation is apparently due to phenotypic plasticity in response to environmental factors, especially water depth (P. E. Rothrock and R. H. Wagner 1975). The named varieties intergrade extensively, and achenes, which are important in defining the varieties, are often absent. H. K. Svenson (1929) recognized four varieties and two forms for North America, but later (1957) did not recognize infraspecific taxa. "

Eleocharis bella (Piper) Svenson [FNA23, HC, HC2]
Rhodora. 31: 201. 1929.
pretty spikerush

Eleocharis acicularis (L.) Roem. & Schult. var. *bella* Piper
Eleocharis acicularis (L.) Roem. & Schult. var. *minima* Torr. ex Britton

FNA23: "Eleocharis bella and E. acicularis seem to be amply distinct; putative hybrids are unknown. The occasional plants of E. bella with evident rhizomes, which include the type, are otherwise identical to plants apparently without rhizomes. Eleocharis bella is very similar to E. cancellata. "

Eleocharis coloradoensis (Britton) Gilly [FNA23, HC2]
Amer. Midl. Naturalist. 26: 66. 1941.
dwarf spike-rush

Eleocharis parvula (Roem. & Schult.) Link ex Bluff, Nees & Schauer var. *anachaeta* (Torr.) Svenson [HC]
Scirpus coloradoensis Britton

One specimen at WTU annotated by Galen Smith (1999) with the following note: "Most probably. No flower in proximal scale. No achene or tubers." FNA23: "Most authors, except C. L. Gilly (1941), H. L. Mason (1957), and R. R. Yeo (1980), have included Eleocharis coloradoensis in E. parvula or E. parvula var. anachaeta. In typical E. coloradoensis, which occurs from Saskatchewan south to Kansas and in California to 2100 m elevation, the achenes are usually distinctly rugulose or rough, often pitted-cellular, their apices usually truncate, and the tubercles are usually brown, often rudimentary, clearly distinct from the achene, and apparently partly sunken into the achene summit. Some plants from the southern Great Plains to the Mexican border, including the type of E. parvula var. anachaeta from Louisiana, may deserve taxonomic recognition. They differ from typical E. coloradoensis in having nearly smooth achenes with the apex tapered to a tubercle that is difficult to distinguish from the achene. C. L. Gilly (1941) separated these plants as E. membranacea (Buckley) Gilly; application of that name is doubtful because achenes are lacking from the type. R. R. Yeo (1980) studied the life-history of E. coloradoensis in the Sacramento Valley, California, and showed that it can be used to control several aquatic weeds in irrigation canals. The n = 4 count reported from Kansas under E. parvula var. anachaeta (Anonymous 1964) and on voucher specimens at GH and UC, is probably erroneous; the label on a duplicate voucher specimen at NDA includes the information "n = 3 II\'s + a chain of IV"• (i.e., n = 5). The record from Washington is somewhat doubtful because the specimen lacks achenes. Literature reports of E. parvula from Illinois and Tennessee may refer to E. coloradoensis; I have not seen specimens."

Eleocharis engelmannii Steud. [FNA23, HC2]
Syn. Pl. Glumac. 2: 79. 1855 (as engelmanni). 1855.
Engelman spikerush

Eleocharis engelmannii Steud. var. *detonsa* A. Gray
Eleocharis engelmannii Steud. var. *monticola* (Fernald) Svenson
Eleocharis engelmannii Steud. var. *robusta* Fernald
Eleocharis monticola Fernald
Eleocharis monticola Fernald var. *leviseta* Fernald
Eleocharis ovata (Roth) Roem. & Schult. var. *detonsa* (A. Gray) Mohlenbr.

Eleocharis erythropoda Steud. [FNA23, HC2]
Syn. Pl. Glumac. 2: 76. 1855.
bald spike-rush, redfoot spike-rush

Eleocharis geniculata (L.) Roem. & Schult. [FNA23, HC2]
Syst. Veg. 2: 150. 1817.
capitate spike-rush

Eleocharis macrostachya Britton [FNA23, HC2]
Fl. S.E. U.S. 184, 1327. 1903.
creeping spikerush

Eleocharis perlonga Fernald & Brackett
Eleocharis xyridiformis Fernald & Brackett

FNA23: "Eleocharis macrostachya probably occurs in Saskatchewan; I have not seen specimens. It is extremely variable. Cytotaxonomic studies (S.-O. Strandhede 1967; L. J. Harms 1968) and morphology suggest that it is a diploid-polyploid complex at least partly of hybrid origin from E. palustris and both E. erythropoda and E. uniglumis. The 2n = 38 plants of E. macrostachya may comprise the American counterpart of the European E. palustris subsp. vulgaris, which presumably originated from E. palustris subsp. palustris and E. uniglumis (S.-O. Strandhede 1966). Although recognition of infraspecific taxa is premature, the following three intergrading variants are notable: Variant b is very variable in comparison with variant a. It differs from variant a in having culms terete or slightly compressed; distal leaf-sheath apices often obtuse, tooth rarely present, to 0.1 mm; spikelets broadly lanceoloid to ovoid; floral scales 3.5?4(?4.5) × 1.7?2+ mm; achenes 1.3?1.5 mm, rarely to 1.8 mm; culm stomates 60?72 Âµm; chromosome numbers (for which I have seen vouchers, all from Kansas and South Dakota), 2n = ca. 38. It is wide-ranging, known from inland localities at 20?2300 m from Manitoba west to Yukon and British Columbia, south to Alabama, Mississippi, Louisiana, Texas, New Mexico, Arizona, and California, and in Mexico from Baja California. Intermediates between variant b and both Eleocharis erythropoda and E. uniglumis are widespread, and intermediates with E. ambigens occur in Louisiana. Most plants of variant b have floral scales to 4 mm and achenes to 1.5 mm; plants with scales to 4?5 mm and achenes sometimes more than 1.6 mm occur in California, Nevada, Oregon, and Washington. Variant c differs from variant b in having spikelet scales mostly uniformly dark chestnut-brown, not carinate, (3.5?)4?5.5 × 2?2.5 mm. Its achenes are often unusually large, 1.3?1.8(?2) × 1.1?1.5 mm. It is known from near sea level on the coasts of British Columbia, Ontario, and Quebec (James Bay and Magdalen Islands); Alaska, California, Oregon, and Washington. Some plants are intermediate between variant c and variant b. Several specimens I have seen from far eastern Russia are very similar to American plants of Eleocharis macrostachya, variant c. Except for having incompletely amplexicaulous proximal scales, and subproximal scales often without a flower, variant c closely resembles many Eurasian specimens of E. uniglumis."

Eleocharis mamillata (H. Lind.) H. Lind. [FNA23, HC2]
Herb. Norm. 44: 108. 1902 (as Heleocharis). 1902.
soft-stem spike-rush

Scirpus mamillata H. Lind.

ssp. *mamillata* [FNA23, HC2]
In I. Dörfler, Herb. Norm. 44: 108. (as Heleocharis). 1902.
soft-stemmed spikerush

FNA23: "Eleocharis mamillata has been confused in North America with E. macrostachya and E. palustris. In addition to the perianth bristle and achene differences as given in the key, E. mamillata differs from E. palustris in culm stomate shape and distance between epidermal collenchyma strands

(S. M. Walters 1953b; S.-O. Strandhede and R. Dahlgren 1968). Eleocharis mamillata subsp. mamillata, with the tubercle mamillate, usually shorter than wide, and subsp. austriaca (Hayek) Strandhede, with the tubercle conic, longer than wide, are recognized in Europe; in North America only E. mamillata subsp. mamillata is thus far known. The stamen filaments usually remain attached to the shed achenes, and together with the bristles they keep the achenes in ball-like aggregates that drift with winds and water currents (S.-O. Strandhede 1966)."

Eleocharis nitida Fernald [FNA23, HC2]
Rhodora. 8: 129. 1906.
quill spike-rush

Recently (2023) collected in Pierce County.

Eleocharis obtusa (Willd.) Schult. [FNA23, HC2]
Mant. 2: 89. 1824.
blunt spikerush

Eleocharis obtusa (Willd.) Schult. var. *ellipsoidales* Fernald
Eleocharis obtusa (Willd.) Schult. var. *gigantea* Fernald
Eleocharis obtusa (Willd.) Schult. var. *jejuna* Fernald
Eleocharis obtusa (Willd.) Schult. var. *peasei* Svenson
Scirpus obtusus Willd.

FNA23: "Extremely uncommon plants of Eleocharis obtusa without perianth bristles may be called E. obtusa var. peasei (type from New Hampshire). Robust plants with distinct caudices, floral scales 2.5 mm, and achenes 1.2?1.3 mm (Eleocharis obtusa var. gigantea Fernald) are rare (specimens seen from the Washington-British Columbia border [type], Arkansas, and the Hawaiian Islands). Dwarf plants (E. obtusa var. jejuna Fernald, type from Maine), with unusually small achenes and floral scales, and tubercles often less than 0.5 mm wide, are occasional in the East and are easily confused with E. ovata and E. aestuum. A few specimens are intermediate with E. engelmannii. Eleocharis obtusa is sometimes treated as conspecific with E. ovata, which consistently differs in its mostly 2-fid styles, mostly two stamens, and especially its narrower tubercles (B. M. H. Larson and P. M. Catling 1996). Eleocharis macounii Fernald has been treated as a synonym of E. obutsa (H. K. Svenson 1957) but is more probably a hybrid between E. intermedia and E. obtusa (P. M. Catling and S. G. Hay 1993; see 34. E. intermedia)."

Eleocharis ovata (Roth) Roem. & Schult. [FNA23, HC, HC2]
Syst. Veg. 2: 152. 1817.
ovoid spikerush

Eleocharis obtusa (Willd.) Schult. var. *ovata* (Roth) Drepalik & Mohlenbr.
Scirpus ovatus Roth
Scirpus ovatus Roth var. *heuseri* Uetrichtz

FNA23: "Although Eleocharis ovata has often been confused with E. obtusa, B. M. H. Larson and P. M. Catling (1996) showed that these species may be distinguished by non-overlapping widths of the tubercles, at least in Canada. The records of E. ovata in New Brunswick, Newfoundland, Nova Scotia, and Prince Edward Island are based on B. M. H. Larson and P. M. Catling (1996) and the records in Illinois, Indiana, Missouri, Montana, New Jersey, Oregon, and Washington are based on D. M. Hines (1975). Eleocharis ovata probably also occurs in Manitoba and Saskatchewan."

Eleocharis palustris (L.) Roem. & Schult. [FNA23, HC, HC2]
Syst. Veg. 2: 151. 1817.
common spikerush

Eleocharis smallii Britton
Scirpus palustris L.

FNA23: "Eleocharis palustris is the most widespread and common species of the extremely difficult circumboreal "E. palustris complex,"• which in North America comprises E. palustris, E. mamillata, E. macrostachya, E. erythropoda, E. uniglumis, E. kamtschatica, and E. ambigens. Two or more of these species have been combined by recent authors. The complex has been studied extensively only in northern Europe (S.-O. Strandhede 1965, 1966), where E. palustris, E. mamillata, and E. uniglumis are recognized (S.-O. Strandhede 1966). European studies and preliminary studies in North America by S.-O. Strandhede (1967) and L. J. Harms (1968) indicate that unstable chromosome structure and number as

well as interspecific hybridization contribute to the taxonomic complexity of the E. palustris complex. Eleocharis palustris is extremely variable worldwide. Recognition of infraspecific taxa outside northwestern Europe is premature..... At least 4 variants are notable in North America: Variant d comprises most of the plants that cannot be placed in the preceding variants. Most of these plants closely resemble most specimens that I have seen from northern Eurasia and as described for Eleocharis palustris subsp. palustris by S.-O. Strandhede (1966). Variant d has distal leaf sheaths often splitting or disintegrating, the summit margins not reddish, and apices usually broadly obtuse. In North America variant d is mostly subarctic and boreal; it is known from Newfoundland and Labrador to Alaska, south to New York, Wisconsin, Minnesota, Iowa, New Mexico, and California. Some plants of variant d that have markedly narrow tubercles mostly much (to 2 times) higher than wide and narrow achenes only 0.9?1.1 mm wide may deserve taxonomic recognition; they are known from Manitoba west to British Columbia and Alaska, south to Colorado, Utah, and California. Specimens of variant d from scattered western localities from Alaska and Yukon south to California have floral scales 4?5 mm and achenes 1.6?1.9 mm and are very similar to variant c."

Eleocharis parvula (Roem. & Schultes) Link ex Bluff Nees, & Schauer [FNA23, HC, HC2]

Comp. Fl. German. ed. 2. 1: 93. 1836.

little-head spikerush

(see also *Eleocharis coloradoensis*)

Eleocharis parvula (Roem. & Schult.) Link ex Bluff, Nees & Schauer var. *parvula* [HC]
Eleocharis pygmaea Torr.
Scirpus nanus Spreng.
Scirpus parvulus Roem. & Schult.

FNA23: "Plants without well-developed bristles are otherwise typical Eleocharis parvula. S.-O. Strandhede and R. M. T. Dahlgren (1968) provided a detailed description from Scandinavia; the mostly curved tubers of North American plants are differently shaped than the ovoid, mostly nearly straight tubers illustrated by them. Eleocharis parvula is very uncommon inland. Plants lacking spikelets and having rather broad culms with evident aerenchyma (E. parvula forma spongiosa Fassett) that are submerged in tidal zones closely resemble small plants of Sagittaria graminea. Eleocharis parvula has also been reported from North Dakota, South America, and Africa; I have not seen specimens. Plants without achenes or tubers cannot be reliably identified to species. Literature reports from Cuba, Mexico, and Venezuela may be based on specimens of E. coloradoensis. "

Eleocharis quinqueflora (Hartm.) O. Schwarz [FNA23, HC2]

Mitt. Thüring. Bot. Ges. 1: 89. 1949.

few-flowered spike-rush

Eleocharis fernaldii (Svenson) Á. Löve
Eleocharis pauciflora (Lightf.) Link [HC, JPM]
Eleocharis pauciflora (Lightf.) Link var. *fernaldii* Svenson
Eleocharis quinqueflora (Hartm.) O. Schwarz ssp. *fernaldii* (Svenson) Hultén
Scirpus quinqueflorus Hartm.

FNA23: "The chromosome numbers for Eleocharis quinqueflora reported for North America (2n = 80) are in doubt because vouchers and other information are lacking. The often-cited n = 10 is probably erroneous. S.-O. Strandhede and R. M. T. Dahlgren (1968) gave 2n = 132 and 134 from Scandinavia. Recognition of infraspecific taxa within E. quinqueflora is premature pending a worldwide revision of subg. Zinserlingia. It has been reported from North Dakota, although I have not seen specimens. About five varieties and subspecies of E. quinqueflora have been described worldwide. Most specimens from eastern North America and some from the West can be placed in Eleocharis quinqueflora subsp. fernaldii (Svenson) Hultén, which is characterized by its small size (culms to 15 cm × 0.5 mm) and small bulbs. Specimens of E. quinqueflora from 2000?3600 m in California, which are atypical, especially in that the proximal scales of the spikelets do not subtend flowers, may deserve taxonomic recognition. Those plants are also small, with culms only to 15 cm × 0.5 mm; hard caudices are often present at the culm-tuft bases; small, narrowly ovoid bulbs are sometimes present; and perianth bristles are absent or rudimentary. Very few specimens of E. quinqueflora are intermediate with E. suksdorfiana."

Eleocharis rostellata (Torr.) Torr. [FNA23, HC, HC2]

Fl. New York. 2: 347. 1843.

walking sedge, beaked spikerush

Scirpus rostellatus Torr.

FNA23: "Eleocharis rostellata is highly competitive, often forming large monospecific colonies. The South American E. platypus C. B. Clarke is often treated as a synonym of E. rostellata. Eleocharis rostellata superfically closely resembles E. suksdorfiana in its culms, spikelets, and achenes, but differs in the absence of creeping rhizomes, presence of stoloniferous culms, absence of a flower in the proximal scale, and achene surface details. The collection of E. rostellata I have seen from Miami-Dade County, Florida, is from 1877. I have not seen vouchers for Archuleta County, Colorado, by H. D. Harrington (1954), or for the localities in Montana and South Carolina, which are based on the map in H. K. Svenson (1934)."

Eleocharis suksdorfiana Beauverd [FNA23, HC2]
Bull. Soc. Bot. Genève. 13: 267. 1922.
Suksdorf spikerush

Eleocharis pauciflora (Lightf.) Link var. *suksdorfiana* (Beauverd) Svenson
Eleocharis quinqueflora (Hartm.) O. Schwarz var. *suksdorfiana* (Beauverd) J.T. Howell

FNA23: "Although Eleocharis suksdorfiana is usually included in E. quinqueflora, it clearly differs qualitatively as given in the key. A collection from hot springs in Ruby Valley, Elko County, Nevada, has stout perianth bristles less than half of the achene length and may represent an undescribed taxon related to E. suksdorfiana. Eleocharis suksdorfiana closely resembles E. rostellata in its achenes, tubercles, culms, and caudices; it differs in the presence of long horizontal rhizomes and the absence of stoloniferous culms. The achenes of E. suksdorfiana are often finely longitudinally ridged, but in E. rostellata they are often rugulose. Specimens from Coconino and Santa Cruz counties, Arizona, are probably E. suksdorfiana but lack achenes so cannot be identified with certainty."

Eleocharis uniglumis (Link) Schult. [FNA23, HC2]
Mant. 2: 88. 1824.
slender spike-rush

Eriophorum [FNA23, HC, HC2]
Sp. Pl. 1: 52. 1753; Gen. Pl. ed. 5, 27. 1754.
bog cotton, cotton-grass

Eriophorum angustifolium Honck. [FNA23, HC2]
Verz. Gew. Teutschl. 153. 1782.
many-spiked bog cotton, many-spiked cotton-grass

ssp. *angustifolium* [FNA23, HC2]
Verz. Gew. Teutschl. 153. 1782.
many-spiked cottongrass

Eriophorum polystachion L. [HC]

Eriophorum chamissonis C.A. Mey. [FNA23, HC, HC2]
Fl. Altaica. 1: 70. 1829.
Chamisso's cotton-grass, russet cotton-grass

Eriophorum altaicum Meinsh. var. *neogeum* Raymond
Eriophorum chamissonis C.A. Mey. var. *aquatile* (Norman) Fernald
Eriophorum rufescens Andersson
Eriophorum russeolum Fr. ssp. *rufescens* (Andersson) Hyl.
Eriophorum russeolum Fr. var. *albidum* F. Nylander
Eriophorum russeolum Fr. var. *leucothrix* (Blomgren) Hultén
Eriophorum russeolum Fr. var. *majus* Sommier

FNA23: "The Eriophorum chamissonis complex contains taxa based mainly on stem size and bristle color (M. Raymond 1954). Much of the variation appears to be continuous with abundant intermediates; experimental studies are needed to determine the biological basis of the variation."

Eriophorum gracile W.D.J. Koch ex Roth [FNA23, HC, HC2]
Catal. Bot. 2: 259. 1800.
slender cotton-grass

Eriophorum gracile W.D.J. Koch var. *caurianum* Fernald [KZ99]
Eriophorum gracile W.D.J. Koch var. *gracile* [KZ99]

*_Eriophorum virginicum_ L. [FNA23, HC2]
Sp. Pl. 1: 52. 1753.
tawny cotton-grass

Eriophorum viridicarinatum (Engelm.) Fernald [FNA23, HC, HC2]
Rhodora. 7: 89. 1905.
tassel cotton-grass

Eriophorum latifolium Hoppe var. _viridicarinatum_ Engelm.

Isolepis [FNA23, HC2]
Prodr. 221. 1810.
club-rush

Isolepis cernua (Vahl) Roem. & Schult. [FNA23, HC2]
Syst. Veg. 2: 106. 1817.
low club-rush

Isolepis cernua (Vahl) Roem. & Schult. var. _cernua_
Scirpus cernuus Vahl [HC]
Scirpus cernuus Vahl ssp. _californicus_ (Torr.) Thorne
Scirpus cernuus Vahl var. _californicus_ (Torr.) Beetle

FNA23: "Isolepis cernua is widespread and variable. Four varieties were recognized by A. M. Muasya and D. M. Simpson (2002). Only var. ceruna is known from North America. The earliest collection I have seen from the Pacific Coast is from 1888; the earliest collection I have seen from Texas is from 1974."

*_Isolepis setacea_ (L.) R. Br. [FNA23, HC2]
Prodr. 222. 1810.
Eurasian bulrush, bristle-leaf sedge

Scirpus setaceus L.

Not in H&C; Native to Eurasia. FNA23: "solepis setacea belongs to a distinct group of species characterized by ridged achenes (A. M. Muasya et al. 2001). Isolepis setacea was collected in 1874 on waste at Camden, New Jersey, and in the 1880s at Philadelphia, Pennsylvania; it has not persisted in the East. It has been known from the Pacific Coast since at least 1921. It is reported as native to Eurasia and Africa. It is cultivated as an ornamental."

Kobresia [FNA23, HC, HC2]
Sp. Pl. 4(1): 205. 1805.
kobresia

Kobresia myosuroides (Vill.) Fiori [FNA23, HC, HC2]
Fl. Italia. 1: 125. 1896.
Bellard's kobresia, Pacific bog sedge

Kobresia bellardii (All.) Degl. ex Loisel. [JPM]

Lipocarpha [FNA23, HC2]
Narr. Exped. Zaire. 459. 1818.
hemicarpha, lipocarpha

Hemicarpha [HC]

Lipocarpha aristulata (Coville) G.C. Tucker [FNA23, HC2]
J. Arnold Arbor. 68: 410. 1987.
halfchaff sedge

Cyperus aristulatus (Coville) Bauters
Hemicarpha aristulata (Coville) Smyth
Hemicarpha intermedia Piper
Hemicarpha micrantha (Vahl) Pax var. _aristulata_ Coville

Lipocarpha micrantha (Vahl) G.C. Tucker [FNA23, HC2]
J. Arnold Arbor. 68: 410. 1987.

small-flowered halfchaff sedge

Cyperus subsquarrosus (Muhl.) Bauters
Hemicarpha micrantha (Vahl) Pax [HC]
Hemicarpha micrantha (Vahl) Pax var. *minor* (Schrad.) Friedland
Hemicarpha subsquarrosa (Muhl.) Nees
Hemicarpha subsquarrosa (Muhl.) Nees var. *minor* (Schrad.) Nees
Isolepis subsquarrosa (Muhl.) Schrad.
Isolepis subsquarrosa (Muhl.) Schrad. var. *minor* Schrad.
Scirpus micranthus Vahl
Scirpus subsquarrosus Muhl.

Lipocarpha occidentalis (A. Gray) G.C. Tucker [FNA23, HC2]
J. Arnold Arbor. 68: 410. 1987.
western halfchaff sedge

Cyperus hemioccidentalis Goetgh.
Hemicarpha occidentalis A. Gray [HC]

Rhynchospora [FNA23, HC, HC2]
Enum. Pl. 2: 229. 1805 (as Rynchospora).
beakrush

Rhynchospora alba (L.) Vahl [FNA23, HC, HC2]
Enum. Pl. 2: 236. 1805 (as Rynchospora). 1805.
white beakrush

Dichromena alba (L.) J.F. Macbr.
Phaeocephalum album (L.) House
Rhynchospora luguillensis Britton
Schoenus albus L.
Triodon albus (L.) Farw.

FNA23: "The smooth-bristled Rhynchospora alba forma laeviseta Gale mostly occurs with the typical antrorsely barbellate type in Pennsylvania, the Great Lakes, British Columbia, Newfoundland, and Nova Scotia."

Schoenoplectus [FNA23, HC2]
Verh. K.K. Zool.-Bot. Ges. Wien. 38(Sitzungsber.): 49. 1888.
bulrush, naked-stem bulrush, club-rush

Schoenoplectus acutus (Muhl. ex Bigelow) Á. Löve & D. Löve [FNA23, HC2]
Bull. Torrey Bot. Club. 81: 33. 1954.
American bulrush, common tule

Schoenoplectus acutus (Muhl. ex Bigelow) Á. Löve & D. Löve var. *acutus* [FNA23]
Schoenoplectus acutus (Muhl. ex Bigelow) Á. Löve & D. Löve var. *occidentalis* (S. Watson) S.G. Sm. [FNA23]
Scirpus acutus Muhl. ex Bigelow [HC]
Scirpus acutus Muhl. ex Bigelow var. *occidentalis* (S. Watson) Beetle
Scirpus lacustris L. var. *occidentalis* S. Watson
Scirpus ×*rubiginosus* Beetle

Schoenoplectus americanus (Pers.) Volkart ex Schinz & R. Keller [FNA23, HC2]
Fl. Schweiz ed. 2. 1: 75. 1905.
American three-square bulrush, Olney's three-square bulrush

Scirpus americanus Pers. [HC]
Scirpus olneyi A. Gray [HC]

FNA23: "The secondary involucral bracts of Schoenoplectus americanus lack blades and closely resemble floral scales, in contrast to S. pungens and S. deltarum. Although mostly very locally distributed, S. americanus is ecologically important in many coastal marshes. In recent years it has seriously declined (e.g., in Maryland and Louisiana). It may occur in southwestern Kansas; I have not seen a specimen. It

probably has been extirpated from the Missouri station, based on one collection from 1886 (G. Yatskievych, pers. comm.). The report from New Hampshire is based on M. L. Fernald (1950). The stations on the Maine and Connecticut coasts, at Lake Champlain in Vermont, and in Oklahoma are based on putative S. americanus × S. pungens specimens. Some plants in the southwest are atypical in having nearly flat culm sides and leaf blades to 1.5 times as long as their sheaths as in the type of Scirpus monophyllus J. Presl & C. Presl from Peru. The name Scirpes americanus was long misapplied to Schoenoplectus pungens; Schoenoplectus americanus was known as Scirpus olneyi (A. E. Schuyler 1974)."

Schoenoplectus ×kuekenthalianus (Junge) D.H. Kent [FNA23, HC2]
Watsonia 18(2): 213. 1990.
Kukenthal's bulrush

**Schoenoplectus mucronatus* (L.) Palla [FNA23, HC2]
Verh. K.K. Zool.-Bot. Ges. Wien. 38(Sitzungsber.): 49. 1888.
ricefield bulrush, rough-seed bulrush

Scirpus mucronatus L.

FNA23: "Schoenoplectus mucronatus was collected before 1900 in New Brunswick and New Jersey; apparently the plants did not persist. It has also been reported from New York and Pennsylvania; I have not seen specimens. Elsewhere, it has become firmly established. It is an important ricefield weed in California (M. K. Bellue 1947), where it was first observed in 1942 and is called "ricefield bulrush."• It was first observed in the Midwest in 1971. Schoenoplectus mucronatus is cultivated for wildlife food near the Columbia River in Clark County, Washington, but apparently is not established in that area. Schoenoplectus mucronatus is very similar to S. triangulatus (Roxburgh) Soják of Asia, which differs in its larger spikelets, spikelet scales, and anthers."

Schoenoplectus pungens (Vahl) Palla [FNA23, HC2]
Verh. K.K. Zool.-Bot. Ges. Wien. 38(Sitzungsber.): 49. 1888.
chairmaker's clubrush, common three-square

Scirpus olneyi A. Gray [HC], misapplied
Scirpus pungens Vahl

The taxonomy of this species is confusing; see FNA for explanation. FNA3: "Three varieties of Schoenoplectus pungens (under Scirpus americanus) were recognized for North America by T. Koyama (1963), and three more or less equivalent varieties were recognized by S. G. Smith (1995). These varieties are described informally and illustrated here but not formally recognized because their morphologic delimitation should be evaluated and their exact ranges are still uncertain. "Schoenoplectus americanus, S. pungens, and S. deltarum belong to the small "Scirpus americanus complex"• T. Koyama (1963), in which the species are sometimes difficult to delimit. Schoenoplectus pungens was long known incorrectly as S. americanus Persoon; the type of that name is conspecific with plants formerly treated as S. olneyi A. Gray (A. E. Schuyler 1974). Putative Schoenoplectus pungens × S. americanus hybrids [= S. ×contortus (Eames) S. G. Smith] are locally common. 2n = ca. 86?128."

Schoenoplectus saximontanus (Fernald) J. Raynal [FNA23, HC2]
Adansonia, n.s. 16: 141. 1976.
Rocky Mountain bulrush

Scirpus bergsonii Schuyler
Scirpus saximontanus Fernald
Scirpus supinus L. var. *saximontanus* (Fernald) T. Koyama

FNA23: "The distribution of Schoenoplectus saximontanus is very scattered (local)."

Schoenoplectus subterminalis (Torr.) Soják [FNA23, HC2]
Cas. Nár. Mus., Odd. Prír. 140: 127. 1972.
swaying clubrush, water clubrush

Scirpus subterminalis Torr. [HC]

FNA23: "Schoenoplectus subterminalis often forms lawnlike, underwater mats that are entirely vegetative or have only the inflorescences emergent. This species is probably extirpated from Illinois. Schoenoplectus subterminalis var. terrestris Paine [= S. subterminalis forma terrestris (Paine) Fernald] probably does not deserve taxonomic recognition."

Schoenoplectus tabernaemontani (C.C. Gmel.) Palla [FNA23, HC2]
Verh. K.K. Zool.-Bot. Ges. Wien. 38(Sitzungsber.): 49. 1888.
great bulrush, soft-stem bulrush

Schoenoplectus validus (Vahl) Á. Löve & D. Löve
Scirpus lacustris L. ssp. *creber* (Fernald) T. Koyama
Scirpus lacustris L. ssp. *glaucus* (Sm.) Hartm.
Scirpus lacustris L. ssp. *tabernaemontani* (C.C. Gmel.) Syme
Scirpus lacustris L. ssp. *validus* (Vahl) T. Koyama
Scirpus tabernaemontani C.C. Gmel.
Scirpus validus Vahl [HC]

FNA23: "Schoenoplectus validus, described from the Caribbean, and S. tabernaemontani, described from Europe, are here treated as one variable, cosmopolitan species without infraspecific taxa, pending further studies (J. Browning et al. 1995b; S. G. Smith 1995). Most North American plants have spikelets with reddish papillae or prickles on the scales, whereas some plants of coastal and boreal North America closely resemble most plants of northwestern Europe and southern Africa in their densely reddish prickly-papillose scales and are similar to the type of Scirpus glaucus J. E. Smith. Schoenoplectus tabernaemontani, S. acutus, S. heterochaetus, S. lacustris, and S. triqueter belong to the very difficult S. lacustris complex. The entire complex except S. triqueter was treated as the single species Scirpus lacustris (T. Koyama 1962b). Many Old World authors treat Schoenoplectus tabernaemontani as S. lacustris var. tabernaemontani or subsp. glaucus. Much of the local infraspecific variation in the Schoenoplectus lacustris complex is probably because of hybridization. Some studies support the recognition of separate species in this group (J. Browning et al. 1995b). Hybrids in North America include S. acutus × S. tabernaemontani, widespread and common, especially in the east; S. acutus × S. heterochaetus = S. ×oblongus (T. Koyama) Soják, widespread but uncommon; S. heterochaetus × S. tabernaemontani = S. ×steinmetzii (Fernald) S. G. Smith, eastern and most uncommon; S. tabernaemontani × S. triqueter = S. ×kuekenthalianus (Junge) Kent, lower Columbia River in Oregon and probably Washington; and S. acutus var. occidentalis × S. californicus, local in California. Except for its trigonous culms, S. triqueter is very similar to the S. lacustris complex and freely hybridizes with S. tabernaemontani, both in North America and Europe."

**Schoenoplectus triqueter* (L.) Palla [FNA23, HC2]
Verh. K.K. Zool.-Bot. Ges. Wien. 38(Sitzungsber.): 49. 1888.
stream bank bulrush, triangular club-rush

Scirpus triqueter L.

FNA23: "In North America Schoenoplectus triqueter is known only from the tidal Columbia River system (B. W. Lightcap and A. E. Schuyler 1984), where it forms fertile hybrids with S. tabernaemontani [S. ×kuekenthalianus (Junge) D. H. Kent = Scirpus ×scheuchzeri Brugg]. Fertile hybrids between the same species also occur in Europe."

Scirpus [FNA23, HC, HC2]
Sp. Pl. 1: 47. 1753; Gen. Pl. ed. 5, 26. 1754.
bulrush
(see also *Amphiscirpus*, *Bolboschoenus*, *Isolepis*, *Schoenoplectus*, *Trichophorum*)

Scirpus atrocinctus Fernald [FNA23, HC2]
Proc. Amer. Acad. Arts. 34: 502. 1899.
common woolly sedge

Scirpus cyperinus (L.) Kunth var. *brachypodos* (Fern.) Gilly [HC], orthographic variant
Scirpus cyperinus (L.) Kunth var. *brachypodus* (Fernald) Gilly

FNA23: "Scirpus atrocinctus differs from S. pedicellatus by having more intense pigmentation in its inflorescence, both in the scales and the bases of the involucral bracts. Scales of S. atrocinctus are usually distinctly blackened, at least distally, and those of S. pedicellatus show either no black pigment at all or indistinct blackening beside the distal part of the midrib. Brown streaking throughout the scale is usually prominent in both species. The bases of the involucral bracts are almost always solid black in S. atrocinctus and reddish brown, brownish, or merely tinged or bordered with black in S. pedicellatus. The scales of S. pedicellatus also differ from those of S. atrocinctus in usually having a short mucro. All of these characteristics are variable. The two species are usually quite distinct when they grow close together, and

they are not known to hybridize with each other (although each species hybridizes with S. cyperinus). It is often difficult to identify isolated herbarium specimens with confidence. Scirpus atrocinctus often hybridizes with S. cyperinus and forms hybrid swarms. The type of S. pedicellatus forma viviparus F. G. Bernard appears to be S. atrocinctus × cyperinus."

**Scirpus cyperinus* (L.) Kunth [FNA23, HC, HC2]
Enum. Pl. 2: 170. 1837.
cotton-grass bulrush

Eriophorum cyperinum L.
Scirpus cyperinus (L.) Kunth var. *andrewsii* (Fernald) Fernald
Scirpus cyperinus (L.) Kunth var. *pelius* Fernald
Scirpus rubricosus Fernald

Pacific Northwest populations are recently expanded and many new populations are found on roadsides, all suggesting a recent introduction from eastern North America and not a native species.. FNA23: "Scirpus cyperinus is extremely variable. A form common in the northern part of its range, south to Iowa, northern Ohio, Maryland, and (in the Appalachians) North Carolina and Tennessee, has bases of the involucral bracts and the involucels blackish, the spikelets sessile or nearly so in glomerules, and the scales relatively short, ovate, and brownish. This form has often been treated as S. cyperinus var. pelius. A more robust southern form, extending north to southern Missouri and Illinois, Kentucky, Virginia, and (along the coast) New Jersey and Massachusetts, has the bases of the involucral bracts and the involucels reddish brown, the spikelets mostly solitary, and the scales relatively long, narrowly elliptic, and reddish brown. This form has often been treated as a distinct species, S. rubricosus (or under the illegitimate name S. eriophorum Michaux). These two morphologies intergrade so extensively that it is not practical to recognize them taxonomically at any rank. Scirpus cyperinus often hybridizes with S. atrocinctus and S. pedicellatus, forming hybrid swarms. Some plants appear to have characteristics of all three species; the names Scirpus atrocinctus var. grandis Fernald and S. atrocinctus forma grandis (Fernald) D. S. Carpenter are based on such a specimen."

Scirpus microcarpus J. Presl & C. Presl [FNA23, HC, HC2]
Reliq. Haenk. 1: 195. 1828.
panicled bulrush, small fruited bulrush

Scirpus microcarpus J. Presl & C. Presl var. *longispicatus* M. Peck
Scirpus microcarpus J. Presl & C. Presl var. *rubrotinctus* (Fernald) M.E. Jones
Scirpus rubrotinctus Fernald
Scirpus sylvaticus L. var. *digynus* Boeckeler

FNA23: "Populations of Scirpus microcarpus from eastern United States have been treated as a distinct species, S. rubrotinctus Fernald. Populations from the central part of the continent are intermediate for the characters Fernald used to separate S. rubrotinctus. The taxonomy of the group should be reinvestigated. Populations from the Queen Charlotte Islands (British Columbia) have a different chromosome number (2n = 64; R. L. Taylor and G. A. Mulligan 1968) than populations from New York and Pennsylvania (2n = 66; A. E. Schuyler 1967, 1976)."

Scirpus pallidus (Britton) Fernald [FNA23, HC, HC2]
Rhodora. 8: 163. 1906.
pale bulrush

Scirpus atrovirens Willd. var. *pallidus* Britton

FNA23: "Scirpus pallidus has been confused with S. atrovirens. The awned rather than mucronate scales distinguish S. pallidus from all similar species. The perianth bristles are similar to those of S. atrovirens; the scales of S. pallidus are almost always black, rather than brownish as in S. atrovirens. Inflorescences of S. pallidus consist of relatively few, large glomerules (the largest glomerule in the inflorescence usually has 50 or more spikelets). Some individuals of S. atrovirens may have glomerules with as many as 65 spikelets. Scirpus pallidus occasionally hybridizes with S. atrovirens."

Trichophorum [FNA23, HC2]
Syn. Pl. 1: 69. 1805.
deergrass

Trichophorum cespitosum (L.) Schur [FNA23, HC2]

Verh. Mitth. Siebenbürg. Vereins Naturwiss. Hermannstadt. 4: 78. 1853.
tufted clubrush

Baeothyron cespitosum (L.) A. Dietr.
Scirpus bracteatus Bigelow
Scirpus cespitosus L. [HC]
Scirpus cespitosus L. var. *callosus* Bigelow
Scirpus cespitosus L. var. *delicatulus* Fernald

FNA23: "Segregates defined on the basis of characters such as the number of flowers per spike and distal leaf sheath morphology have been recognized at varietal or subspecific ranks in North America and Europe. In North America, at least, these characters are variable within populations and appear to have no geographic integrity. North American plants of Trichophorum cespitosum appear to be identical to subsp. cespitosum (cf. R. A. DeFilipps 1980). No cytological differences have been detected between European and North American populations; all counted plants have 2n = 104 or n = 52."

Gramineae: see Poaceae

Hydrocharitaceae [FNA22, HC, HC2] Frogbit Family, Tapegrass Family, Waterweed Family

Synonyms:
Najadaceae [FNA22, HC] (Naiad Family, or Water-nymph Family)
Vallisneriaceae [Abrams]

FNA editors insisted on following Cronquist (1981) in recognizing Najadaceae, and the author's introduction to Najadaceae in FNA (Haynes 2000) protested Cronquist's treatment was outdated, citing recent papers investigating seed coat (Shaffer-Fehre 1991) and molecular relationships (Les & Haynes 1995). That evidence places Najadaceae within Hydrocharitaceae. Here we combine the two, as in JPM.

**Egeria* [FNA22, HC2]
Annales des Sciences Naturelles, Botanique. sér. 3, 11: 79. 1849.
brazilian waterweed

**Egeria densa* Planch. [FNA22, HC2]
Annales des Sciences Naturelles, Botanique. sér. 3, 11: 80. 1849.
Brazilian waterweed, South American waterweed

Elodea densa (Planch.) Casp. [HC]

FNA22: "Egeria densa is native to southeastern Brazil and has been widely sold in the aquarium trade, often becoming established in nature. Only staminate plants of E. densa have been observed outside its native range. Reproduction, then, occurs entirely by vegetative methods. No differentiated vegetative reproductive structures (turions, bulbils, etc.) are known (C. D. K. Cook and K. Urmi-König 1984b); however, the species is known to live temporarily under ice. The leaves of Egeria densa, which are only two cell-layers thick, are much used to demonstrate plant-cell structure and cytoplasmic streaming in introductory botany courses."

Elodea [FNA22, HC, HC2]
Flora Boreali-Americana. 1: 20. 1803.
ditchmoss, waterweed
(see also *Egeria*)

Elodea canadensis Michx. [FNA22, HC, HC2]
Flora Boreali-Americana. 1: 20. 1803.

Canadian waterweed, common waterweed, Rocky Mountain waterweed

Elodea brandegeeae H. St. John
Elodea planchonii Casp. [Abrams]

Elodea nuttallii (Planch.) H. St. John [FNA22, HC, HC2]
Rhodora. 22:29. 1920.
Nuttall's waterweed, western waterweed

Anacharis nuttallii Planch.

**Hydrilla* [FNA22, HC2]
Memoires de la Classe des Sciences Mathematiques et Physiques de L'Institut National de France. 12(2): 9, 61, 73, plate 2a?k. 1814.

**Hydrilla verticillata* (L. f.) Royle [FNA22, HC2]
Illustrations of the Botany ... of the Himalayan Mountains ... 1: 376. 1839.
hydrilla, water-thyme

Serpicula verticillata L. f.

FNA22: "Hydrilla verticillata is widely distributed in the Eastern Hemisphere but it is uncertain as to where it is truly native. It grows in a variety of aquatic habitats ranging from acidic to basic, oligotrophic to eutrophic, fresh to brackish, and from a few centimeters to a meter or more if light penetrates that deeply. Growth and spread often are rapid. Stem fragments become rooted by fine, unbranched adventitious roots and soon produce vegetative reproductive structures from both subterranean and erect stems. Tubers produced on subterranean stems are pale brown; those produced on erect stems are dark olive-green and covered with short, stiff scales. Both types germinate quickly to produce new stems."

**Hydrocharis* [FNA22, HC2]
Sp. Pl. 2: 1036. 1753; Gen. Pl. ed. 5; 458, 1754.

**Hydrocharis morsus-ranae* L. [FNA22, HC2]
Sp. Pl. 2: 1036. 1753.
European frog-bit

Known from Meadow Lake in Snohomish County.

**Limnobium* [FNA22, HC2]
Memoires de la Classe des Sciences Mathematiques et Physiques de L'Institut National de France. 12(2): 66. 1814.

**Limnobium laevigatum* (Humb. & Bonpl. ex Willd.) Heine [HC2]
Adansonia, n.s. 8(3): 315. 1968.
smooth frogbit, South American sponge-plant

Recently (2016) collected in Pacific County.

Najas [FNA22, HC, HC2]
Sp. Pl. 2: 1015. 1753; Gen. Pl. ed. 5; 445, 1754.
water-nymph

Najas canadensis Michx. [HC2]
Flora Boreali-Americana 2: 220. 1803.
Canadian water-nymph

Rather cryptic taxon for which historic and contemporary collections have been made.

Najas flexilis (Willd.) Rostk. & W.L.E. Schmidt [FNA22, HC, HC2]
Flora Sedinensis. 382. 1824.
slender naias, nodding water-nymph, slender water-nymph

Caulinia flexilis Willd.
Najas caespitosus (Maguire) Reveal

FNA22: "In habit, Najas flexilis is most similar to N. guadalupensis. When seeds are present, N. flexilis can be separated easily from the latter species by the glossy, smooth, yellowish seeds that are widest above

the middle. In the northern United States and in Canada, N. flexilis is by far the most common species of Najas, although in the Ohio and surrounding areas, it is disappearing as eutrophication (depletion of oxygen from lakes) continues (W. A. Wentz and R. L. Stuckey 1971)."

Najas guadalupensis (Spreng.) Magnus [FNA22, HC, HC2]
Beitrage zur Kenntniss der Gattung Najas. 8. 1870.
Guadalupe water-nymph

Caulinia guadalupensis Spreng.

ssp. *guadalupensis* [FNA22, HC2]
Beitrage zur Kenntniss der Gattung Najas. 8. 1870.
Guadalupe naias, common water-nymph, Guadalupe water-nymph

We follow FNA in accepting the subspecies, but they seem poorly defined along arbitrary size diffences in the seeds, stems, and leaves.

**Vallisneria* [FNA22, HC, HC2]
Sp. Pl. 2: 1015. 1753; Gen. Pl. ed. 5; 446, 1754.
wild celery, tapegrass

**Vallisneria americana* Michx. [FNA22, HC, HC2]
Flora Boreali-Americana. 2: 220. 1803.
wild celery, American eelgrass, tapegrass

Vallisneria americana Michx. var. *americana* [Crow & Hellquist 2000]
Vallisneria neotropica Vict.
Vallisneria spiralis L. [HC], misapplied

FNA22: "Vallisneria americana plus various species of Sagittaria, Sparganium, and Blyxa aubertii form usually sterile basal rosettes of long, linear leaves in shallow water in North America. Vallisneria can easily be separated from the others by the following combination of char acter states: base of leaves nearly flat in cross section, broad band of lacunae along each side of midvein, roots without cross septa, and absence of milky juice. The three other genera have a different combinations for these characters. Vallisneria spiralis Linnaeus has been reported in some of the older literature as being represented in North America. These reports are all based on a misapplication of the name V. spiralis and are actually V. americana. In warmer waters of southeastern United States are some populations of Vallisneria with much larger leaves that have been given the name V. neotropicalis. After considerable study of populations in the field, the plants formerly known as V. neotropicalis were determined to be just larger individuals of V. americana (R. M. Lowden 1982)."

Iridaceae [FNA26, HC, HC2] Iris Family

**Crocosmia* [FNA26, HC2]
Fl. Serres Jard. Eur. 7: 161. 1851.
montbretia

**Crocosmia* ×*crocosmiiflora* (Lemoine) N.E. Br. [FNA26, HC2]
Trans. Roy. Soc. South Africa. 20: 264. 1932 (as crocosmiflora). 1932.
montbretia

Recently (2007) collected in Grays Harbor Co.

**Crocus* [HC2]

ssp. *vernus* [HC2]
spring crocus

TROPICOS shows Hill as the author of this combination but provides no publication information. IPNI lists several authors for this combination, however Hill is not one of them. Recently collected in San Juan Co.

Iris [FNA26, HC, HC2]
Sp. Pl. 1: 38. 1753; Gen. Pl. ed. 5, 24. 1754.
flag, fleur-de-lis, iris

Belamcanda [FNA26]

**Iris foetidissima* L. [HC2]
Sp. Pl. 1: 38-40. 1753.
stinking iris

Recently collected in King Co.

**Iris germanica* L. [FNA26, HC2]
Sp. Pl. 1: 38. 1753.
bearded iris, German iris

FNA points out that Iris germanica was derived from a natural hybrid between Iris pallida Lam. and Iris variegata L. In 1889 additional Mediterranean species were hybridized with I. germanica in gardens (Wister 1927; Henderson 1992), and those crosses have been called Iris ×conglomerata N. C. Hend. (Henderson 1993). It is possible the wild plants in Cowlitz Co. are I. ×conglomerata, not true I. germanica.

Iris missouriensis Nutt. [FNA26, HC, HC2]
J. Acad. Nat. Sci. Philadelphia. 7: 58. 1834.
western blue flag, Rocky Mountain iris

FNA26: "The ecological range of Iris missouriensis is probably more varied than that of any other North American species of the genus, extending from almost sea level in southern California to 3000 m in Montana and Wyoming. There is correspondingly wide variation in a number of characters, which has caused much confusion as to taxonomic circumscription. Homer Metcalf (pers. comm.) made a detailed study of this species. The basic requirement for its success seems to be an extremely wet area before flowering and then almost desertlike conditions for the rest of the summer. In large populations, sometimes covering hundreds of acres, Iris missouriensis may be found with either simple or branched stems, leaves from 4 mm to more than 1 cm wide, shorter than the stem or longer, only one flower to as many as three on a stem, and colors from deep blue to almost pure white. A single plant found on the Pariah Plateau in Kane County, Utah, with leaves only 3?4 mm wide and a single flower stem only 4 cm long, which meant that the flower was at almost ground level, was named Iris pariensis. No other such specimen has been located, and this entity must be considered as just an aberrant form that was due to the desertlike conditions in which it was growing."

**Iris pseudacorus* L. [FNA26, HC, HC2]
Sp. Pl. 1: 38. 1753.
pale yellow iris

Iris tenax Douglas ex Lindl. [FNA26, HC, HC2]
Edwards?s Bot. Reg. 15: plate 1218. 1829.
Oregon flag, tough-leaf iris

var. *tenax* [HC2]
Oregon flag, tough-leaf iris

Iris tenax Douglas ex Lindl. ssp. *klamathensis* L.W. Lenz [KZ99]
Iris tenax Douglas ex Lindl. ssp. *tenax* [KZ99]

Olsynium [FNA26, HC2]
New Fl. 1: 72. 1836.
purple-eyed grass, grass-widow

Olsynium douglasii (A. Dietr.) E.P. Bicknell [FNA26, HC2]
Bull. Torrey Bot. Club. 27: 237. 1900.
grass-widow, purple-eyed grass-widow

Sisyrinchium douglasii A. Dietr. [HC]

var. *douglasii* [FNA26, HC2]
Bull. Torrey Bot. Club. 27: 237. 1900.
purple-eyed grass-widow

Sisyrinchium douglasii A. Dietr. ssp. *douglasii*
Sisyrinchium douglasii A. Dietr. var. *douglasii* [JPM]

Generic taxonomy tentatively follows FNA. This genus is differentiated from Sisyrinchium by its round leaves and fused filaments (Goldblatt et al. 1990). FNA26: var. douglasii - "Filament columns tapering evenly to base or slightly flared."

var. *inflatum* (Suksd.) Cholewa & Douglass M. Hend. [FNA26, HC2]
Madroño. 38: 232. 1991.
grass-widow, purple-eyed grass-widow

Olysnium inflatum Suks.
Sisyrinchium douglasii A. Dietr. var. *inflatum* (Suksd.) P.K. Holmgren
Sisyrinchium inflatum (Suksd.) H. St. John [HC]

The distinction between S. douglasii var. douglasii and var. inflatum is weak, and the complex needs further study. FNA26: var. inflatum - "Filament columns abruptly and broadly flared at base."

Sisyrinchium [FNA26, HC, HC2]
Sp. Pl. 2: 954. 1753; Gen. Pl. ed. 5, 409. 1754.
blue-eyed grass, sisyrinchium
(see also *Olsynium*)

Sisyrinchium californicum (Ker Gawl.) W.T.Aiton [FNA26, HC, HC2]
Hortus Kew. 4: 135. 1812.
golden blue-eyed grass

Sisyrinchium boreale (E.P. Bicknell) J.K. Henry
Sisyrinchium brachypus (E.P. Bicknell) J.K. Henry
Sisyrinchium flavidum Kellogg
Sisyrinchium lineatum Torr.

Sisyrinchium idahoense E.P. Bicknell [FNA26, HC2]
Bull. Torrey Bot. Club. 26: 445. 1899.
Idaho blue-eyed grass

var. *idahoense* [FNA26, HC2]
Bull. Torrey Bot. Club. 26: 445. 1899.
Idaho blue-eyed grass

Sisyrinchium birameum Piper [VPPNW1]
Sisyrinchium halophilum Greene [FNA26, HC2], misapplied

The varieties are poorly defined and need study, they may not be distinct. We provisionally follow the taxonomy of Henderson (1976).

var. *macounii* (E.P. Bicknell) Douglass M. Hend. [FNA26, HC2]
Brittonia. 28: 172. 1976.
Macoun's blue-eyed grass

Sisyrinchium macounii E.P. Bicknell

Restricted to San Juan Co., the Gulf Islands, and southern Vancouver Island. The taxonomy of the varieties needs review.

var. *occidentale* (E.P. Bicknell) Douglass M. Hend. [FNA26, HC2]
Brittonia. 28: 174. 1976.
western blue-eyed grass

Sisyrinchium occidentale E.P. Bicknell

var. *segetum* (E.P. Bicknell) Douglass M. Hend. [FNA26, HC2]
Brittonia. 28: 174. 1976.
cornfield blue-eyed grass, prairie grass

Sisyrinchium segetum E.P. Bicknell

Endemic to NW Washington and a small area of adjacent BC. The taxonomy of the varieties needs

review.

Sisyrinchium littorale Greene [FNA26, HC2]
Pittonia. 4: 33. 1899.
Alaska blue-eyed grass, shore blue-eyed grass

Sisyrinchium montanum Greene [FNA26, HC2]
Pittonia. 4: 33. 1899.
strict blue-eyed grass

var. *montanum* [FNA26, HC2]

Sisyrinchium sarmentosum Suksd. ex Greene [FNA26, HC2]
Erythea. 3: 121. 1895.
Suksdorf's blue-eyed grass

Endemic to a small area of the Cascade Mountains on the Oregon and Washington border. FNA26: " The pale blue flowers with rounded apices on the outer tepals set this species apart from others in the region."

Sisyrinchium septentrionale E.P. Bicknell [FNA26, HC2]
Bull. Torrey Bot. Club. 26: 452. 1899.
northern blue-eyed grass

FNA26: "Sisyrinchium septentrionale is widespread but apparently not common in western Canada. In central Canada it intergrades with S. mucronatum, to which it appears closely related (see discussion, p. 367). It is confused also with S. montanum but can be distinguished by its very slender, very long outer spathe and nongibbous inner spathe. Fresh material will show lighter blue flowers and outer tepals with rounded apices."

Juncaceae [FNA22, HC, HC2] Rush Family

Juncus [FNA22, HC, HC2]
Sp. Pl. 1: 325. 1753; Gen. Pl. ed. 5; 152, 1754.
rush

Juncus acuminatus Michx. [FNA22, HC, HC2]
Flora Boreali-Americana. 1: 192. 1803.
knotty leaf rush, sharp-fruited rush, tapered rush

Juncus acuminatus Michx. var. *legitimus* Engelm.
Juncus pallescens E. Mey. ex Buchenau
Juncus pondii A.W. Wood

Juncus alpinoarticulatus Chaix [FNA22, HC2]
Hist. Pl. Dauphiné. 1: 378. 1786.
alpine rush, northern rush

Juncus alpinoarticulatus Chaix ssp. *americanus* (Farw.) Hämet---Ahti
Juncus alpinoarticulatus Chaix ssp. *fuscescens* (Fernald) Hämet---Ahti
Juncus alpinoarticulatus Chaix ssp. *nodulosus* (Wahlenb.) Hämet-Ahti
Juncus alpinus Vill. [HC], illegitimate name
Juncus richardsonianus Schult. & Schult.f.

A. A. Reznicek notes there are typification problems with the Chaix name proposed by HÅ met-Ahti (1980b); here it is retained until another name is proposed in the literature taxonomy here follows FNA (Brooks and Clemants 2000), not Lindquist (1932) or HÅ met-Ahti (1986) FNA22: "Several attempts have been made to separate subspecies or varieties of this widespread and variable species. In one study, five varieties were recognized, with four in North America (B. Lindquist 1932) . In another, at least six subspecies were recognized with two in North America (L. Hämet-Ahti 1986). The variation we .have encountered does not fit nicely into the subspecies Hämet-Ahti has recognized, and until a full account of the variation throughout the range of the species is presented, we are not recognizing subspecific or

varietal divisions of this species. Recent evidence suggests that this species may be one of the parents of the tetraploid Juncus articulatus. Juncus alpinus hybridizes with J. brevicaudatus (= J. Â´ xgracilescens J. Hermann), J. articulatus (= J. Â´ xalpiniformis Fernald), J. nodosus (= J. Â´ xnodosiformis Fernald), and J. torreyi (= JuncusJ. ×stuckeyi Reinking)."

*_Juncus anthelatus_ (Wiegand) R.E. Brooks [FNA22, HC2]
Novon. 9: 11. 1999.
giant path rush

Juncus macer Gray var. _anthelatus_ (Wiegand) F.J. Herm.
Juncus tenuis Willd. var. _anthelatus_ Wiegand

Recently collected in King Co. We follow the taxonomy of FNA. Can be confused with J. tenuis, but is much larger and has slightly smaller fruits (Brooks and Whittemore 1999).

Juncus articulatus L. [FNA22, HC, HC2]
Sp. Pl. 1: 327. 1753.
joint-leaved rush, jointed rush

Juncus articulatus L. var. _obtusatus_ Engelm.
Juncus articulatus L. var. _stolonifer_ (Wohlleben) House
Juncus lampocarpus Ehrh. ex Hoffm.

ssp. *articulatus* [HC2, JPM2]
Sp. Pl. 1: 327. 1753.
jointed rush, jointleaf rush

A second subsp. is found in eastern Asia. FNA22: "Juncus articulatus hybridizes with J. brevicaudatus (= J. Â´ xfulvescens Fernald), J. alpinus (= J. Â´ xalpiniformis Fernald), J. nodosus, and J. canadensis. Juncus articulatus var. obtusatus Engelmann appears to be intermediate with J. alpinus. It has spreading inflorescence branches but obtuse inner tepals. This may represent a backcross with J. alpinus. Recent evidence suggests that J. alpinus is a polyploid species with J. articulatus as one of its parents."

Juncus balticus Willd. [HC, HC2]
Ges. Naturf. Freunde Berlin Mag. Neuesten Entdeck. Gesammten Naturk. 2: 298. 1809
Baltic rush
(see also _Juncus breweri_)

Juncus arcticus Willd. var. _balticus_ (Willd.) Trautv. [FNA22]

ssp. *ater* (Rydb.) Snogerup [HC2]
Preslia 74(3): 258. 2002.
Baltic rush, valley rush

Juncus balticus Willd. ssp. _balticus_, misapplied
Juncus balticus Willd. ssp. _littoralis_ (Engelm.) Snogerup, misapplied
Juncus balticus Willd. var. _balticus_ [HC], misapplied
Juncus balticus Willd. var. _littoralis_ Engelm., misapplied
Juncus balticus Willd. var. _montanus_ Engelm. [HC]
Juncus balticus Willd. var. _vallicola_ Rydb. [HC]
Juncus vallicola (Rydb.) Rydb.

The use of J. arcticus to include J. balticus (as treated in FNA22) is not accepted by European authors.

Juncus bolanderi Engelm. [FNA22, HC, HC2]
2:436, 470. 1868.
Bolander's rush

Juncus bolanderi Engelm. var. _riparius_ Jeps.

*_Juncus brachycarpus_ Engelm. [FNA22, HC2]
Manual of Botany of the Northern United States (ed. 5). 542. 1867.
short-fruit rush

Juncus brevicaudatus (Engelm.) Fernald [FNA22, HC2]

Rhodora. 6: 35. 1904.
narrow-panicled rush

Juncus canadensis J. Gay ex Laharpe var. *brevicaudatus* Engelm.
Juncus canadensis J. Gay ex Laharpe var. *coarctatus* Engelm.
Juncus canadensis J. Gay ex Laharpe var. *kuntzei* Buchenau
Juncus kuntzei (Buchenau) Vierh.
Juncus tweedyi Rydb. [HC]

This species is primarily distributed east of the Mississippi River, from Minnesota to Newfoundland, south to Tennessee. Disjunct populations are known from interior and coastal western North America. The coastal populations are typically associated with cranberry cultivation.

Juncus breweri Engelm. [HC2, IFBC]
Transactions of the Academy of Science of St. Louis 2: 440-441. 1866.
Brewer's rush, salt rush

Juncus lesueurii Bol. [FNA22, HC, HC2], misapplied

Juncus lesueurii orth. (misspelled, see Lint 1977, pp 149-150) The epithet lescurii was published by Bolander in 1862 as "leseurii", and indexed "lesueurii," both are typographical errors for the latinized version of Leo Lesquereaux, corrected under Article 73 of the ICBN to lescurii, which is how Bolander spelled the epithet in his 1870 catalogue of plants in the San Francisco area (Lint 1977). Juncus lescurii is endemic to the San Francisco area.

Juncus bufonius L. [FNA22, HC, HC2]
Sp. Pl. 1: 328. 1753.

var. *bufonius* [HC2, JPM2]
Sp. Pl. 1: 328. 1753.
toad rush

FNA22: "Nearly worldwide, Juncus bufonius is found essentially throughout North America except north of the Alaskan and Canadian tTaiga. Juncus bufonius is a highly polymorphic complex that is poorly understood systematically. Insufficient evidence exists upon which to base the segregation of the plethora of taxa that have been recognized out of this group in the past."

*var. *congestus* Wahlb. [HC2, JPM2]
clustered toad rush

var. *occidentalis* F.J. Herm. [HC2, JPM2]
western toad rush

Juncus sphaerocarpus Nees, misapplied

**Juncus bulbosus* L. [FNA22, HC2]
Sp. Pl. 1: 327. 1753.
bulbous rush, spreading rush

Juncus kockii F.W. Schultz
Juncus supinus Moench [HC]

**Juncus canadensis* J. Gay ex Laharpe [FNA22, HC2]
Essai Monogr. Jonc. 46. 1825.
Canadian rush

Juncus canadensis J. Gay ex Laharpe var. *longicaudatus* Engelm.
Juncus canadensis J. Gay ex Laharpe var. *sparsiflorus* Fernald
Juncus longicaudatus (Engelm.) Mack.
Juncus polycephalus Michx. var. *paradoxus* Torr.

FNA22: "Two varieties and two forms occurring within the flora have been recognized (M. L. Fernald 1945b). Juncus canadensis var. sparsiflorus has stiffly erect inflorescence branches, and the flowers are generally longer than those of var. canadensis. These varieties simply serve to give name to parts of the broad morphologic range of variation encountered in J. canadensis and do not appear to represent any distinct biological entities. Juncus canadensis and the following three species form a distinctive group: they have been variously treated as speecies (as here), varieties of J. canadensis, or as two species, J.

canadensis and a polymorphic species, J. brachysephalus, encompassing the other three species (B. Boivin 1967--1979, part IV). Most of the species are easily recognized at their extremes but show a fair amount of overlap."

*_Juncus compressus_ Jacq. [FNA22, HC2]
Enumeratio Stirpium Pleraumque, quae sponte crescung in agro Vindobonensi. 60, 235. 1762.
round-fruit rush

Juncus confusus Coville [FNA22, HC, HC2]
Proceedings of the Biological Society of Washington. 10: 127. 1896.
Colorado rush

Juncus exilis Osterh.

*_Juncus conglomeratus_ L. [HC2]
Sp. Pl. 1: 326. 1753.
compact rush

Juncus conglomeratus L. var. _subuliflorus_ (Drejer) Asch. & Graebn.

Taxonomy follows Kirschner et al. (2002).

Juncus covillei Piper [FNA22, HC, HC2, JPM2]
Contributions from the U. S. National Herbarium. 11: 182. 1906.
Coville's rush

Juncus covillei Piper var. _covillei_ [FNA22, HC]
Juncus covillei Piper var. _obtusatus_ C.L. Hitchc. [FNA22, HC]
Juncus falcatus E. Mey. var. _paniculatus_ Engelm.
Juncus falcatus E. Mey. var. _prominens_ Buchenau
Juncus latifolius (Engelm.) Buchenau var. _paniculatus_ (Engelm.) Buchenau
Juncus obtusatus Engelm., homonym (illegitimate)

*_Juncus diffusissimus_ Buckley [FNA22, HC2]
Proceedings of the Academy of Natural Sciences of Philadelphia. 14: 9. 1862.
diffuse rush, slimpod rush

Recently collected in Cowlitz Co.

Juncus drummondii E. Mey. [FNA22, HC, HC2]
Flora Rossica. 4: 235. 1853.
Drummond's rush, threeflower rush

Juncus compressus Jacq. var. _subtriflorus_ E. Mey.
Juncus drummondii E. Mey. var. _drummondii_ [HC]
Juncus drummondii E. Mey. var. _longifructus_ H. St. John
Juncus drummondii E. Mey. var. _subtriflorus_ (E. Mey.) C.L. Hitchc. [HC]
Juncus pauperculus Schwarz
Juncus subtriflorus (E. Mey.) Coville

FNA22: "Plants with capsules distinctly longer than the perianth have been referred to as Juncus drummondii var. subtriflorus. Those plants frequently occur sympatrically with J. drummondii (strict sense) through most of its range, leaving considerable doubt as to the value of recognizing such variation."

Juncus dudleyi Wiegand [FNA22, HC2]
Bulletin of the Torrey Botanical Club. 27: 524. 1900.
Dudley's rush

Juncus tenuis Willd. var. _dudleyi_ (Wiegand) F.J. Herm. [HC]
Juncus tenuis Willd. var. _uniflorus_ Farw.

Juncus effusus L. [FNA22, HC, HC2]
Sp. Pl. 1: 326. 1753.
(see also _Juncus laccatus_)

*ssp. _effusus_ [HC2]
Sp. Pl. 1: 326. 1753.
soft rush

Juncus effusus L. var. *compactus* Lej. & Courtois [HC]
Juncus effusus L. var. *effusus*
Juncus effusus L. var. *subglomeratus* DC.

Taxonomy follows Kirschner et al. (2002). A common introduction on both the east and west sides of the Cascades.

ssp. *pacificus* (Fernald & Wiegand) Piper & Beattie [HC2]
Brittonia 55(2): 152. 2003.
common rush, Pacific rush

Juncus effusus L. var. *pacificus* Fernald & Wiegand [HC]

Taxonomy follows Zika (2003). The common native in western lowland WA, with a disjunct population in the Blue Mountains area.

*ssp. *solutus* (Fernald & Wiegand) Hämet-Ahti [HC2]
Ann. Bot. Fenn. 17: 188. 1980.
eastern soft rush

Juncus effusus L. var. *solutus* Fernald & Wiegand

Occasional introduction, usually in standing water. Taxonomy follows Hämet-Ahti (1980).

Juncus ensifolius Wikstr. [FNA22, HC, HC2, JPM2]
Kongl. Vetenskaps Academiens Handlingar. 2: 274. 1823.
dagger rush, daggerleaf rush
(see also *Juncus saximontanus*)

Juncus ensifolius Wikstr. var. *ensifolius* [FNA22, HC]

Juncus falcatus E. Mey. [FNA22, HC, HC2]
Syn. Luzul. 34. 1823.
sickle-leaved rush

ssp. *sitchensis* (Buchenau) Hultén [HC2, JPM2]
Alaskan sickle leaved rush

Juncus falcatus E. Mey. ssp. *falcatus*, misapplied
Juncus falcatus E. Mey. var. *falcatus* [FNA22], misapplied
Juncus falcatus E. Mey. var. *sitchensis* Buchenau [FNA22, HC]
Juncus menziesii R. Br. ex Hook.

Typical subsp. falcatus is native on the coast of central California and in se Australia.

Juncus filiformis L. [FNA22, HC, HC2]
Sp. Pl. 1: 326. 1753.
thread rush

Juncus gerardi Loisel. [HC2]
black rush, mud rush

Juncus bulbosus L. var. *gerardii* (Loisel.) A. Gray
Juncus gerardii Loisel. [FNA22, HC], orthographic variant

ssp. *gerardi* [HC2]
black grass, Gerard's rush, mud rush

Juncus fucensis H. St. John
Juncus gerardii Loisel. ssp. *gerardii* [JPM2], orthographic variant
Juncus gerardii Loisel. var. *gerardii* [KZ99], orthographic variant
Juncus gerardii Loisel. var. *pedicellatus* Fernald [KZ99]

The correct spelling of the epithet is the original "gerardi" and not "gerardii." See IPNI

Juncus hemiendytus F.J. Herm. [FNA22, HC, HC2, Peck]
Leaflets of Western Botany. 5: 118. 1948.

var. *hemiendytus* [FNA22, HC2]
Leaflets of Western Botany. 5: 118. 1948.

dwarf rush, Hermann's dwarf rush

Juncus brachystylus (Engelm.) Piper var. *uniflorus* (Engelm.) M. Peck
Juncus triformis Engelm. var. *uniflorus* Engelm.

Juncus hesperius (Piper) Lint [HC2]
Preslia 74(3): 262. 2002.
bog rush, coastal rush

Juncus effusus L. var. *bruneus* Engelm. [JPM]

Taxonomy follows Snogerup et al. (2002). Coastal and adjacent lowlands, including Puget Sound.

Juncus howellii F.J. Herm. [FNA22, HC, HC2]
Leaflets of Western Botany. 5: 182. 1949.
Howell's rush

reported for Washington by WNHP

**Juncus inflexus* L. [FNA22, HC2]
Sp. Pl. 1: 326. 1753.
blue rush

Juncus glaucus Ehrh. ex Sibth.

Recently (2017) collected in Klickitat County.

*ssp. *inflexus* [HC2]

Juncus interior Wiegand [FNA22, HC, HC2]
Bulletin of the Torrey Botanical Club. 27: 516. 1900.
inland rush

Juncus interior Wiegand var. *interior* [KZ99]
Juncus tenuis Willd. var. *arizonicus* (Wiegand) F.J. Herm. [KZ99]
Juncus tenuis Willd. var. *neomexicanus* (Wiegand) F.J. Herm. [KZ99]

Seldom collected in WA, with specimens seen from Chelan, Grant, and Ferry Cos. Easily confused with J. tenuis, differing in its acuminate-aristate bracteoles and erect tepals (Hermann 1975; Catling and Spicer 1987).

Juncus kelloggii Engelm. [FNA22, HC, HC2]
Kellogg's dwarf rush
(see also *Juncus hemiendytus* var. *hemiendytus*, *Juncus uncialis*)

Juncus triformis Engelm. var. *brachystylus* Engelm.

Juncus laccatus Zika [HC2]
Preslia 74(3): 261-263. 2002.
shiny rush
(see also *Juncus hesperius*)

Juncus effusus L. var. *gracilis* Hook. [HC]

Taxonomy follows Snogerup et al. (2002). Common on the outer coast, and occasional in the southern Cascades.

Juncus longistylis Torr. [FNA22, HC, HC2]
Report on the United States and Mexican Boundary Survey, ... 2(1): 223. 1859.
long-styled rush

Juncus longistylis Torr. var. *longistylis* [KZ99]

Juncus mertensianus Bong. [FNA22, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2: 167. 1833.
Mertens' rush

Juncus duranii Ewan
Juncus mertensianus Bong. var. *duranii* (Ewan) F.J. Herm.
Juncus mertensianus Bong. var. *filifolius* Suksd.

Juncus slwookoorum S. Young

FNA22: "This species passes into Juncus nevadensis and has often been combined with that species (F. J. Hermann 1964). The two species can generally be separated, and we are following those treatments (F. J. Hermann 1975; A. Cronquist et al. 1972+, vol. 6)."

Juncus nevadensis S. Watson [FNA22, HC, HC2]
Proceedings of the American Academy of Arts and Sciences. 14: 303. 1879.
Nevada rush

var. *inventus* (L.F. Hend.) C.L. Hitchc. [HC, HC2, JPM2]
dune rush

Recently collected on Vancouver Island and on the outer coast of Washington.

var. *nevadensis* [HC, HC2]
Proceedings of the American Academy of Arts and Sciences. 14: 303. 1879.
Sierra rush

Juncus badius Suksd. [Abrams]
Juncus columbianus Coville [Peck]
Juncus nevadensis S. Watson var. *badius* (Suksd.) C.L. Hitchc. [HC]
Juncus nevadensis S. Watson var. *columbianus* (Coville) H. St. John [HC]

Juncus nodosus L. [FNA22, HC, HC2]
Sp. Pl., ed. 2. 1: 466. 1762.
knotted rish, tuberous rush

Juncus nodosus L. var. *meridionalis* F.J. Herm.
Juncus nodosus L. var. *nodosus* [KZ99]
Juncus rostkovii E. Mey.

Juncus occidentalis (Coville) Wiegand [FNA22, HC2]
Bulletin of the Torrey Botanical Club. 27: 521. 1900.
western rush

Juncus tenuis Willd. var. *congestus* Engelm. [HC]
Juncus tenuis Willd. var. *occidentalis* Coville

The authorship is (Coville) Wiegand, not Wiegand as in Kz99. A west-side equivalent of J. confusus, often misidentified as J. tenuis, but differing in its retuse capsules and brown-striped tepals, and found in wetter habitats (Coville 1896; Wiegand 1900).

Juncus orthophyllus Coville [FNA22, HC, HC2]
Contributions from the U. S. National Herbarium. 4: 207. 1893.
straight-leaved rush

Juncus latifolius (Engelm.) Buchenau
Juncus longistylis Torr. var. *latifolius* Engelm.

Juncus oxymeris Engelm. [FNA22, HC, HC2]
Transactions of the Academy of Science of St. Louis 2:483. 1868.
pointed rush

Juncus acutiflorus Benth.

Juncus parryi Engelm. [FNA22, HC, HC2]
Transactions of the Academy of Science of St. Louis 2: 446-447. 1866.
Parry's rush

Juncus drummondii E. Mey. var. *parryi* (Engelm.) M.E. Jones
Juncus hallii Engelm. [FNA22, HC, HC2], misapplied

Brooks and Clemants (pers. comm.) state their FNA report of Juncus hallii in Washington is an error and there are no vouchers

Juncus patens E. Mey. [FNA22, HC, HC2]
Syn. Luzul. 28. 1823.
spreading rush

Several collections from Clark Co.

*_Juncus pelocarpus_ E. Mey. [FNA22, HC2]
Syn. Luzul. 30. 1823.
brown-fruited rush

Juncus abortivus Chapm.
Juncus pelocarpus E. Mey. var. _crassicaudex_ Engelm.
Juncus pelocarpus E. Mey. var. _sabulonensis_ H. St. John

Recently collected in Grays Harbor and Pacific Cos.

*_Juncus pylaei_ Laharpe [HC2]
common rush

Juncus regelii Buchenau [FNA22, HC, HC2]
Botanische Jahrbucher fur Systematik, Pflanzengeschichte und Pflanzengeographie. 12: 414. 1890.
Regel's rush

Juncus jonesii Rydb.

Juncus saximontanus A. Nelson [HC2, JPM2]
Bull. Torrey Bot. Club 29(6): 401. 1902.
Rocky Mountain rush

Juncus ensifolius Wikstr. var. _brunnescens_ (Rydb.) Cronquist [IMF6]
Juncus ensifolius Wikstr. var. _montanus_ (Engelm.) C.L. Hitchc. [FNA22, HC]
Juncus tracyi Rydb. [HC, KZ99]

Juncus supiniformis Engelm. [FNA22, HC, HC2]
Transactions of the Academy of Science of St. Louis 2: 461-462. 1868.
hair-leaved rush, spreading rush

Juncus oreganus S. Watson [Abrams]
Juncus paucicapitatus Buchenau

FNA22: "he northern California and southern Oregon populations (Juncus supiniformis in the strict sense) form long filiform leaves before flowering, are shorter, and have smaller flowers than the northern populations. Except for the filiform leaves, the variation in sizes appears to follow a rough latitudinal cline with the largest plants and largest flowers in Alaska. Flowers of Juncus supiniformis often form bulbils."

Juncus tenuis Willd. [FNA22, HC, HC2]
Sp. Pl. 2(1): 214. 1799.
path rush, poverty rush, slender rush
(see also _Juncus dudleyi_, _Juncus occidentalis_)

Juncus bicornis Michx.
Juncus macer Gray
Juncus tenuis Willd. var. _bicornis_ (Michx.) E. Mey.
Juncus tenuis Willd. var. _multicornus_ E. Mey.
Juncus tenuis Willd. var. _tenuis_ [HC]
Juncus tenuis Willd. var. _williamsii_ Fernald

FNA22: "Juncus tenuis occurs throughout North America. It is particularly abundant in northeastern United States and eastern Canada, although infrequent in the south and west. Through the use of isozyme electrophoresis, hybridization can be demonstrated between various members of the Juncus tenuis complex, including Juncus tenuis, J. anthelatus, J. interior, J. secundus, and J. dichotomus (R. E. Brooks, unpubl.). Juncus ××oronensis is thought to be a hybrid between J. tenuis and J. vaseyi in the northeast."

Juncus tiehmii Ertter [FNA22, HC2]
Memoirs of the New York Botanical Garden. 39: 60, figs. 13f?g, 14. 1986.
Tiehm's dwarf rush

Juncus torreyi Coville [FNA22, HC, HC2]
Bulletin of the Torrey Botanical Club. 22:303. 1895.
Torrey's rush

Juncus megacephalus (Torr.) Alph. Wood

Juncus nodosus L. var. *megacephalus* Torr.

Juncus trilocularis Zika [HC2]
Rhodora 114(959):309-329. 2012.
foothill rush

Juncus brachyphyllus Wiegand [FNA22, HC], misapplied

Juncus uncialis Greene [FNA22, HC, HC2]
Pittonia. 2: 105. 1890.
inch-high rush

Not recorded N of OR in FNA; Ertter (1986) in her monograph of the group notes collections N as far as The Dalles, Wasco Co., OR, but none from WA. Several recent collections from central and eastern WA.

Juncus vaseyi Engelm. [FNA22, HC, HC2]
Trans. Acad. Sci. St. Louis 2: 448. 1866.
Vasey's rush

Recently collected (2104) by Peter Zika in northeastern WA.

Luzula [FNA22, HC, HC2]
Fl. France, ed. 3. 1: 198; 3: 158. 1805.
[name conserved]
woodrush

Luzula arcuata (Wahlenb.) Sw. [FNA22, HC, HC2]
Summa Veg. Scand. 13. 1814.
curved woodrush

ssp. *unalaschcensis* (Buchenau) Hultén [FNA22, HC2]
Arkiv for Botanik utgivet av K. Svenska Vetenskapsakademien. n.s. 7:32. 1968.
curved woodrush

Luzula arcuata (Wahlenb.) Sw. ssp. *unalaschkensis* (Buchenau) Hulten [FNA22], orthographic variant
Luzula arcuata (Wahlenb.) Sw. var. *kamtschadalorum* Sam.
Luzula arcuata (Wahlenb.) Sw. var. *unalaschcensis* Buchenau [VPPNW1]
Luzula beringensis Tolmachev
Luzula kamtschadolarum (Sam.) Gorodkov
Luzula unalaschkensis (Buchenau) Satake, orthographic variant
Luzula unalaschkensis (Buchenau) Satake ssp. *kamtschdalorum* (Sam.) Tolmachev

FNA22: "In Luzula arcuata subsp. unalaschkensis the sheath throats are rounded and densely pilose; basal leaves are flat with pubescent margins."

**Luzula campestris* (L.) DC. [FNA22, HC, HC2]
Fl. France, ed. 3. 3: 161. 1805.
field woodrush
(see also *Luzula cascadensis*, *Luzula comosa*, *Luzula macrantha*, *Luzula multiflora*, *Luzula subsessilis*)

Juncus campestris L.

FNA22: "Luzula campestris may occur rarely elsewhere in Canada and the United States in lawns and cleared places (collected in Massachusetts in the 1920s). A common European species, the name is used in our floras for almost every species of the "multiflora--campestris" complex."

*ssp. *campestris* [HC2]
In J. Lamarck and A. P. de Candolle, Fl. France, ed. 3. 3: 161. 1805.
field woodrush

Luzula cascadensis Zika [HC2]
Phytotaxa 192(4): 204. 2015.
Cascades woodrush

Luzula comosa E. Mey. [FNA22, HC2]
Syn. Luzul. 21. 1823.
Pacific woodrush

Luzula congesta (Thuill.) Lej., misapplied

var. *comosa* [HC2, JPM2]
pale woodrush

Luzula campestris (L.) DC. var. *congesta* (Thuill.) E. Mey. [HC], misapplied
Luzula multiflora (Ehrh.) Lej. ssp. *congesta* Hyl., misapplied
Luzula multiflora (Ehrh.) Lej. var. *comosa* (E. Mey.) H. St. John [Peck]
Luzula multiflora (Ehrh.) Lej. var. *congesta* W.D.J. Koch, misapplied

var. *laxa* Buchenau [HC2, JPM2]
Pflanzenr. (Engler) 4, Fam. 36: 83. 1906.
Pacific woodrush

**Luzula forsteri* (Sm.) DC. [HC2]
Syn. Pl. Fl. Gall. 150. 1806.
southern woodrush

**ssp. *forsteri* [HC2]
southern woodrush

Luzula hitchcockii Hämet-Ahti [FNA22, HC, HC2]
Annales Botanici Fennici. 8: 368. 1971.
Hitchcock's woodrush, smooth woodrush

Luzula glabrata (Hoppe ex Rostk.) Desv., misapplied
Luzula glabrata (Hoppe ex Rostk.) Desv. var. *hitchcockii* (Hämet-Ahti) Dorn [KZ99]

FNA22: "Although Luzula hitchcockii has been reported from California, no convincing specimens have been seen by this author. The species resembles the European L. glabrata (Hoppe) Desvaux very closely; however, it is readily distinguished from all other North American species. Plants may be heavily infested with Ustilago vuijckii Oudemans. and Beijerinck. complete last names??, which considerably alters their usual appearance."

Luzula macrantha (S. Watson) Zika & B.L. Wilson [HC2]
Phytotaxa 192(4): 217. 2015.
large-anthered woodrush, large-flowered woodrush, prairie woodrush

Luzula multiflora (Ehrh.) Lej. [FNA22, HC2]
Flore des Environs de Spa. 1: 169. 1811.
common woodrush

Luzula campestris (L.) DC. var. *frigida* Buchenau [HC]
Luzula campestris (L.) DC. var. *multiflora* (Ehrh.) ?elak. [HC]
Luzula multiflora (Ehrh.) Lej. ssp. *frigida* (Buchenau) V.I. Krecztowicz [FNA22], misapplied
Luzula multiflora (Ehrh.) Lej. ssp. *frigida* (Buchenau) V.I. Krecztowicz [FNA22]
Luzula multiflora (Ehrh.) Lej. ssp. *multiflora* [FNA22]
Luzula multiflora (Ehrh.) Lej. var. *multiflora* [KZ99]

The most common meadow species in WA, montane or lowlands.

Luzula parviflora (Ehrh.) Desv. [FNA22, HC, HC2]
J. Bot. (Desvaux). 1: 144. 1808.
small-flowered woodrush
(see also *Luzula piperi*)

Juncus parviflorus Ehrh.
Luzula divaricata S. Watson [FNA22, HC, HC2], misapplied
Luzula fastigiata E. Mey. [KZ99]
Luzula parviflora (Ehrh.) Desv. ssp. *fastigiata* (E. Mey.) Hämet-Ahti [KZ94]
Luzula parviflora (Ehrh.) Desv. ssp. *melanocarpa* (Michx.) Hämet-Ahti
Luzula parviflora (Ehrh.) Desv. var. *melanocarpa* (Michx.) Buchenau [Peck]

FNA22: "The base of the culm of Luzula parviflora is often reddish and often distinctly so at the proximal internodes."

Luzula piperi (Coville) M.E. Jones [FNA22, HC, HC2]

Bull. Biol. Ser. Bull. State Univ. Montana. 15: 22. 1910.
Piper's woodrush

Juncoides piperi Coville
Luzula wahlenbergii Rupr. [FNA22], misapplied
Luzula wahlenbergii Rupr. ssp. *piperi* (Coville) Hultén

Luzula spicata (L.) DC. [FNA22, HC, HC2]
Fl. France, ed. 3. 1: 161. 1805.
spiked woodrush

Juncus spicatus L.

ssp. *spicata* [HC2]
In J. Lamarck and A. P. de Candolle, Fl. France, ed. 3. 1: 161. 1805.
spiked woodrush

FNA22: "The culms of Luzula spicata are thick and reddish with bases extending 1--8 cm into the soil; sheath throats are densely hairy; basal leaves are erect, linear, and channeled; inflorescence bracts are conspicuous and often exceed glomerules; and bracteoles have narrow and extended apices."

Luzula subsessilis (S. Watson) Buchenau [HC2, IFBC]
Oesterreichische Botanische Zeitschrift 48: 290. 1898.
short-stalked wood-rush

Often confused with L. comosa.

Juncaginaceae [FNA22, HC, HC2] Arrow-grass Family

Synonyms:
Lilaeaceae [Abrams]

Triglochin [FNA22, HC, HC2]
Sp. Pl. 1: 338. 1753; Gen. Pl. ed. 5; 157, 1754.
arrow-grass

Lilaea [FNA22, HC]

Triglochin concinna J.B. Davy [HC2]
graceful arrow-grass

Triglochin concinnum Burtt Davy [HC]

var. *concinna* [HC2, ILBC6, JPM]

Triglochin concinnum Burtt Davy var. *concinnum* [HC]

Triglochin maritima L. [FNA22, HC2]
Sp. Pl. 1: 339. 1753 (as maritimum). 1753.
seaside arrow-grass

Triglochin elata Nutt.
Triglochin maritimum L. [HC]

The plants are variable and the taxonomy is disputed; small plants with bilobed ligules are called T. concinna, but large plants can have bilobed or entire ligules, and we follow FNA in combining the two. H&C use the spellings concinnum and debile; here we follow FNA. FNA22: "This taxon has been separated into Triglochin concinna and T. maritima based upon the lobing of the ligule and the smaller size of the plants of the former (e.g., J. L. Reveal 1977; R. F. Thorne 1993). On a local basis such a separation seems warranted. Examination of the T. maritima complex throughout the Americas, however, reveals continuous variation from small, widely spaced plants with 2-lobed ligules to large, tufted plants with unlobed ligules, including plants with all combinations of those characters. Triglochin maritima is important in livestock management because it is quite toxic: it is a cyanide producer."

Triglochin palustris L. [FNA22, HC2]
Sp. Pl. 1: 338. 1753 (as palustre). 1753.
marsh arrow-grass

Triglochin palustre L. [HC]

The one specimen at WTU previously assigned to this name was misidentified. That specimen is T. striata. Spelled T. palustre by H&C, here we follow FNA.

Triglochin scilloides (Poir.) von Mering & Kadereit [HC2, JPM2]
Diversity Phylogeny Evol. Monocotyledons 73. 2010.
awl-leaf arrow-grass, flowering quillwort

Lilaea scilloides (Poir.) Hauman [FNA22, HC]
Lilaea subulata Humb. & Bonpl. [Peck, Abrams]

Jepson, 2nd: "Previously in Lilaea, yet highly nested in Triglochin, a paraphyletic genus made monophyletic by inclusion of this sp. (von Mering & Kadereit 2010)."

Triglochin striata Ruiz & Pav. [FNA22, HC2]
Flora Peruviana. 3: 72. 1802 (as striatum). 1802.

Lemnaceae: see Araceae

Lilaeaceae: see Juncaginaceae

Liliaceae [FNA26, HC, HC2] Lily Family

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html). Members of Liliaceae s. l. have been placed in the Alstroemeriaceae, Amaryllidaceae, Asparagaceae, Melanthiaceae, Tofieldiaceae, and Xanthorrhoeaceae.

Calochortus [FNA26, HC, HC2]
Fl. Amer. Sept. 1: 240. 1814.
cats-ear, mariposa lily, sego lily, mariposa, star-tulip

Calochortus apiculatus Baker [FNA26, HC, HC2]
J. Linn. Soc., Bot. 14: 305. 1874.
Baker's mariposa-lily, pointed mariposa-lily, three-spot mariposa-lily

Calochortus elegans Pursh [FNA26, HC, HC2]
Fl. Amer. Sept. 1: 240. 1814.
elegant cats-ear, northwestern mariposa lily, elegant sego lily

var. *elegans* [FNA26, HC2]
Fl. Amer. Sept. 1: 240. 1814.
elegant cat's ear, northwest mariposa lily

Calochortus eurycarpus S. Watson [FNA26, HC, HC2]
Botany (Fortieth Parallel). 348. 1871.
big-pod mariposa lily, wide-fruited mariposa lily

Calochortus euumbellatus A. Nels.
Calochortus nitidus Douglas var. *eurycarpus* L.F. Hend.
Calochortus parviflorus Baker

Calochortus longebarbatus S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 17: 381. 1882.
long-bearded sego-lily

Calochortus longebarbatus S. Watson var. *longebarbatus* [FNA26]
Calochortus longebarbatus S. Watson var. *peckii* Ownbey [FNA26]

Calochortus lyallii Baker [FNA26, HC, HC2]
J. Linn. Soc., Bot. 14: 305. 1874.
Lyall's mariposa-lily

Calochortus ciliatus B.L. Rob. & Seaton

Calochortus macrocarpus Douglas [FNA26, HC, HC2]
Trans. Hort. Soc. London. 7: 276, plate 8. 1828.
sagebrush mariposa lily, green-banded star-tulip

Mariposa macrocarpa (Douglas) Hoover

var. *macrocarpus* [FNA26, HC2]
Trans. Hort. Soc. London. 7: 276, plate 8. 1828.
sagebrush mariposa lily

Calochortus douglasianus Schult. f.

var. *maculosus* (A. Nelson & J.F. Macbr.) A. Nelson & J.F. Macbr. [FNA26, HC2]
Contr. Gray Herb. 56: 14. 1918.
sagebrush mariposa

Calochortus maculosus A. Nelson & J.F. Macbr.

Calochortus nitidus Douglas [FNA26, HC, HC2]
Trans. Hort. Soc. London. 7: 277, plate 9A. 1828.
broad-fruited mariposa lily

Calochortus pavonaceus Fern.

Calochortus subalpinus Piper [FNA26, HC, HC2]
Contr. U.S. Natl. Herb. 11: 195. 1906.
mountain mariposa, subalpine mariposa-lily

Calochortus lobbii (Baker) Purdy

Clintonia [FNA26, HC, HC2]
Amer. Monthly Mag. & Crit. Rev. 2: 266. 1818.
beadlily, bluebead, clintonia

Clintonia uniflora (Menzies ex Schult.) Kunth [FNA26, HC, HC2]
Enum. Pl. 5: 159. 1850.
bride's-bonnet, queen's cup

Smilacina borealis (Aiton) Ker Gawl. var. *uniflora* Menzies ex Schult.
Smilacina uniflora (Menzies ex Schult.) Hook.

Erythronium [FNA26, HC, HC2]
Sp. Pl. 1: 305. 1753; Gen. Pl. ed. 5, 145. 1754.
adder's-tongue, dogtooth-violet, fawn-lily, glacier-lily, trout-lily

Erythronium grandiflorum Pursh [FNA26, HC, HC2]
Fl. Amer. Sept. 1: 231. 1814.
yellow fawn-lily, glacier-lily
(see also *Erythronium idahoense*)

Erythronium parviflorum (S. Watson) Goodd.

var. *chrysandrum* (Applegate) Scoggan [HC2]
Fl. Canada pt. 1, 51. 1978.
yellow fawn-lily

Erythronium grandiflorum Pursh ssp. *chrysandrum* Applegate

var. *grandiflorum* [HC, HC2]
yellow fawn-lily, glacier-lily

Erythronium giganteum Lindl.
Erythronium grandiflorum Pursh ssp. *grandiflorum* [FNA26]

var. *pallidum* H. St. John [HC2]
Res. Stud. State Coll. Wash. 2: 113. 1931.
pale-anthered glacier-lily

Erythronium idahoense H. St. John & G.N. Jones [HC2]
Res. Stud. State Coll. Wash. 1: 91, fig. 1, tab. 5. 1929.
Idaho fawn-lily

Erythronium grandiflorum Pursh ssp. *candidum* Piper [FNA26]
Erythronium grandiflorum Pursh var. *candidum* (Piper) Abrams [HC]
Erythronium grandiflorum Pursh var. *idahoense* (H. St. John & G.N. Jones) R.J. Davis

Flowers: tepals white to creamy white, with yellow zone at base; anthers cream to yellow.

Erythronium montanum S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 26: 130. 1891.
avalanche-lily, white avalanche-lily

FNA26: "This species occurs in the Coast Ranges of southern British Columbia, and disjunctly to southern Vancouver Island, the Olympic Peninsula, and Cascade Mountains from Mount Rainier National Park in Washington to central Oregon."

Erythronium oregonum Applegate [FNA26, HC, HC2]
Madroño. 3: 99. 1935.
deer's tongue, giant fawn-lily, wild easter lily

ssp. *oregonum* [HC2]
Madroño. 3: 99. 1935.
giant fawn lily, wild easter lily, deer's tongue

FNA26: "Forms from the southern part of the range with cream-white tepals and pale anthers have been described as subsp. leucandrum. This species is closely related to E. revolutum and occasionally hybridizes with it where their ranges meet. In addition, E. citrinum and E. hendersonii are reported to hybridize with E. oregonum in the southern part of its range."

Erythronium quinaultense G.A. Allen [FNA26, HC2]
Syst. Bot. 26: 269, fig. 3. 2001.
Olympic fawn-lily, Quinault trout-lily

FNA26: "Erythronium quinaultense is a tetraploid species apparently derived from hybridization between E. montanum and E. revolutum. It is known only from the southwestern Olympic Peninsula."

Erythronium revolutum Sm. [FNA26, HC, HC2]
Cycl. 13: Erythronium no. 3. 1809.
coast fawn lily, pink fawn lily, mahogany fawn lily

Erythronium johnsonii Bol.

Fritillaria [FNA26, HC, HC2]
Sp. Pl. 1: 303. 1753; Gen. Pl. ed. 5, 144. 1754.
fritillary, riceroot

Fritillaria affinis (Schult. & Schult. f.) Sealy [FNA26, HC2]
Hooker?s Icon. Pl. 39: 239. 1980.
checker lily, chocolate lily, rice-root lily

Fritillaria camschatcensis (L.) Ker Gawl. var. *floribunda* (Benth.) B. Boivin
Fritillaria eximia Eastw.
Fritillaria lanceolata Pursh [HC]
Fritillaria lanceolata Pursh var. *gracilis* S. Watson

Fritillaria lanceolata Pursh var. *tristulis* A.L. Grant
Fritillaria multiflora Kellogg
Fritillaria mutica Lindl.
Fritillaria mutica Lindl. var. *gracilis* (S. Watson) Jeps.
Fritillaria phaeanthera Purdy
Lilium affine Schult. & Schult. f.

FNA26: "Fritillaria affinis has one of the broadest geographical distributions of all the North American species of the genus. It is also highly variable, which has resulted in the naming of several supposedly distinct species as well as some infraspecific taxa, all but one of which are in fact only poorly differentiated, and all of which are treated here as synonyms. Among the latter, F. lanceolata var. tristulis may actually merit formal recognition as a variety, but the new combination under F. affinis remains to be made. This entity is restricted to coastal grassland in Marin County, California, and has a perianth that is scarcely if at all mottled, and more than 50 small bulb scales. Fritillaria affinis has long been known by the name F. lanceolata, which is illegitimate because when Pursh described it, he cited Lilium camschatcense (= F. camschatcensis) as a synonym but did not adopt that epithet. Actually, his synonymic reference was based on a misidentification, even though he stated that an illustration of L. c

Fritillaria camschatcensis (L.) Ker Gawl. [FNA26, HC, HC2]
Bot. Mag. 30: under plate 1216. 1809.
black lily, Indian rice

Lilium camschatcense L.

Fritillaria pudica (Pursh) Spreng. [FNA26, HC, HC2]
Syst. Veg. 2: 64. 1825.
yellow bells, yellow fritillary, yellow mission bells

Lilium pudicum Pursh
Ochrocodon pudicus (Pursh) Rydb.

FNA26: "Fritillaria pudica is highly variable and has one of the widest distributions of all the North American species of the genus."

**Gagea*

Lilium [FNA26, HC, HC2]
Sp. Pl. 1: 302. 1753; Gen. Pl. ed. 5, 143. 1754.
lily

Lilium columbianum Leichtlin [FNA26, HC, HC2]
J. Soc. Centr. Hort. France, sér. 2. 5: 98. 1871.
Columbia lily

Lilium canadense L. var. *parviflorum* Hook.
Lilium lucidum Kellogg
Lilium parviflorum (Hook.) Holz.

FNA26: "The author citations often seen for this species derive from Baker (1874), who published the name as Lilium columbianum "Hanson in hort., Leichtlin"•; this authority is given by various later writers as Hanson, or Baker, or Hanson ex Baker. However, Ducharte\\\\'s (1871) recapitulation of a letter from M. Leichtlin is apparently the first confirmed and valid publication of L. columbianum, and hence that citation is used here. This widespread lily is rather variable. In California plants the stamens are considerably less exserted than those of plants found farther north. Lilium columbianum may intergrade with L. kelloggii along Highway 199 at the border between California and Oregon; these plants are slightly fragrant, the stamens moderately exserted, and the bulb scales unsegmented. Lilium columbianum hybridizes with L. pardalinum subspp. wigginsii and vollmeri, and extensively with L. occidentale in Oregon."

Lloydia [FNA26, HC, HC2]
Fl. Germ. Excurs. 102. 1830.
[name conserved]
lloydia

Lloydia serotina (L.) Salisb. ex Rchb. [FNA26, HC, HC2]

Fl. Germ. Excurs. 102. 1830.
alpine lily

Bulbocodium serotinum L.

var. *serotina* [FNA26, HC2]
Fl. Germ. Excurs. 102. 1830.
alpine lily

Lloydia serotina (L.) Salisb. ex Rchb. ssp. *serotina* [KZ99]

Prosartes [FNA26, HC2]
Proc. Linn. Soc. London. 1: 48. 1839.
fairy-bell

Prosartes hookeri Torr. [FNA26, HC2]
Pacif. Railr. Rep. 4(5): 144. 1857.
fairy-bells, Hooker's fairy-bells

Disporum hookeri (Torr.) G. Nicholson [HC]
Disporum hookeri (Torr.) G. Nicholson var. *oreganum* (S. Watson) Q. Jones [HC]
Disporum hookeri (Torr.) G. Nicholson var. *trachyandrum* (Torr.) Q. Jones
Disporum oreganum (S. Watson) W.T. Mill.
Disporum parvifolium (S. Watson) Britton
Disporum trachyandrum (Torr.) Britton
Prosartes hookeri Torr. var. *oregana* (S. Watson) Kartesz [KZ99]
Prosartes oregana S. Watson

FNA26: "The three geographical races recognized as varieties by Q. Jones (1951), i.e., var. hookeri (coastal California northwards), var. oreganum (northern California north and northwestward), and var. trachyandrum (Sierra Nevada northwest to Oregon), are highly variable and intergrade with respect to their purportedly diagnostic differences in pubescence on the anthers, ovaries, and styles, and in the degree of stamen exsertion. This is especially true in their overlapping ranges in northern California and southern Oregon. Whereas the extremes may be distinctive, overall the varieties so intergrade that they are not here recognized. From this same area, where the Coastal, Sierra, and Cascade ranges meet, the purported, sterile hybrid Prosartes parvifolia was first reported. The few older collections attributed to P. parvifolia and recent dwarf ones of P. hookeri from this area are similar, especially those from serpentine substrata, and the known variation in P. hookeri unquestionably encompasses the morphology described for P. parvifolia. The recently discovered population of Prosartes hookeri in the Porcupine Mountains of upper Michigan (E. G. Voss 1972?1985, vol. 1) is a noteworthy disjunction for this otherwise western species."

Prosartes smithii (Hook.) Utech, Shinwari & Kawano [FNA26, HC2]
Taxon. 43: 364. 1994.
Smith's fairy-bells

Disporum smithii (Hook.) Piper [HC]
Prosartes menziesii D. Don
Uvularia smithii Hook.

Prosartes trachycarpa S. Watson [FNA26, HC2]
Botany (Fortieth Parallel). 344. 1871.
wartberry fairy-bells

Disporum trachycarpum (S. Watson) Benth. & Hook. f. [HC]
Disporum trachycarpum (S. Watson) Benth. & Hook. f. var. *subglabrum* E.H. Kelso

Streptopus [FNA26, HC, HC2]
Fl. Bor.-Amer. 1: 200. 1803.
twisted-stalk

Streptopus amplexifolius (L.) DC. [FNA26, HC, HC2]
Fl. Franç. ed. 3. 3: 174. 1805.
cucumber root, clasp-leaf twisted-stalk, clasping twisted-stalk

Streptopus amplexifolius (L.) DC. ssp. *americanus* (Schult. & Schult. f.) Á. Löve & D. Löve

Streptopus amplexifolius (L.) DC. var. *americanus* Schult. & Schult. f. [HC]
Streptopus amplexifolius (L.) DC. var. *amplexifolius* [KZ99]
Streptopus amplexifolius (L.) DC. var. *chalazatus* Fassett [HC]
Streptopus amplexifolius (L.) DC. var. *denticulatus* Fassett
Streptopus amplexifolius (L.) DC. var. *grandiflorus* Fassett
Streptopus fassettii Á. Löve & D. Löve
Tortipes amplexifolius (L.) Small
Uvularia amplexifolia L.

FNA26: "Several poorly defined races described by N. C. Fassett (1935) as varieties based chiefly on minute difference in leaf-margin serration are not here recognized."

Streptopus lanceolatus (Aiton) Reveal [FNA26, HC2]
Phytologia. 74: 187. 1993.
rosy twisted-stalk

Streptopus curvipes Vail
Streptopus lanceolatus (Aiton) Reveal var. *curvipes* (Vail) Reveal [KZ99]
Streptopus roseus Michx. [HC]
Streptopus roseus Michx. ssp. *curvipes* (Vail) Hultén
Streptopus roseus Michx. var. *curvipes* (Vail) Fassett [HC]
Uvularia lanceolata Aiton

FNA26: "Streptopus lanceolatus has replaced the long-used name S. roseus, based on the recent lectotypification (J. L. Reveal 1993d) of Aiton\\'s Uvularia lanceolata. This widespread North American species has been divided into four intergrading varieties or races (N. C. Fassett 1935) based on variation in rhizome internode lengths and density of leaf-margin ciliation. These include var. roseus in the southern Appalachians, var. longipes in the western Great Lakes region, var. lanceolatus (= var. perspectus Fassett) in the northeast, and var. curvipes in the west."

Streptopus streptopoides (Ledeb.) Frye & Rigg [FNA26, HC, HC2]
N.W. Fl. 109. 1912.
Kruhsea, small twisted-stalk

Kruhsea streptopoides (Ledeb.) Kearney
Streptopus streptopoides (Ledeb.) Frye & Rigg ssp. *brevipes* (Baker) Calder & Roy L. Taylor
Streptopus streptopoides (Ledeb.) Frye & Rigg var. *brevipes* (Baker) Fassett [HC]

FNA26: "The North American plants, usually referred to var. brevipes (N. C. Fassett 1935), differ from the typical Asiatic ones in lacking leaf-margin ciliation (F. H. Utech and S. Kawano 1975, 1976b; H. Takahashi 1976)."

**Tulipa* [FNA26]
Sp. Pl. 1: 305. 1753; Gen. Pl. ed. 5, 145. 1754.

Limnocharitaceae: see Alismataceae

Melanthiaceae [HC2] False-Hellebore Family

Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

Anticlea [HC2]
death camas

Anticlea elegans (Pursh) Rydb. [HC2]
Bull. Torrey Bot. Club 30: 273. 1903.
glaucous death camas

Anticlea coloradensis (Rydb.) Rydb.
Zigadenus alpinus Blank.
Zigadenus elegans Pursh ssp. *elegans* [KZ99]

FNA26: "Zigadenus elegans has been treated previously as comprising two varieties, or two subspecies (W. B. Zomlefer 1997b). The western var. or subsp. elegans tends to be a smaller plant with a raceme or a 1?2-branched panicle and glabrous, sometimes glaucous leaves and stems; while the eastern var. or subsp. glaucus tends to be a larger plant with a paniculate inflorescence and glaucous leaves and stems. Because there is considerable evidence of intergradation between the two entities toward the middle of the range, including overlapping flowering times, they have not been formally distinguished here"

Anticlea occidentalis (A. Gray) Zomlefer & Judd [HC2, OFP]
Novon 12(2): 303. 2002.
bronze bells, mission bells, western featherbells

Stenanthella occidentalis (A. Gray) Rydb.
Stenanthium occidentale A. Gray [FNA26, HC]
Stenanthium rhombipetalum Suksd.

FNA26: "Stenanthium occidentale is similar to a circum-northern Pacific and Sakhalin Island endemic, S. sachalinense F. Schmidt, which may be conspecific (S. M. Kupchan et al. 1961; F. H. Utech 1987)."

Toxicoscordion [HC2]
death-camas, zigadenus, zygadene

Toxicoscordion paniculatum (Nutt.) Rydb. [HC2, JPM2]
Bull. Torrey Bot. Club 30: 272. 1903.
sand corn, panicled death-camas

Helonias paniculatus Nutt.
Zigadenus paniculatus (Nutt.) S. Watson [FNA26, HC]

Toxicoscordion venenosum (S. Watson) Rydb. [HC2]
Bull. Torrey Bot. Club 30(5): 272. 1903.
meadow death-camas, deadly zygadene

Zigadenus venenosus S. Watson [FNA26, HC]

var. *gramineum* (Rydb.) Brasher [HC2]
Novon 19(3): 295. 2009.
common death-camas, grassy death-camas

Toxicoscordion gramineum (Rydb.) Rydb.
Zigadenus gramineus Rydb.
Zigadenus intermedius Rydb.
Zigadenus venenosus S. Watson var. *gramineus* (Rydb.) Walsh ex M. Peck [FNA26, HC]

var. *venenosum* [HC2, JPM2]
coastal death-camas, common death-camas

Toxicoscordion salinum (A. Nelson) R.R. Gates
Zigadenus diegoensis Davidson
Zigadenus salinus A. Nelson
Zigadenus venenosus S. Watson var. *ambiguus* M.E. Jones
Zigadenus venenosus S. Watson var. *venenosus* [FNA26, HC]

FNA26: "The inflorescences of most plants in each population of var. venenosus are racemose, but those of a few individuals are paniculate, with a single short basal branch."

Trillium [FNA26, HC, HC2]
Sp. Pl. 1: 339. 1753; Gen. Pl. ed. 5, 158. 1754.
trillium, wake-robin

Trillium albidum J.D. Freeman [FNA26, HC2]
Brittonia. 27: 48, fig. 11. 1975.
giant trillium, sessile trillium

Trillium chloropetalum (Torr.) Howell [FNA26, HC], misapplied
Trillium chloropetalum (Torr.) Howell var. *chloropetalum* [FNA26], misapplied

ssp. *parviflorum* (V.G. Soukup) K.L. Chambers & S.C. Mey.s [HC2]
J. Bot. Res. Inst. Texas 5(2): 620. 2011.
small-flowered trillium

Trillium albidum J.D. Freeman [FNA26, HC2], misapplied
Trillium parviflorum V.G. Soukup

Trillium ovatum Pursh [FNA26, HC, HC2]
Fl. Amer. Sept. 1: 245. 1814.
trillium, white trillium, western wake-robin

var. *ovatum* [FNA26, HC2]
Fl. Amer. Sept. 1: 245. 1814.
western white trillium, western wake-robin

Trillium petiolatum Pursh [FNA26, HC, HC2]
Fl. Amer. Sept. 1: 244. 1814.
purple trillium, purple wakerobin

Veratrum [FNA26, HC, HC2]
Sp. Pl. 2: 1044. 1753; Gen. Pl. ed. 5: 468. 1754.
corn-lily, false hellebore, skunk-cabbage

Veratrum californicum Durand [FNA26, HC, HC2]
J. Acad. Nat. Sci. Philadelphia, ser. 2. 3: 103. 1855.
California false hellebore

var. *californicum* [FNA26, HC, HC2]
J. Acad. Nat. Sci. Philadelphia, ser. 2. 3: 103. 1855.
skunk cabbage, California wild hellebore

Veratrum eschscholtzii A. Gray var. *watsonii* Baker
Veratrum jonesii A. Heller
Veratrum speciosum Rydb.
Veratrum tenuipetalum A. Heller

FNA26: "N. Chiariello et al. (1980), using the snow-bank-emergent characteristics of Veratrum californicum, documented that the plants differing in open versus closed bud morphologies also have different leaf areas, internal temperatures, and rates of early expansion growth. These differences in life-history characteristics are inferentially similar to those of other alpine and northern Veratrum species."

var. *caudatum* (A. Heller) C.L. Hitchc. [FNA26, HC, HC2]
Vasc. Pl. Pacif. N.W. 1: 809. 1969.
skunk cabbage, tailed wild hellebore

Veratrum caudatum A. Heller

FNA26: "Veratrum californicum var. caudatum occurs mostly west of the Cascade Mountains in the Pacific Northwest."

Veratrum insolitum Jeps. [FNA26, HC, HC2]
Fl. Calif. 1: 266. 1921.
siskiyou wild hellebore

FNA26: "The only other whitish-flowered species in North America, Veratrum californicum, which might be confused with V. insolitum, has entire, unfringed tepals, and only slightly hairy ovaries."

Veratrum viride Aiton [FNA26, HC, HC2]
Hort. Kew. 3: 422. 1789.
American false hellebore, green false hellebore, Indian-poke

var. *eschscholzianum* (Roem. & Schult.) Breitung [FNA26, HC2]
Canad. Field-Naturalist. 71: 49. 1957 (as eschscholtzii). 1957.

American wild hellebore

Veratrum eschscholtzianum (Roem. & Schult.) Rydb.
Veratrum eschscholtzii A. Gray
Veratrum eschscholtzii A. Gray var. *incriminatum* B. Boivin
Veratrum viride Aiton ssp. *eschscholtzii* (A. Gray) Á. Löve & D. Löve
Veratrum viride Aiton var. *eschscholtzii* (A. Gray) Breitung

Xerophyllum [FNA26, HC, HC2]
Fl. Bor.-Amer. 1: 210. 1803.
basket-grass, beargrass, turkey-beard

Xerophyllum tenax (Pursh) Nutt. [FNA26, HC, HC2]
Gen. N. Amer. Pl. 1: 235. 1818.
beargrass, western turkeybeard

Helonias tenax Pursh
Xerophyllum douglasii S. Watson

FNA26: "Xerophyllum tenax, variable in plant and flower size, is without evident geographic races (S. M. Maule 1959). Similar in most respects to X. asphodeloides but more robust, X. tenax typically has twice the number of flowers (F. H. Utech 1978c). The leaf fibers were used by native tribes for garments and decorative, watertight baskets. The bulbous rhizomes were roasted for several days before being eaten."

Najadaceae: see Hydrocharitaceae

Orchidaceae [FNA26, HC, HC2] Orchid Family

The taxonomy presented here follows that presented in Flora of North America Volume 26.

Calypso [FNA26, HC, HC2]
Parad. Lond. plate 89. 1807.
[name conserved]
fairy-slipper, Venus-slipper

Calypso bulbosa (L.) Oakes [FNA26, HC, HC2]
Nat. Hist. Vermont. 1: 200. 1842.
calypso, fairy-slipper, Venus-slipper

var. *americana* (R. Br.) Luer [FNA26, HC2]
Native Orchids U.S. & Canada. 336. 1975.
calypso, fairy-slipper, Venus-slipper

Calypso americana R. Br.

Taxonomy follows FNA. Reported in Washington by FNA.

var. *occidentalis* (Holz.) B. Boivin [FNA26, HC2]
Naturaliste Canad. 94: 522. 1967.
calypso, fairy-slipper, Venus-slipper

Calypso bulbosa (L.) Oakes f. *occidentalis* Holz.

There is some range overlap between this and var. americana, and the varieties need study. Taxonomy follows FNA.

Cephalanthera [FNA26, HC2]
De Orchid. Eur. 29. 1817.

phantom-orchid, snow-orchid

Eburophyton [HC]

Cephalanthera austiniae (A. Gray) A. Heller [FNA26, HC2]
Cat. N. Amer. Pl. ed. 2. 4. (as austinae). 1900.
phantom orchid

Chloraea austiniae A. Gray
Eburophyton austiniae (A. Gray) A. Heller [HC]

Corallorhiza [FNA26, HC, HC2]
Acta Helv. Phys.-Math. 2: 61. 1755; orthography conserved.
coral-root

Corallorhiza maculata (Raf.) Raf. [FNA26, HC, HC2]
Amer. Monthly Mag. & Crit. Rev. 2: 119. 1817.
spotted coralroot

Cladorhiza maculata Raf.

var. *maculata* [FNA26, HC2]
mer. Monthly Mag. & Crit. Rev. 2: 119. 1817.
spotted coralroot

Corallorhiza multiflora Nutt.
Corallorhiza multiflora Nutt. var. *sulphurea* Suksd.
Corallorhiza vancouveriana Finet

Taxonomy follows FNA. Varieties weakly defined, intergradient with broadly overlapping ranges, and need more study. Variety maculata is reported to flower 2-4 weeks later than var. occidentalis.

var. *occidentalis* (Lindl.) Ames [FNA26, HC2]
Enum. Orchids U.S. & Canada. 22. 1924.
western spotted coralroot

Corallorhiza grab-hamii Cockerell
Corallorhiza leimbachiana Suksd.
Corallorhiza maculata (Raf.) Raf. ssp. *occidentalis* (Lindl.) Cockerell
Corallorhiza multiflora Nutt. var. *occidentalis* Lindl.

Taxonomy follows FNA. Varieties weakly defined,intergradient with broadly overlapping ranges, and need more study. Variety occidentalis is reported to flower 2-4 weeks earlier than var. maculata.

var. *ozettensis* E. Tisch [HC2]
Madroño 48(1): 40-42, f. 1. 2001.
ozette coralroot

A Clallam Co., WA endemic.

Corallorhiza mertensiana Bong. [FNA26, HC, HC2]
Mém. Acad. Imp. Sci. St. Pétersbourg, Sér. 6, Sci. Math. 2: 165. 1832.
Pacific coralroot, western coralroot

Corallorhiza maculata (Raf.) Raf. ssp. *mertensiana* (Bong.) Calder & Roy L. Taylor
Corallorhiza purpurea L.O. Williams

FNA26: "In the Pacific Northwest Corallorhiza mertensiana is largely sympatric with C. maculata and occasionally intergrades with it. It frequently forms large clumps."

Corallorhiza striata Lindl. [FNA26, HC, HC2]
Gen. Sp. Orchid. Pl. 534. 1840.
striped coralroot

var. *striata* [FNA26, HC2]
Gen. Sp. Orchid. Pl. 534. 1840.
hooded coralroot, striped coralroot

Corallorhiza macraei A. Gray

Weakly defined varietes that need more study, and were not recognized in JPM. Intermediates are known from Oregon and California, and could be expected in Washington. Taxonomy provisionally follows Freudenstein (1997) and FNA.

var. *vreelandii* (Rydb.) L.O. Williams [FNA26, HC2]
Ann. Missouri Bot. Gard. 21: 343. (as Corallorrhiza). 1934.
Vreeland's striped coralroot

Corallorhiza bigelovii S. Watson
Corallorhiza ochroleuca Rydb.
Corallorhiza striata Lindl. var. *flavida* Todsen & T.A. Todsen
Corallorhiza vreeelandii Rydb.

These are the slightly smaller flowered members of the species, reported for Washington by FNA. Intermediates are known from Oregon and California, and could be expected in Washington. Taxonomy provisionally follows Freudenstein (1997) and FNA.

Corallorhiza trifida Châtel. [FNA26, HC, HC2]
Specim. Inaug. Corallorhiza. 8. 1760.
early coralroot, northern coralroot, yellow coralroot

Corallorhiza corallorhiza (L.) MacMill., invalidly published
Corallorhiza corallorhiza (L.) MacMill. var. *coloradensis* Cockerell
Corallorhiza innata R. Br.
Corallorhiza verna Nutt.
Corallorhiza wyomingensis Hellmayr & K. Hellmayr

FNA26: "Corallorhiza trifida is largely autogamous, although a syrphid fly (Syrphus cinctellus) was reported as a pollinator by F. Silen (1906). Various floral morphs exist, some with weak geographic correlation; they do not appear to warrant taxonomic recognition. Variants of C. odontorhiza, C. wisteriana, and C. maculata without red and purple pigments in sepals and petals are occasionally misidentified as C. trifida."

Cypripedium [FNA26, HC, HC2]
Sp. Pl. 2: 951. 1753; Gen. Pl. ed. 5, 408. 1754.
lady's-slipper

Cypripedium ×columbianum Sheviak [HC2]
Columbia lady's-slipper, hybrid lady's-slipper

Cypripedium ×*columbiana* Sheviak, orthographic variant

Described from British Columbia (Sheviak 1992). Reported for Washington by P. M. Brown in a personal communication to KZ, but no voucher has been located. The two parents do grow mixed together in Spokane Co., but no spontaneous hybrids have been confirmed.

Cypripedium fasciculatum Kellogg ex S. Watson [FNA26, HC, HC2]
Proc. Amer. Acad. Arts. 17: 380. 1882.
clustered lady's-slipper

Cypripedium knightiae A. Nelson

Cypripedium montanum Douglas ex Lindl. [FNA26, HC, HC2]
Gen. Sp. Orchid. Pl. 528. 1840.
mountain lady's-slipper

FNA26: "Plants of Cypripedium montanum grown in exposed, relatively sunny situations have the ascending leaves inserted along the basal portion of the stem and the flowers displayed well above the leaves. In shadier, especially sheltered sites, the spreading leaves may be more evenly scattered along the stem. In this species the apical margin of the orifice of the lip is usually acute, in common with C. candidum, and in contrast to the usually obtuse margin in C. parviflorum; this difference can aid determination of discolored herbarium specimens. Hybrids of C. montanum and C. parviflorum have been designated C. × columbianum Sheviak. See 11. C. parviflorum for a general discussion of hybridization and variation within and between related species."

Cypripedium parviflorum Salisb. [FNA26, HC2]
Trans. Linn. Soc. London, Bot. 1: 77, plate 2, fig. 2. 1791.

yellow lady's-slipper

Recognition of varieties in this species is based on minor fragrance and pubescence differences and inconstant lip dimensions, and remains controversial. Sheviak (2002a) provides a key to the varieties, and reports from Washington both var. pubescens and var. makasin, but the two have broad and almost completely overlapping ranges across the width of North America. The FNA treatment unfortunately provides the wrong maps for two of the three varieties recognized. "In the west it becomes very difficult to separate [var. makasin] from very small plants of var. pubescens that are common there," according to Sheviak (2002a).

var. *makasin* (Farw.) Sheviak [FNA26, HC2]
Amer. Orchid Soc. Bull. 62: 403. 1993.
mocassin yellow lady's-slipper

var. *pubescens* (Willd.) O.W. Knight [FNA26, HC2]
Rhodora. 8: 93. 1906.
hairy yellow lady's-slipper

Dactylorhiza [FNA26, HC2]
Trudy Bot. Inst. S.S.S.R., Ser. 1, Fl. Sist. Vyssh. Rast. 4: 332. 1937.
[conservation proposed]
keyflower, marsh-orchid

Coeloglossum [FNA26]

Dactylorhiza viridis (L.) R. M. Bateman, Pridgeon & M. W. Chase [HC2]
Lindleyana 12(3): 129. 1997.
frog orchid, long-bracted green orchid

Coeloglossum viride (L.) Hartm. [FNA26]
Coeloglossum viride (L.) Hartm. var. *virescens* (Muhl.) Luer
Habenaria viridis (L.) R. Br. [HC]
Habenaria viridis (L.) R. Br. var. *bracteata* (Muhl. ex Willd.) A. Gray [HC]
Habenaria viridis (L.) R. Br. var. *interjecta* Fernald
Satyrium viride L.

From Devos et al.,: Our results, which combine sequences of the internal and external transcribed spacers of the nuclear ribosomal DNA, support the monophyly of Dactylorhiza, with Coeloglossum being a sister clade. The position of C. viride in the phylogenetic tree, and the considerable morphological differences with respect to Dactylorhiza, incline us to retain both lineages as distinct genera.

Epipactis [FNA26, HC, HC2]
Cat. Pl. Hort. Gott. 85. 1757.
[name conserved]
helleborine

Epipactis gigantea Douglas ex Hook. [FNA26, HC, HC2]
Fl. Bor.-Amer. 2: 202, plate 202. 1839.
giant helleborine

Amesia gigantea (Douglas ex Hook.) A. Nelson & J.F. Macbr.
Epipactis gigantea Douglas ex Hook. f. *citrina* P.M. Br.
Epipactis gigantea Douglas ex Hook. f. *rubrifolia* P.M. Br.
Helleborine gigantea (Douglas ex Hook.) Druce

FNA26: "Two very distinct color forms of this species have been published: Epipactis gigantea forma rubrifolia P. M. Brown, with deep red stems and leaves, and E. gigantea forma citrina P. M. Brown, with lemon-yellow flowers. Both are known from California. The occurrence of this wide-ranging species in India and Tibet is based on Epipactis royaleana Lindley ex Royle being given as a synonym in a study of the Monocotyledoneae of Karakorum (W. B. Dickoré 1995) and an embryologic study (S. P. Vij et al. 1999)."

**Epipactis helleborine* (L.) Crantz [FNA26, HC, HC2]
Stirp. Austr. Fasc. ed. 2. 2: 467. 1769.
broad-leaved helleborine, garden helleborine

Epipactis latifolia (L.) All.
Serapias helleborine L.

Goodyera [FNA26, HC, HC2]
Hortus Kew. 5: 197. 1813.
lattice-leaf, rattlesnake-plantain

Goodyera oblongifolia Raf. [FNA26, HC, HC2]
Herb. Raf. 76. 1833.
giant rattlesnake-plantain, western rattlesnake-plantain

Goodyera decipiens (Hook.) F.T. Hubbard
Goodyera oblongifolia Raf. var. *reticulata* B. Boivin
Peramium decipiens (Hook.) Piper

Goodyera oblongifolia and G. repens are likely the parents of the allotetraploid G. tesselata (Kallunki 1976, 1981, 2002). Earlier checklist reports of Goodyera repens from WA are in error. FNA26: "In eastern North America, Goodyera oblongifolia is restricted to formerly glaciated areas. Plants with leaves white-reticulate on the lateral veins have been described as Goodyera oblongifolia var. reticulata. This segregate, essentially coastal in distribution, occurs from northern California to southeastern Alaska and is less frequent inland from British Columbia to New Mexico and in Michigan and Wisconsin. Because garden transplant experiments (J. A. Calder and R. L. Taylor 1968, vol. 1) have shown that both reticulate and non-reticulate leaves are found within the same clone, varieties are not recognized."

Liparis [FNA26, HC, HC2]
De Orchid. Eur. 21, 30, 38. 1817.
[name conserved]
liparis, twayblade

Liparis loeselii (L.) Richardson [FNA26, HC, HC2]
De Orchid. Eur. 38. 1817.
fen orchid, Loesel's twayblade

Leptorchis loeselii (L.) MacMill.
Liparis correana (Barton) Spreng.
Malaxis correana W. Barton
Malaxis longifolia W. Barton
Ophrys loeselii L.

Rare in Washington.

Malaxis [FNA26, HC, HC2]
Prodr. 8, 119. 1788.
adder's-mouth, malaxis

Malaxis monophyllos (L.) Sw. [FNA26, HC, HC2]
Kongl. Vetensk. Acad. Nya Handl. 21: 234. 1800.
white adder's-mouth, one-leaved malaxis

var. *brachypoda* (A. Gray) F. Morris & E.A. Eames [FNA26, HC2]
Our Wild Orchids. 358. 1929.
North American white adder's-mouth

Malaxis brachypoda (A. Gray) Fernald

Recently observed in Whatcom County. Plants documented with photographs; no specimen collected due to small size of population.

Neottia [HC2]
listera, twayblade

Listera [FNA26, HC]

Neottia banksiana (Lind.) Rchb. f. [HC2]
Ann. Bot. Syst. (Walpers) 3(4): 595. 1852.

northwestern twayblade

Listera banksiana Lindl.
Listera caurina Piper [FNA26, HC]
Listera retusa Suksd.
Neottia caurina (Piper) Szlachetko
Ophrys caurina (Piper) Rydb.

Neottia borealis (Morong) Szlachetko [HC2]
Fragm. Florist. Geobot. Supp. 3: 117. 1995.
northern twayblade

Listera borealis Morong [FNA26, HC]
Ophrys borealis (Morong) Rydb.

FNA26: "In Japan Listera borealis is replaced by L. yatabei Makino, which is nearly identical except for short basal auricles. Listera borealis and L. auriculata are very similar in overall appearance; the ovaries and pedicels in L. borealis are glandular-pubescent, and in L. auriculata they are glabrous."

Neottia convallarioides (Sw.) Richardson [HC2]
De Orchid. Eur. 37. 1817.
broad-lip twayblade

Bifolium convallarioides (Sw.) Nieuwl.
Diphryllum convallarioides (Sw.) Kuntze
Epipactis convallarioides Sw.
Listera convallarioides (Sw.) Nutt. ex Elliott [FNA26, HC]
Listera eschscholziana Cham.
Ophrys convallarioides (Sw.) W. Wight ex House

Neottia cordata (L.) Richardson [HC2]
De Orchid. Eur. 37. 1817.
heart-leaf twayblade

Bifolium cordatum (L.) Nieuwl.
Diphryllum cordatum (L.) Kuntze
Distomaea cordata (L.) Spenner
Listera cordata (L.) R. Br. [FNA26, HC]
Listera cordata (L.) R. Br. var. *cordata* [FNA26]
Listera cordata (L.) R. Br. var. *nephrophylla* (Rydb.) Hultén [FNA26]
Ophrys cordata L.
Pollinirhiza cordata (L.) Dulac

The FNA treatment by Magrath and Coleman (2002) notes the varietal taxonomy is controversial. They assign our material to var. nephrophylla. Their key separates the two proposed varieties on the basis of leaf shape, lip length, and flower color, while stating "the distinction is not sufficient to maintain the varieties."

Platanthera [FNA26, HC2]
De Orchid. Eur. 20, 26, 35. 1817.
[name conserved]
bog-orchid, piperia, rein-orchid

Piperia [FNA26]

Platanthera aquilonis Sheviak [FNA26, HC2]
Lindleyana. 14: 193, figs. 1?5. 1999.
eagle rein orchid, Sheviak's bog orchid

Recently described (Sheviak 1999b), and difficult to distinguish from Platanthera huronensis. FNA26: "Flowers of Platanthera aquilonis are usually scentless, but in the far northwest they have a sweet, pungent scent, like that of some related species. The flowers are commonly self-pollinating: the pollinia rotate forward and downward, contacting the stigma, and/or the pollen masses dissociate and are deposited on the stigma as if they had sifted downward. Platanthera aquilonis is a North American diploid species long confused with the tetraploid Icelandic P. hyperborea (Linnaeus) Lindley. Flowers of both

species autopollinate, although the details of the mechanisms may differ. The two species differ in column structure and lip and viscidium shape. True P. hyperborea is similar to P. huronensis, and the relationship of these two species needs further study."

Platanthera chorisiana (Cham.) Rchb. f. [FNA26, HC2]
Icon. Fl. Germ. Helv. 13?14: 128. 1851.
choriso bog orchid

Habenaria chorisiana Cham. [HC]
Limnorchis chorisiana (Cham.) J.P. Anderson
Pseudodiphryllum chorisianum (Cham.) Nevski

Rare.

Platanthera dilatata (Pursh) Lindl. ex L.C. Beck [FNA26, HC2]
Bot. North. Middle States. 347. 1833.
bog-candle, boreal bog-orchid, white orchid, white rein-orchid, scent-bottle

Habenaria dilatata (Pursh) Hook. [HC]

var. *albiflora* (Cham.) Ledeb. [FNA26, HC2]
Fl. Ross. 4: 71. 1853.
white bog-orchid

Habenaria dilatata (Pursh) Hook. var. *albiflora* (Cham.) Correll [HC]

var. *dilatata* [FNA26, HC2]
white bog-orchid

Habenaria dilatata (Pursh) Hook. var. *dilatata* [HC]

Sheviak (2002b) discusses variability in this species, with spur length modified by pollinators, and spur length defining the infraspecific taxa. However, extreme variability in spurs and their development can lead to a single plant "simulating all three varieties" (Sheviak 2002b). There is limited geographic sorting of the three proposed varieties, all of which are found in the same habitats and have broadly overlapping ranges in western North America. "Intermediates and populations with variable spur lengths are abundant" (Sheviak 2002b). Luer (1975) also questioned the taxonomic validity of the varieties, even as he was proposing a new combination for one of them. Wallace (2003) suggested the species is "actively evolving" but failed to find molecular markers or consistent physical features to further resolve the three proposed varieties. We suggest more work is needed before the varieties can be reliably separated morphologically and recognized taxonomically.

var. *leucostachys* (Lindl.) Luer [FNA26, HC2]
Native Orchids U.S. & Canada. 225. 1975.
white bog-orchid

Habenaria dilatata (Pursh) Hook. var. *leucostachys* (Lindl.) Ames [HC]
Habenaria leucostachys (Lindl.) S. Watson
Platanthera leucostachys Lindl. [JPM]

FNA26: " Platanthera dilatata traditionally has been divided on the basis of spur length into three varieties, one of which, var. leucostachys, is sometimes treated as a distinct species. These infraspecific taxa seem to reflect differing pollination pressures. The moderate spur length and diurnal fragrance of var. dilatata suggests adaptation to diurnal Lepidoptera; the long spurs and primarily nocturnal fragrance of var. leucostachys indicates specialization for moth pollination, and the short spurs and often broader viscidia of var. albiflora suggest a broader range of pollinators or, in extreme cases, specialization for bee or fly pollination. Alone, these characteristics might support recognition at the specific level, but intermediates and populations with variable spur lengths are abundant. In some plants in western Canada, in particular, spurs that are very short when the flower is young grow to equal the lip as the flower ages, and in some they may eventually greatly exceed the lip, thereby simulating all three varieties. Plants with short spurs, either thick or variably slender, occur occasionally across the range of the species. In the southern Rocky Mountains spur reduction reaches an extreme, yet populations with moderate-length spurs occur there as well. In the broad sense, then, P. dilatata forms a cohesive unit in which spur length varies greatly, apparently in response to differing pollination pressures. The northwest is the center of variability of the species, and as it ranges eastward through the boreal forest, and southward down the Rockies and the more western ranges, it

appears to have specialized for different pollinators. The recognized varieties of P. dilatata are evidentally merely endpoints in a very complex variation pattern. They have some utility for discussion purposes, but they are very simplistic representations of the underlying situation. Variety leucostachys and, to a lesser extent, var. dilatata appear to be real entities that have emerged from a background of variability that continues to produce similar plants. This variability is here treated within var. albiflora. Platanthera dilatata hybridizes with P. huronensis and P. purpurascens, and perhaps also does so with other related species; see the note under 10. P. aquilonis."

Platanthera elegans Lindl. [HC2]
Gen. Sp. Orchid. Pl., 285. 1835.
elegant rein-orchid, hillside rein orchid

Habenaria elegans (Lindl.) Bol. [HC]
Piperia elegans (Lindl.) Rydb. [FNA26]

ssp. *elegans* [HC2]
Gen. Sp. Orchid. Pl. 285. 1835.
elegant rein-orchid, hillside rein-orchid
(see also *Platanthera elongata*, *Platanthera transversa*)

Habenaria greenei Jeps. [HC]
Habenaria unalascensis (Spreng.) S. Watson var. *maritima* (Greene) Correll
Piperia elegans (Lindl.) Rydb. ssp. *elegans* [FNA26]

Taxonomy follows FNA. A second subspecies is endemic to the Pt. Reyes Peninsula in California.

Platanthera elongata (Rydb.) R.M. Bateman [HC2]
Bot. J. Linn. Soc. 142(1): 21. 2003.
dense orchid, dense-flower rein orchid
(see also *Platanthera elegans*, *Platanthera transversa*)

Habenaria unalascensis (Spreng.) S. Watson ssp. *elata* (Jeps.) Calder & Roy L. Taylor
Habenaria unalascensis (Spreng.) S. Watson var. *elata* (Jeps.) Correll
Piperia elegans (Lindl.) Rydb. var. *elata* (Jeps.) Luer
Piperia elongata Rydb. [FNA26]

Taxonomy follows FNA & JPM. Similar to Piperia unalascensis but with a longer spur. Reports of Piperia leptopetala from Klickitat Co., Washington (WS) presumably belong here. FNA treats Piperia leptopetala as a California endemic.

Platanthera ephemerantha R.M. Bateman [HC2]
Ann. Bot. (Oxford) n.s., 104(3): 439. 2009.
white-lip rein-orchid

Piperia candida Rand. Morgan & Ackerman [FNA26]

Platanthera huronensis (Nutt.) Lindl. [FNA26, HC2]
Gen. Sp. Orchid. Pl. 288. 1835.
northern green bog-orchid

Habenaria media (Rydb.) Niles
Limnorchis media Rydb.
Orchis huronensis Nutt.
Platanthera hyperborea (L.) Lindl. [FNA26, JPM], misapplied
Platanthera ×*media* (Rydb.) Luer

FNA26: "Northwestern plants commonly treated as Platanthera hyperborea var. viridiflora (Chamisso) Kitamura (note Kitamura\'s priority over Luer) are P. huronensis; Chamisso\'s name furthermore is synonymous with P. stricta. Aleutian and coastal Alaskan plants are often short, stout, and broad-leaved, and they have incorrectly been referred to 9. P. convallariifolia. Platanthera huronensis as here delimited does not auto-pollinate in the manner of P. aquilonis. Occasional plants and populations that may be referable to P. huronensis, however, exhibit the movement of pollinia typical of P. aquilonis. These plants might reflect infraspecific variation within an allotetraploid species, result from hybridization, or constitute a distinct taxon. The relationship of some of these plants to P. hyperborea needs study. Platanthera huronensis is typically intensely fragrant with the sweet, pungent scent of some related species. Platanthera huronensis is known to hybridize with P. dilatata; it may hybridize with other species as well.

Although hybrids of P. dilatata and P. aquilonis may occur, the name traditionally used for them, P. ×media (Rydberg) Luer is a synonym of P. huronensis. See notes under 10. P. aquilonis and 8. P. hyperborea."

Platanthera obtusata (Banks ex Pursh) Lindl. [FNA26, HC2]
Gen. Sp. Orchid. Pl. 284. 1835.
small northern bog-orchid, blunt-leaf rein-orchid, one-leaf rein-orchid

Habenaria obtusata (Banks ex Pursh) Richardson [HC]
Orchis obtusata Banks ex Pursh

ssp. *obtusata* [FNA26, HC2]
Gen. Sp. Orchid. Pl. 284. 1835.
small northern bog-orchid, blunt-leaf rein-orchid, one-leaf rein-orchid

Habenaria obtusata (Banks ex Pursh) Richardson var. *collectanea* Fernald

Rare. Taxonomy follows FNA. FNA26: "The rare Eurasian Platanthera obtusata subsp. oligantha (Turczaninow) Hultén differs from the North American subsp. obtusata in its smaller dimensions and rhombic-lanceolate lip. It is also said to be densely few-flowered, although some Siberian material is comparable to American plants. Supposedly intermediate plants are reported from Alaska, and much material from that area is reduced in stature and with smaller flowers than typical of American plants. In most cases, however, lips are relatively slender, and the plants seem merely to be stunted by their environment. One or two collections from the Alaskan Peninsula and Aleutians, however, seem entirely referable to subsp. oligantha with dense, few-flowered inflorescences of very small flowers with rhombic-lanceolate lips and shorter curved spurs. Eurasian plants are reported to be hexaploid or perhaps sometimes triploid, and if the apparent ploidy differences delimit the taxa, then it should be possible to unequivocally identify Alaskan plants."

Platanthera orbiculata (Pursh) Lindl. [FNA26, HC2]
Gen. Sp. Orchid. Pl. 286. 1835.
large round-leaf orchid

Habenaria orbiculata (Pursh) Torr. [HC]
Orchis orbiculata Pursh

Taxonomy follows FNA. Closely related to Platanthera macrophylla of northeastern North America (Reddoch and Reddoch 1993). FNA26:"Considerable variation in size and shape of leaves occurs, and although to some extent regional in nature, intergradation is complete; recognition of infraspecific taxa is unwarranted. A few collections from isolated areas on the Pacific Coast of Canada are noteworthy, however. Those are small, few-flowered plants with rather narrow leaves borne alternately or subopposite toward the base of the stem, as in some Asiatic species. They are in some respects very similar to Platanthera freynii Kränzlin, an Asiatic species distinguished primarily by its abruptly narrowed petals, in contrast to the generally broader, but variable, petals in North American plants. These western plants warrant further study to establish their identity and to elucidate relationships between North American and Asiatic species."

Platanthera sparsiflora (S. Watson) Schltr. [FNA26, HC2]
Bull. Herb. Boissier. 7: 538. 1899.
canyon bog orchid

Habenaria sparsiflora S. Watson [HC]

Platanthera stricta Lindl. [FNA26, HC2]
Gen. Sp. Orchid. Pl. 288. 1835.
canyon bog orchid, needle-spur green orchid, slender bog orchid

Habenaria borealis Cham. var. *viridiflora* Cham.
Habenaria saccata Greene [HC]
Habenaria stricta (Lindl.) Rydb., homonym (illegitimate)
Limnorchis stricta (Lindl.) Rydb.
Platanthera gracilis Lindl. [KZ99]
Platanthera hyperborea (L.) Lindl. var. *viridiflora* (Cham.) Luer
Platanthera saccata (Greene) Hultén

Taxonomy follows FNA. Hybrids between Platanthera huronensis and P. stricta may be the source of the incorrect report of Platanthera × correllii Schrenk (P. hyperborea × stricta) from WA, made by KZ on the

strength of a personal communication by P. M. Brown, and not supported by specimens. FNA does not map Platanthera sparsiflora north of the Siskiyou Mountains, suggesting all WA reports (e.g., H&C from Skamania Co., and WNHP from Skamania, Yakima, Chelan & Whatcom Cos.) were misidentifications of the notoriously variable Platanthera stricta. Further work is needed support reports of Platanthera sparsiflora from Washington. FNA26: "The plants here treated as Platanthera stricta have in common more or less saccate spurs, orbiculate viscidia, and leaves that abruptly diverge from the stem, often at angles approaching 90Âº (this feature is sometimes obscured in sheltered, deeply shaded habitats). The plants described as P. gracilis Lindley are florally typical of the slender-spurred extreme of P. stricta; they differ only in peculiarly reduced, slenderly oblong but nonetheless abruptly wide-spreading leaves. The plants figured by C. A. Luer (1975) as P. hyperborea var. gracilis (Lindley) Luer are not referable to P. stricta but rather are apparently hybrids of P. stricta and P. dilatata. Critical study of the description of Habenaria borealis var. viridiflora Chamisso and an evident isotype show this plant to be referable to P. stricta, although the name has been applied to P. huronensis in the Northwest and to P. convallariifolia in Japan. See also the discussion under 9. P. convallariifolia."

Platanthera transversa (Suksd.) R.M. Bateman [HC2]
Botanical Journal of the Linnean Society 142(1): 21. 2003.
royal rein orchid

Piperia transversa Suksd. [FNA26]

Platanthera unalascensis (Spreng.) Kurtz [HC2]
Bot. Jahrb. Syst. 19(4): 408. 1894.
Alaska rein-orchid

Habenaria schischmareffiana Cham.
Habenaria unalascensis (Spreng.) S. Watson [HC]
Habenaria unalaschensis (Spreng.) S. Watson, orthographic variant
Piperia unalascensis (Spreng.) Rydb. [FNA26]
Platanthera foetida Geyer ex Hook.
Platanthera unalaschcensis (Spreng.) Kurtz, orthographic variant
Spiranthes unalascensis Spreng.

Taxonomy follows FNA and Ackerman (1977). FNA26: "The racemes in Piperia unalascensis are usually slender and sparsely flowered; racemes of uncommon coastal populations (including the type) are short, stout, and densely flowered. Plants of the coast ranges and the Pacific Northwest are stouter and have broader sepals and petals than do interior and montane forms. Two sym-patric forms appear to be in the Sierra Nevada, differing in lip morphology and scent."

Spiranthes [FNA26, HC, HC2]
De Orchid. Eur. 20, 28, 36. 1817.
[name conserved]
ladies-tresses, pearl-twist

Spiranthes diluvialis Sheviak [FNA26, HC2]
Brittonia. 36: 11, figs. 1C, D, 2A?C, F. 1984.
diluvial ladies'-tresses

Spiranthes romanzoffiana Cham. var. *diluvialis* (Sheviak) S.L. Welsh

Rare. FNA notes it is an amphiploid hybrid derived from S. romanzoffiana and S. magnicamporum Sheviak, a species of central North America.

Spiranthes porrifolia Lindl. [FNA26, HC2]
Gen. Sp. Orchid. Pl. 467. 1840.
western ladies'-tresses

Spiranthes romanzoffiana Cham. var. *porrifolia* (Lindl.) Ames & Correll [HC]

Rare.

Spiranthes romanzoffiana Cham. [FNA26, HC, HC2]
Linnaea. 3: 32. 1828.
hooded ladies'-tresses
(see also *Spiranthes porrifolia*)

Gyrostachys stricta Rydb.
Ibidium strictum (Rydb.) House
Spiranthes romanzoffiana Cham. var. *romanzoffiana* [HC]
Spiranthes stricta (Rydb.) A. Nelson

Taxonomy follows FNA. To the south of us a variable species, 2n = 44,66,88, with different ploidy levels possible within a single population, and further complicated by crossing with Spiranthes porrifolia (Sheviak & Brown 2002). FNA26:"Plants of Spiranthes romanzoffiana vary considerably in habit but are usually quite consistent in floral morphology. The strongly hooded, ascending flowers with abruptly reflexed lips provide a distinctive geometric precision. The pandurate lip with typically three veins, the lateral with abruptly wide-spreading branches, is a key feature. In some areas, however, especially at the edges of the range of the species, some variation is apparent and is sometimes coincident with variability in ploidy level. In particular, in California and adjacent southwestern Oregon variability reaches its peak, with plants variously exhibiting yellowish flowers, loosely spiraled inflorescences, and spreading lateral sepals. Some of this variation may result from gene flow from S. porrifolia, but with various ploidy levels common in this area, even within populations, the situation is apparently more complex than simple hybridization."

Poaceae [HC2] Grass Family

Synonyms:
Gramineae [HC]

Achnatherum [HC2]
needlegrass, ricegrass

Achnatherum hendersonii (Vasey) Barkworth [FNA24, HC2]
Phytologia 74(1): 7. 1993.
Henderson's needlegrass

Eriocoma hendersonii (Vasey) Romasch.
Oryzopsis hendersonii Vasey [HC]
Stipa hendersonii (Vasey) Mehlenb.

Achnatherum hymenoides (Roem. & Schult.) Barkworth [FNA24, HC2]
Phytologia 74(1): 7-8. 1993.
Indian ricegrass

Eriocoma cuspidata Nutt.
Oryzopsis hymenoides (Roem. & Schult.) Ricker ex Piper [HC]
Stipa hymenoides Roem. & Schult.

FNA24: "Achnatherum hymenoides grows in dry, well-drained soils, primarily in the western part of the Flora region and northern Mexico. Specimens from further east may be introduced; it is unknown whether they have persisted. The roots of A. hymenoides are often surrounded by a rhizosheath formed by mucilaginous secretions to which soil particles attach. This rhizosheath harbors nitrogen-fixing organisms that probably contribute to the success of the species as a colonizer."

Achnatherum lemmonii (Vasey) Barkworth [HC2]
Phytologia 74(1): 8. 1993.
Lemmon's needlegrass

Eriocoma lemmonii (Vasey) Romasch.
Stipa columbiana Macoun
Stipa lemmonii (Vasey) Scribn. [HC]

ssp. *lemmonii* [FNA24, HC2]
Phytologia 74(1): 8. 1993.

Eriocoma lemmonii (Vasey) Romasch. ssp. *lemmonii*
Stipa lemmonii (Vasey) Scribn. var. *jonesii* Scribn.

Stipa lemmonii (Vasey) Scribn. var. *lemmonii* [HC]

FNA24: "Achnatherum lemmonii grows in sagebrush and yellow pine associations, from southern British Columbia to California and east to Utah. It has been confused in the past with A. nelsonii; it differs in having narrower leaves, laterally compressed florets with a thick apical lobe, and longer paleas."

Achnatherum nelsonii (Scribn.) Barkworth [HC2]
Phytologia 74(1): 9. 1993.
Nelson's needlegrass

Eriocoma nelsonii (Scribn.) Romasch.

ssp. *dorei* (Barkworth & J. Maze) Barkworth [FNA24, HC2]
Phytologia 74(1): 9. 1993.
Nelson's needlegrass

Achnatherum lettermanii (Vasey) Barkworth [HC2], misapplied
Stipa columbiana Macoun, misapplied
Stipa nelsonii Scribn. ssp. *dorei* Barkworth & J. Maze
Stipa nelsonii Scribn. var. *dorei* (Barkworth & J. Maze) Dorn

FNA24: "Achnatherum nelsonii subsp. dorei grows from the southern Yukon Territory to California and Wyoming. In regions where both subspecies grow, subsp. dorei is at higher elevations than subsp. nelsonii."

ssp. *nelsonii* [HC2]
Nelson's needlegrass

Stipa occidentalis Thurb. ex S. Watson var. *nelsonii* (Scribn.) C.L. Hitchc. [HC]

Achnatherum occidentale (Thurb. ex S. Watson) Barkworth [HC2]
(Piper) Barkworth, Phytologia 74: 10. 1993.
common western needlegrass
(see also *Achnatherum nelsonii*)

Stipa occidentalis Thurb. ex S. Watson [HC]

ssp. *californicum* (Merr. & Burtt Davy) Barkworth [FNA24, HC2]
Phytologia 74(1): 10. 1993.
California needlegrass

Achnatherum nelsonii (Scribn.) Barkworth ssp. *longiaristatum* (Barkworth & J. Maze) Barkworth
Stipa californica Merr. & Burtt Davy
Stipa nelsonii Scribn. var. *longiaristata* Barkworth & J. Maze
Stipa occidentalis Thurb. ex S. Watson var. *californica* (Merr. & Burtt Davy) C.L. Hitchc. [HC]

FNA24: "Achnatherum occidentale subsp. californicum grows from Washington through Idaho to southwestern Montana and south to California and Nevada, with disjunct records from south-central Wyoming and southwestern Utah. Its elevation range is 2000?4000 m. Johnson (1962) postulated that Achnatherum occidentale subsp. californicum is a hybrid derivative of A. nelsonii and A. occidentale; it intergrades with both. The scattering of longer hairs among shorter hairs on the basal awn segments, combined with the long apical lemma hairs, give florets of subsp. californicum a more untidy appearance than those of the other two subspecies. It resembles A. nevadense in this respect, but differs from that species in the shape of the boundary between the glabrous and strigose portions of the callus, in usually being glabrous below the lower cauline nodes, and in having paleas that are shorter in relation to the lemmas. Plants with scabrous awns are often confused with A. nelsonii subsp. nelsonii; they differ in having sharper calluses, a more elongated extension of the glabrous callus area into the strigose portion of the callus, and, usually, longer awns."

ssp. *pubescens* (Vasey) Barkworth [FNA24, HC2]
Phytologia 74(1): 10. 1993.
western needlegrass

Stipa elmeri Piper & Brodie ex Scribn.
Stipa occidentalis Thurb. ex S. Watson var. *pubescens* (Vasey) J. Maze, Roy L. Taylor & MacBryde

FNA24: "Achnatherum occidentale subsp. pubescens grows from Washington to California and eastward to Wyoming, at 1300?4700 m. It is the most widespread and variable subspecies of A. occidentale, intergrading with subsp. californicum, A. nelsonii, and A. lettermanii. It differs from the latter two in its shorter paleas and its pilose awns."

Achnatherum richardsonii (Link) Barkworth [FNA24, HC2]
Phytologia 74(1): 12. 1993.
Richardson's ricegrass

Stipa richardsonii Link [HC]

FNA24: "Achnatherum richardsonii grows in open woodlands and grasslands, often on sand or gravel, from the Yukon Territory to Washington and Manitoba, and south in the Rocky Mountains through Montana and Wyoming to western South Dakota and northern Colorado. Its elevation range is 1000?3100 m. It is readily recognized by its combination of flexuous panicle branches, drooping spikelets, and straight distal awn segments. Scagel and Maze (1984) concluded that putative hybrids between A. richardsonii and A. nelsonii subsp. dorei were merely large plants of subsp. dorei that varied in the direction of A. richardsonii."

Achnatherum thurberianum (Piper) Barkworth [FNA24, HC2]
Phytologia 74(1): 14. 1993.
Thurber's ricegrass

Stipa thurberiana Piper [HC]

FNA24: "Achnatherum thurberianum grows in canyons and foothills, primarily in sagebrush desert and juniper woodland associations, from Washington to southern Idaho and southwestern Montana and from California to Utah, at 900?3000 m. Its long ligules and pilose awns make it one of the easier North American species of Achnatherum to identify."

**Aegilops* [HC, HC2]
goatgrass

**Aegilops cylindrica* Host [FNA24, HC, HC2]
Icon. Descr. Gram. Austriac. 2: 6, pl. 7. 1802.
jointed goatgrass

Aegilops cylindrica Host var. *rubiginosa* Popova
Cylindropyrum cylindricum (Host) Á. Löve
Triticum cylindricum (Host) Ces., Pass. & Gibelli

FNA24: "Aegilops cylindrica is a widespread weed in North America, being particularly troublesome in winter wheat. It usually grows in disturbed sites such as roadsides, fields, and along railroad tracks. It is native to the Mediterranean region and central Asia, and is adventive in other temperate countries. Hybrids with Triticum aestivum have been found in various parts of North America. Being sterile annuals, they do not persist."

**×Agropogon*

**Agropyron* [HC, HC2]
wheatgrass
(see also *Elymus*, *Eremopyrum*, *Pascopyrum*, *Pseudoroegneria*, *Thinopyrum*)

**Agropyron cristatum* (L.) Gaertn. [FNA24, HC, HC2]
Novi Commentarii Academiae Scientiarum Imperialis Petropolitanae 14(1) 1770 I. 540. 1770.
crested wheatgrass

FNA24: "Among the more commonly encountered variants of Agropyron cristatum in the Flora region are the cultivar "?Fairway\\\', which was considered by Dillman (1946) and Dewey (1986) to belong to A. cristatum rather than A. desertorum, and its derivatives "?Parkway\\\' and "?Ruff\\\'. The name "Fairway"• is also widely used in agricultural circles to refer to any crested wheatgrass that looks like the cultivar "?Fairway\\\'. "Standard"• crested wheatgrass, which Dewey (1986) and others placed in A. desertorum, originally referred to a particular seed lot (S.P.I. 19537) that the Montana Wheatgrowers\\\' Association decided to use as a standard against which to compare the performance of other crested wheatgrass strains. The term is now applied by agronomists to all crested wheatgrasses that are less leafy and have

more lanceolate spikes than "Fairway"• crested wheatgrasses. There are numerous cultivars of crested wheatgrass available. Because it is easy to establish, Agropyron cristatum has often been used to restore productivity to areas that have been overgrazed, burned, or otherwise disturbed. This ability, combined with its high seed production, tends to prevent establishment of most other species, both native and introduced."

*_Agropyron fragile_ (Roth) P. Candargy [HC2]
Étude Monogr. Hordées: 58. 1901.
Siberian wheatgrass

Agropyron sibiricum (Willd.) P. Beauv. [HC]

Agrostis [HC, HC2]
bentgrass
(see also _Apera_, _Podagrostis_, _Polypogon_)

*_Agrostis capillaris_ L. [FNA24, HC2]
Sp. Pl. 1: 62. 1753 1753.
colonial bentgrass

Agrostis sylvatica Huds.
Agrostis tenuis Sibth. [HC]
Agrostis tenuis Sibth. var. _aristata_ (Parnell) Druce
Agrostis tenuis Sibth. var. _hispida_ (Willd.) Philipson
Agrostis tenuis Sibth. var. _pumila_ (L.) Druce

FNA24: "Agrostis capillaris grows along roadsides and in disturbed areas. It was introduced from Europe, and is now well established in western and eastern North America. It is often used for fine-leaved lawns; commercial seed sold as Agrostis tenuis "?Highland\\' usually contains A. capillaris. Agrostis capillaris differs from A. gigantea in its short ligules, especially on the vegetative shoots, and the open panicles that lack spikelets near the base of the branches. It differs from A. castellana in having diffuse rather than clustered spikelets, fewer rhizomes, divaricate panicle branches after anthesis, calluses that are glabrous or with hairs up to 0.1 mm long, and glabrous lemmas. It also tends to flower somewhat earlier than A. castellana. Agrostis capillaris readily hybridizes with A. vinealis, the hybrids being somewhat intermediate between the two parents."

*_Agrostis castellana_ Boiss. & Reut. [FNA24, HC2]
Diagn. Pl. Nov. Hisp. 26. 1842.
Highland bentgrass, dryland browntop

FNA24: "Agrostis castellana is native to southern Europe. It was introduced to North America in the 1930s for use in lawns and golf greens, under the name Agrostis tenuis "?Highland\\\'; commercial samples of "?Highland\\\' often contain A. capillaris. Escaped plants were collected at least as early as the 1950s, but were not recognized as belonging to A. castellana until the 1990s, when several collections were identified as such in Oregon. Recorded habitats have ranged from sunny gravel roadsides to moist ground alongside cranberry bogs, at elevations from near sea level to over 600 m. In view of its extensive commercial use for over 70 years and its drought tolerance, it is likely that it is more widespread than shown. Agrostis castellana belongs to a Eurasian group that includes A. gigantea, A. stolonifera, and A. capillaris. It differs from A. gigantea and A. stolonifera in having shorter, truncate ligules about as short as wide, and in not possessing extensive rhizomes and stolons. It differs from A. capillaris in having clustered rather than diffuse spikelets, more abundant rhizomes, somewhat constricted panicle branches after anthesis, abundantly hairy calluses with hairs up to 0.3(0.6) mm long, and lemmas that are sometimes dorsally pubescent. It also tends to flower somewhat later than A. capillaris."

Agrostis densiflora Vasey [HC2]
Contr. U.S. Natl. Herb. 3(1): 72. 1892.
California bentgrass

Collection from 2013 from Jefferson County confirmed by Barbara Wilson. 1902 collection from Grays Harbor at WS but not examined.

Agrostis exarata Trin. [FNA24, HC, HC2]
Gram. Unifl. Sesquifl. 207. 1824.
spiked bentgrass

Agrostis aenea (Trin.) Trin.
Agrostis alaskana Hultén
Agrostis ampla Hitchc.
Agrostis asperifolia Trin.
Agrostis exarata Trin. ssp. *exarata* [HC]
Agrostis exarata Trin. ssp. *minor* (Hook.) C.L. Hitchc. [HC]
Agrostis exarata Trin. var. *exarata* [HC]
Agrostis exarata Trin. var. *minor* Hook.
Agrostis exarata Trin. var. *monolepis* (Torr.) Hitchc.
Agrostis exarata Trin. var. *monolepsis* (Torr.) Hitch. [HC]
Agrostis exarata Trin. var. *pacifica* Vasey
Agrostis exarata Trin. var. *purpurascens* Hultén
Agrostis longiligula Hitchc. [HC]
Agrostis longiligula Hitchc. var. *australis* J.T. Howell
Agrostis melaleuca (Trin.) Hitchc.
Agrostis microphylla Steud. var. *major* Vasey

FNA24: "Agrostis exarata is common and widely distributed in western North America, usually growing in moist ground in open woodlands, river valleys, tidal marshes, and swamp and lake margins; it also grows in dry habitats such as grasslands and shrublands. It extends from Alaska into Mexico, and is also found in Kamchatka and the Kuril Islands. Eastern North American records probably reflect introductions. It readily colonizes roadsides and bare soil, and exhibits ecological and developmental flexibility. Agrostis exarata is recognized here as a single, variable species that includes what others have treated as distinct species or varieties. Cytotaxonomic study might clarify the basis of the observed variation. Agrostis exarata appears to be related to A. densiflora."

**Agrostis gigantea* Roth [FNA24, HC2]
Tent. Fl. Germ. 1: 31. 1788.
black bentgrass

Agrostis gigantea Roth var. *dispar* (Michx.) Philipson
Agrostis nigra With.
Agrostis stolonifera L. ssp. *gigantea* (Roth) Schübl. & G. Martens
Agrostis stolonifera L. var. *major* (Gaudin) Farw.

FNA24: "Agrostis gigantea grows in fields, roadsides, ditches, and other disturbed habitats, mostly at lower elevations. It is a serious agricultural weed, as well as a valuable soil stabilizer. In the Flora region, its range extends from the subarctic to Mexico; it is considered to be native to Eurasia. It is more heat tolerant than most species of Agrostis. Agrostis gigantea has been confused with A. stolonifera, from which it differs in having rhizomes and a more open panicle. Agrostis stolonifera has elongated leafy stolons, mainly all above the surface, that root at the nodes, and the panicles are condensed and often less strongly pigmented than in A. gigantea. Its distribution tends to be more northern and coastal where ditches and pond margins are common habitats, and its stolons enable it to form loose mats. Agrostis gigantea is ecologically adapted to a more extreme climate?hot summers/cold winters and drought?than A. stolonifera. It is also similar to A. capillaris and A. castellana; it differs from both in its longer ligules, from A. capillaris in its less open panicles with spikelets near the base of the branches, and from A. castellana in being more extensively rhizomatous. When Agrostis gigantea grows in damp hollows under trees it becomes more like A. stolonifera, particularly when the inflorescence is young, not expanded, and pale. If the rootstock is not collected, identification is a major problem."

Agrostis idahoensis Nash [FNA24, HC, HC2]
Bull. Torrey Bot. Club 24(1): 42-43. 1897.
Idaho bentgrass

Agrostis bakeri Rydb.
Agrostis borealis Hartm. var. *recta* (Nash) B. Boivin
Agrostis clavata Trin., misapplied
Agrostis filicumis M.E. Jones, orthographic variant
Agrostis idahoensis Nash var. *bakeri* (Rydb.) W.A. Weber

FNA24: "Agrostis idahoensis grows in western North America, from British Columbia to California and New Mexico, in alpine and subalpine meadows along wet seepage areas and bogs, and in wet openings with

Sphagnum in coniferous forests. It was recently discovered in Chile and Argentina; it is not known whether it is native or introduced there (Rúgolo de Agrasar and Molina 1997). Agrostis idahoensis is often confused with A. mertensii and dwarf forms of A. scabra, both of which tend to grow in better-drained habitats."

Agrostis mertensii Trin. [FNA24, HC2]
Linnaea 10: 302. 1836.
Merten's bentgrass, northern bentgrass

Agrostis borealis Hartm. [HC]
Agrostis borealis Hartm. var. *americana* (Scribner ex Macoun) Fernald
Agrostis borealis Hartm. var. *paludosa* (Scribn.) Fernald
Agrostis mertensii Trin. ssp. *borealis* (Hartm.) Tzvelev
Agrostis rupestris All., misapplied

FNA24: "Agrostis mertensii grows on banks and gravel bars in river and lake valleys, and on open grasslands and rocky slopes of mountains and cliffs. It has a circumboreal distribution. In the Flora region, it extends from Alaska across Canada to Newfoundland and Greenland, south in the mountains to Wyoming and Colorado in the west, and West Virginia, Tennessee, and North Carolina in the east. It also grows in arctic Europe, Scandinavia, the mountainous regions of Mexico, and n

Agrostis microphylla Steud. [FNA24, HC, HC2]
Syn. Pl. Glumac. 1: 164. 1854.
small-leaf bentgrass

Agrostis inflata Scribn.
Agrostis microphylla Steud. var. *intermedia* Beetle

FNA24: "Agrostis microphylla grows in thin, rocky soils, sandy areas, cliffs, vernal pools, and serpentine areas. It is a winter annual, flowering in late winter to spring, adapted to low-competition habitats with summer drought. It may be related to, or conspecific with, A. hendersonii. Agrostis microphylla grows mostly along the Pacific coast from British Columbia to northern Baja California, Mexico. Reports of A. microphylla from the Humboldt Mountains, Nevada, reflect Vasey\\'s treatment of a specimen of A. exarata as the type of a new variety, A. microphylla var. major Vasey."

Agrostis oregonensis Vasey [FNA24, HC, HC2]
Bull. Torrey Bot. Club 13: 55. 1886.
Oregon bentgrass

FNA24: "Agrostis oregonensis grows in wet habitats, such as stream and lake margins, damp woods, and meadows, in western North America, primarily in the Pacific Northwest from British Columbia to California and Wyoming. It has not been found in Mexico."

Agrostis pallens Trin. [FNA24, HC, HC2]
Mém. Acad. Imp. Sci. Saint-Pétersbourg, Sér. 6, Sci. Math., Seconde Pt. Sci. Nat. 6,4(3-4): 328. 1841.
seashore bentgrass

Agrostis diegoensis Vasey [HC]
Agrostis lepida Hitchc.
Agrostis pallens Trin. var. *vaseyi* H. St. John

FNA24: "Agrostis pallens grows on coastal sands and cliffs, in meadows, and in open, xeric woodlands to subalpine woodlands at 3500 m. It extends from British Columbia south into Baja California, Mexico, and east to western Montana and Utah. The relationship of the higher-elevation, more open-panicled plants to those of lower elevations merits further study."

Agrostis scabra Willd. [FNA24, HC, HC2]
Sp. Pl. 1(1): 370. 1797.
rough bentgrass

Agrostis geminata Trin.
Agrostis hyemalis (Walter) Britton, Sterns & Poggenb. var. *geminata* (Trin.) Hitchc.
Agrostis hyemalis (Walter) Britton, Sterns & Poggenb. var. *scabra* (Willd.) H.L. Blomq.
Agrostis hyemalis (Walter) Britton, Sterns & Poggenb. var. *tenuis* (Tuck.) Gleason
Agrostis scabra Willd. ssp. *septentrionalis* (Fernald) Á. Löve & D. Löve
Agrostis scabra Willd. var. *geminata* (Trin.) Swallen
Agrostis scabra Willd. var. *septentrionalis* Fernald

FNA24: "Agrostis scabra grows in a wide variety of habitats, including grasslands, meadows, shrublands, wood-lands, marshes, and stream and lake margins, as well as disturbed sites such as roadsides, ditches, and aban-doned pastures. It occurs throughout much of the Flora region, but is not common in the Canadian high arctic or the southeastern United States. It extends south into Mexico; it is also native to the Pacific coast from Kamchatka to Japan and Korea, and has been introduced elsewhere. Plants in the Agrostis scabra aggregate are variable. Awned and unawned plants often occur together, the difference presumably being caused by a single gene. At least three groups may be distinguished within the species as treated here: widespread, lowland, rather weedy plants capable of producing very large panicles that have been introduced into the southern United States; smaller, short-leaved, slow-growing plants of rocks and screes, which are widespread in the Rockies, the Appalachians, and much of Alaska, Canada, and Greenland; and luxuriant, broad-leaved plants that are characteristically found in sheltered, frost-free canyons of the southwestern United States. The second group has sometimes been called A. scabra var. geminata (Trin.) Swallen or A. geminata Trin. Tercek et al. (2003) found that annual forms of Agrostis scabra with inflated upper sheaths and open panicles that were collected around hot springs in western North America were molecularly, and in some respects morphologically, more similar to plants identified as hot spring endemics such as A. rossiae and A. pauzhetica Prob., than they were to neighboring perennial plants of A. scabra that did not have inflated leaf sheaths. They differed, however, in having open, rather than contracted, panicles. Agrostis scabra is often confused w

*_Agrostis stolonifera_ L. [FNA24, HC2]
Sp. Pl. 1: 62. 1753.
spreading bentgrass

Agrostis alba L. var. _palustris_ (Huds.) Pers. [HC]
Agrostis alba L. var. _stolonifera_ (L.) Sm. [HC]
Agrostis maritima Lam.
Agrostis palustris Huds.
Agrostis stolonifera L. var. _compacta_ Hartm.
Agrostis stolonifera L. var. _palustris_ (Huds.) Farw.

FNA24: "Agrostis stolonifera grows in areas that are often temporarily flooded, such as lakesides, marshes, salt marshes, lawns, and damp fields, as well as moist meadows, forest openings, and along streams. It will also colonize disturbed sites such as ditches, clearcuts, and overgrazed pastures. Its North American range extends from the subarctic into Mexico, mostly at low to middle elevations. Agrostis stolonifera has been confused with A. gigantea. It is considered to be Eurasian, but some northern salt marsh and lakeside populations may be native. Agrostis stolonifera is also similar to A. castellana; it differs in having longer, acute to truncate ligules that are longer than wide, and in possessing extensive stolons. The names A. palustris Huds. and A. maritima Lam. have been applied to plants with longer stolons; all forms intergrade. A hybrid between A. stolonifera and Polypogon monspeliensis, ×Agropogon lutosus, has been found in the Flora region. It differs from A. stolonifera in having awned glumes and lemmas. Agrostis stolonifera readily hybridizes with A. vinealis, the hybrids being somewhat intermediate between the two parents."

Agrostis variabilis Rydb. [FNA24, HC, HC2]
Memoirs of the New York Botanical Garden 1: 32. 1900.
alpine bentgrass

FNA24: "Agrostis variabilis grows in alpine and subalpine meadows and forests and on talus slopes, at elevations up to 4000 m, from British Columbia and Alberta south to California and New Mexico. It can appear similar to dwarf forms of Podagrostis humilis, but differs from that species in not having paleas."

*_Aira_ [HC, HC2]
hairgrass

*_Aira caryophyllea_ L. [HC, HC2]
Sp. Pl. 1: 66. 1753.
silver hairgrass

Aspris caryophyllea (L.) Nash

*var. _caryophyllea_ [FNA24, HC2]
Sp. Pl. 1: 66. 1753.
silver hairgrass

FNA24:"Aira caryophyllea var. caryophyllea is native to the Mediterranean region. It usually grows in dry, sandy to rocky soil and on rock outcrops, in open and disturbed sites in woods, grassy flats, pastures, paths, and roadsides; it is occasionally found in damp ground at swamp or lagoon margins."

**Aira elegans* Roem. & Schult. [HC, HC2]
Syst. Veg., ed. 15 bis [Roemer & Schultes] 2: 682. 1817.
delicate hairgrass

Aira capillaris Host
Aira caryophyllea L. var. *capillaris* (Mert. & W.D.J. Koch) Mutel
Aira elegans Roem. & Schult. ssp. *ambigua* (Arcang.) Holub
Aira elegantissima Schur
Aspris capillaris (Mert. & W.D.J. Koch) Hitchc.

FNA24: "Aira caryophyllea var. capillaris is native to Europe, northern Africa, and western Asia. It usually grows in dry to somewhat moist, sandy loam soils of grassy banks, woodland openings, and disturbed sites such as pastures and roadsides. Aira caryophyllea var. capillaris is the correct name for this taxon at the varietal level. If treated at the species level, its correct name is Aira elegans Willd. ex Roem. & Schult."

**Aira praecox* L. [FNA24, HC, HC2]
Sp. Pl. 1: 65-66. 1753.
early silver hairgrass

Aspris praecox (L.) Nash

FNA24: "Aira praecox is native to Europe. In the Flora region, it grows mainly along or near the Pacific and Atlantic coasts, in dry to vernally moist sand dunes or in sandy to rocky soils, on rock faces and ledges, and in disturbed areas such as the edges of roads, railways, and airports. It is usually found in lowland areas, though it occasionally grows at montane to subalpine elevations."

Alopecurus [HC, HC2]
foxtail, meadow-foxtail

Alopecurus aequalis Sobol. [HC, HC2]
Fl. Petrop. 16. 1799.
little foxtail, short-awn foxtail

var. *aequalis*
Fl. Petrop. 16. 1799.
little foxtail, short-awn foxtail

**Alopecurus arundinaceus* Poir. [FNA24, HC2]
Encycl. 8: 776. 1808.
creeping meadow-foxtail

Alopecurus ventricosus Pers.

FNA24: "Alopecurus arundinaceus is native to Eurasia, extending north of the Arctic Circle and south to the Mediterranean. It grows on wet, moderately acid to moderately alkaline soils, on flood plains, vernal ponds, and along rivers, streams, bogs, potholes, and sloughs. It was introduced for pasture in North Dakota and now occurs more widely, having been promoted as a forage species, and is sometimes used in seed mixtures for revegetation projects. It was evaluated for revegetation in Alberta, but there is no evidence that it was ever actually used in that province. Alopecurus arundinaceus was found to suppress Hordeum jubatum, a troublesome, unpalatable, weedy species, in irrigated pastures (Moyer and Boswall 2002)."

Alopecurus carolinianus Walter [FNA24, HC, HC2]
Fl. Carol. 74. 1788.
tufted meadow-foxtail

Alopecurus macounii Vasey
Alopecurus ramosus Poir.

FNA24: "Alopecurus carolinianus is native to the central plains, Mississippi valley, and southeastern United States, where it is common in wet meadows, ditches, wetland edges, and other moist, open habitats; it is occasionally a weed of rice fields. At the northern limit of its range it is clearly adventive, growing in gardens and nurseries. It also occurs in arid areas of the prairies and southwest, growing sporadically

along sloughs and in ditches and vernal pools. Whether such populations are native or naturalized is not clear."

Alopecurus geniculatus L. [FNA24, HC, HC2]
Sp. Pl. 1: 60. 1753.
water foxtail

Alopecurus pallescens Piper

FNA24: "Alopecurus geniculatus is native to Eurasia and parts of North America, growing in shallow water, ditches, open wet meadows, shores, and stream banks from the lowland to montane zones. It has been naturalized in eastern North America. The status of populations in the west, including the Queen Charlotte Islands, British Columbia, is less certain. Many occur in moist sites within native rangeland, but these areas have also been affected by European settlement, although less intensively and for a shorter period than those in eastern North America."

**Alopecurus myosuroides* Huds. [FNA24, HC, HC2]
Fl. Angl. 1: 23. 1762.
slender meadow-foxtail

Alopecurus agrestis L.

FNA24: "Alopecurus myosuroides is native to Eurasia and grows in moist meadows, deciduous forests, and cultivated or disturbed ground. A significant weed species in temperate cereal crops, it is one of the most damaging weeds of winter cereals in England. It has been introduced repeatedly as a weed of cultivation into many parts of the Flora region, but apparently has not spread to a large degree out of cultivation. Alopecurus myosuroides has been listed as a noxious weed in the state of Washington, one of the states where winter wheat is a major crop."

**Alopecurus pratensis* L. [FNA24, HC, HC2]
Sp. Pl. 1: 60. 1753.
field meadow-foxtail

FNA24: "Alopecurus pratensis is native from temperate northern Eurasia south to North Africa. It is now widely naturalized in temperate regions throughout the world. It grows in poorly to somewhat drained soils in meadows, riverbanks, lakesides, ditches, roadsides and fence rows. It has been widely introduced as a pasture grass; it may also have become established from ballast or imported hay. The earliest collections are from coastal New England; it is now known from most provinces and states."

Alopecurus saccatus Vasey [FNA24, HC, HC2]
Bot. Gaz. 6: 290. 1881.
Pacific meadow-foxtail

Alopecurus howellii Vasey

FNA24: "Alopecurus saccatus is a native annual that inhabits moist, open meadows, valley plains, and vernal pools at elevations below 700 m from Washington to California. Segregates have been treated as species in the past, but the variation between them appears to be continuous, and no habitat differentiation is evident."

**Ammophila* [HC, HC2]
beachgrass

**Ammophila arenaria* (L.) Link [HC, HC2]
Hort. Berol. [Link] 1: 105. 1827.
European beachgrass

*ssp. *arenaria* [FNA24, HC2]
Hort. Berol. 1: 105. 1827.
European beachgrass

FNA24: "Ammophila arenaria is a European species that has become naturalized in most temperate countries. It was introduced along the Pacific coast and in the interior of western North America as a sand binder. North American plants belong to Ammophila arenaria (L.) Link subsp. arenaria, in which the glumes exceed the lemma and the callus hairs are about 2-3 mm long. It is native from northern and western Europe to northwestern Spain."

*_Ammophila breviligulata_ Fernald [HC2]
Rhodora 22: 71. 1920.
American beachgrass

*ssp. _breviligulata_ [FNA24, HC2]
Rhodora 22: 71. 1920.
American beachgrass

FNA24: "Ammophila breviligulata subsp. breviligulata grows on sand dunes and dry sandy shores from around the Great Lakes to the Atlantic coast from Newfoundland to South Carolina and, as an introduction, on the west coast."

*_Anthoxanthum_ [HC, HC2]
vernalgrass

*_Anthoxanthum aristatum_ Boiss. [HC, HC2]
Voy. Bot. Espagne 2: 638. 1842.
annual vernalgrass

Anthoxanthum odoratum L. var. _puelii_ (Lecoq & Lamotte) Coss. & Durieu
Anthoxanthum puelii Lecoq & Lamotte

*ssp. _aristatum_ [FNA24, HC2]
Fl. Centre France 2: 576. 1849.
small sweet vernal grass

FNA24: "Anthoxanthum aristatum is native to Europe. It is now established but not common in the Flora region, being found in mesic to dry, open, disturbed habitats of western and eastern North America. North American plants belong to Anthoxanthum aristatum Boiss. subsp. aristatum, which differs from Anthoxanthum aristatum subsp. macranthum Valdes in having well-exserted awns and deeply bifid, sterile lemmas."

*_Anthoxanthum odoratum_ L. [FNA24, HC, HC2]
Sp. Pl. 1: 28. 1753.
sweet vernalgrass

Anthoxanthum odoratum L. ssp. _alpinum_ (Á. Löve & D. Löve) B.M.G. Jones & Melderis
Anthoxanthum odoratum L. ssp. _odoratum_

FNA24: "Anthoxanthum odoratum is native to southern Europe. In the Flora, region it grows in meadows, pastures, grassy beaches, old hay fields, waste places, dense shade or as a weed in lawns.... In southern British Columbia, it is rapidly invading the moss-covered bedrock of coastal bluffs, and will soon exclude many native species."

*_Apera_ [HC2]
windgrass

*_Apera interrupta_ (L.) P. Beauv. [FNA24, HC2]
Ess. Agrostogr. 31, 151. 1812.
dense silky-bent

Agrostis interrupta L. [HC]

FNA24: "Introduced from Europe, it now grows from British Columbia south to Arizona and New Mexico, as well as in Ontario and a few scattered locations in the eastern part of the Flora region."

Aristida [HC, HC2]
aristida, threeawn

Aristida purpurea Nutt. [HC2]
Trans. Amer. Philos. Soc. ser. 2, 5: 145. 1835.
threeawn

var. *longiseta* (Steud.) Vasey [FNA25, HC2]
Rep. U.S. Geogr. Surv., Wheeler 6: 286 [1879]. 1878.
red threeawn

Aristida longespica Poir. var. *longespica*, misapplied
Aristida longiseta Steud. [HC]
Aristida longiseta Steud. var. *longiseta*
Aristida longiseta Steud. var. *robusta* Merr. [HC]

FNA25: "Aristida purpurea var. longiseta grows on sandy or rocky slopes and plains, and in barren soils of disturbed ground from western Canada to northern Mexico. It is the most variable variety of Aristida purpurea, ranging from short plants with basal leaves and short panicles suggestive of var. fendleriana, to tall plants with long cauline leaves and long, drooping panicles resembling var. purpurea. The length of its glumes, width of its lemma apex, and the length and thickness of its awns distinguish it from all the other varieties. The callus and long, stiff awns are especially troublesome to sheep and cattle."

**Arrhenatherum* [HC, HC2]
oatgrass

**Arrhenatherum elatius* (L.) P. Beauv. ex J. Presl & C. Presl [HC, HC2]
Fl. Cech. 17. 1819.
bulbous oatgrass

Arrhenatherum elatius (L.) P. Beauv. ex J. Presl & C. Presl ssp. *bulbosum* (Willd.) Schübl. & G. Martens [HC2]
Arrhenatherum elatius (L.) P. Beauv. ex J. Presl & C. Presl ssp. *elatius* [HC2]
Arrhenatherum elatius (L.) P. Beauv. ex J. Presl & C. Presl var. *biaristatum* (Peterm.) Peterm.
Avena elatior L.

**Avena* [HC, HC2]
oats

**Avena barbata* Pott ex Link [FNA24, HC, HC2]
J. Bot. (Schrader) 1799(2,2): 314-315 [1800]. 1799.
barbed oats

H&C uses Avena barbata Brot., which is an invalid/illegitimate name according to TROPICOS. FNA24:"Avena barbata is native to the Mediterranean region and central Asia. It has become naturalized in western North America, particularly California, displacing native grasses It was collected once in Vancouver, British Columbia, but should be considered a waif there."

**Avena fatua* L. [FNA24, HC, HC2]
Sp. Pl. 1: 80. 1753.
wild oats

Avena fatua L. var. *glabrata* Peterm.
Avena fatua L. var. *vilis* (Wallr.) Hausskn.

FNA24: "Avena fatua is native to Europe and central Asia. It is known as a weed in most temperate regions of the world; in some parts of Canada and the United States it is considered a noxious weed. Avena fatua is sometimes confused with A. occidentalis, but differs in having shorter, wider spikelets, fewer florets, and a distal floret which does not have a heart-shaped disarticulation scar. Hybrids between A. fatua and A. sativa are common in plantings of cultivated oats. The hybrids resemble A. sativa, but differ in having the fatua-type lodicule; some also have a weak awn on the first lemma. They are easily confused with fatuoid forms of A. sativa."

**Avena sativa* L. [FNA24, HC, HC2]
Sp. Pl. 1: 79. 1753.
cultivated oats

Avena byzantina K. Koch
Avena fatua L. var. *sativa* (L.) Hausskn.
Avena sativa L. var. *orientalis* (Schreb.) Alef.

FNA24: "Avena sativa, a native of Eurasia, is widely cultivated in cool, temperate regions of the world, including North America. Fall-sown oats are planted in the Pacific and southern states in United States; spring-sown oats are more important elsewhere in North America. It is sometimes planted as a

fast-growing soil stabilizer along roadsides. Several forms are grown, of which the most distinctive are naked oats. These differ from typical forms as indicated in the description and in having caryopses that fall from the florets. Escapes from cultivation are common but rarely persist. Avena sativa hybridizes readily with A. fatua. The hybrids are easily confused with fatuoid forms of A. sativa, which differ in having the sativa-type lodicule."

Beckmannia [HC, HC2]
beckmannia, sloughgrass

Beckmannia syzigachne (Steud.) Fernald [FNA24, HC, HC2]
Rhodora 30(350): 27. 1928.
American sloughgrass

Beckmannia eruciformis (L.) Host
Beckmannia eruciformis (L.) Host ssp. *baicalensis* (V.A. Kusn.) Hultén
Beckmannia eruciformis (L.) Host var. *uniflora* Scribn. ex A. Gray
Beckmannia syzigachne (Steud.) Fernald ssp. *baicalensis* (V.A. Kusn.) Hultén
Beckmannia syzigachne (Steud.) Fernald var. *uniflora* (Scribn. ex A. Gray) B. Boivin

FNA24: "Beckmannia syzigachne grows in damp habitats such as marshes, floodplains, the edges of ponds, lakes, streams, and ditches, and in standing water. It is a good forage grass, but frequently grows in easily damaged habitats."

**Brachypodium* [HC, HC2]
false-brome

**Brachypodium sylvaticum* (Huds.) P. Beauv. [FNA, HC, HC2]
Ess. Agrostogr. 101, 155, pl. 3, f. 115. 1812.
false brome

**ssp. sylvaticum*
false brome

**Briza* [HC, HC2]
quaking-grass

**Briza maxima* L. [FNA24, HC2]
Sp. Pl. 1: 70. 1753.
big quakinggrass

FNA24: "Briza maxima is native to the Mediterranean region. Cultivated as an ornamental, it is possibly one of the earliest grasses grown for other than edible purposes. It occasionally becomes naturalized in dry to somewhat moist but well-drained, fine or sandy soil on banks, rocky places, open woodlands, and cultivated areas such as roadsides and pastures. In the Flora region, it is known from scattered locations ... where it is an invader of coastal dune habitat."

Bromus [HC, HC2]
brome

**Bromus arenarius* Labill. [FNA24, HC]
Nov. Holl. Pl. 1: 23, pl. 28. 1804 [1805]. 1804.
Australian brome

**Bromus briziformis* Fisch. & C.A. Mey. [FNA24, HC2]
Index Sem. (St. Petersburg) 3: 30. 1837.
rattlesnake brome

Bromus brizaeformis Fisch. & C. Mey. [HC], orthographic variant

Note distinct spelling in H&C. FNA24: "Bromus briziformis grows in waste places, road verges, and overgrazed areas. It is native to southwest Asia and Europe, and is adventive in the Flora region, occurring from southern British Columbia to as far south as New Mexico, and in scattered locations eastward. The unique shape of its spikelets has led to its use in dried flower arrangements and as a garden ornamental. The common name may refer to the similarity of the spikelets to a rattlesnake's tail."

Bromus ciliatus L. [FNA24, HC, HC2]
Sp. Pl. 1: 76-77. 1753.
fringed brome

Bromopsis canadensis (Michx.) Holub
Bromopsis ciliata (L.) Holub
Bromus canadensis Michx.
Bromus ciliatus L. var. *genuinus* Fern.
Bromus ciliatus L. var. *intonsus* Fernald
Bromus dudleyi Fernald
Bromus richardsonii Link var. *pallidus* (Hook.) Shear

FNA24: "Bromus ciliatus grows in damp meadows, thickets, woods, and stream banks across almost all of northern North America except the high arctic, extending further south mainly through the western United States to Mexico. Some taxonomists have named plants with different degrees of sheath pubescence as different forms. Because the variation is continuous, such differences are not formally recognized in this treatment."

**Bromus commutatus* Schrad. [FNA24, HC, HC2]
Fl. Germ. 353. 1806.
meadow brome

Bromus commutatus Schrad. var. *apricorum* Simonk.

FNA24: "Bromus commutatus grows in fields, waste places, and road verges. It is native to Europe and the Baltic region; in the Flora region, it is found mainly in the United States and southern Canada. Hildemar Scholz (pers. comm.) recognizes three subspecies of B. commutatus in Europe; no attempt has been made to determine which subspecies are present in the Flora region."

**Bromus diandrus* Roth [FNA24, HC2]
Botanische Abhandlungen und Beobachtungen. 1787.
great brome, ripgut brome, ripgut grass

Anisantha rigida (Roth) Hyl.
Bromus diandrus Roth ssp. *rigidus* (Roth) Laínz
Bromus maximus Desf.
Bromus rigidus Roth [HC]

FNA24: "Bromus diandrus is native to southern and western Europe. It is now established in North America, where it grows in disturbed ground, waste places, fields, sand dunes, and limestone areas. It occurs from southwestern British Columbia to Baja California, Mexico, and eastward to Montana, Colorado, Texas, and scattered locations in the eastern United States. The common name "?ripgut grass\\\' indicates the effect it has on animals if they consume the sharp, long-awned florets of this species. Bromus diandrus, as treated here, includes B. rigidus Roth. Sales (1993) reduced these two taxa to varietal rank, pointing out that the differences between them in panicle morphology and callus and scar shape are subtle enough that identification of many specimens beyond B. diandrus sensu lato is often impossible."

**Bromus hordeaceus* L. [HC2]
Sp. Pl. 1: 77. 1753.
soft chess

Bromus hordeaceus L. ssp. *hordeaceus*
Bromus mollis L. [HC]

FNA24: "Bromus hordeaceus subsp. hordeaceus grows throughout the range of the species, being most prevalent in southwestern British Columbia, the western United States, and the northeastern coast."

**Bromus inermis* Leyss. [FNA24, HC, HC2]
Fl. Halens. 16. 1761.
smooth brome
(see also *Bromus pumpellianus*)

Bromopsis inermis (Leyss.) Holub
Bromus inermis Leyss. ssp. *inermis* [HC]
Bromus inermis Leyss. var. *inermis*

FNA24: "Bromus inermis is native to Eurasia, and is now found in disturbed sites in Alaska, Greenland, and most of Canada as well as south throughout most of the contiguous United States except the southeast. It has also been used for rehabilitation, and is planted extensively for forage in pastures and rangelands from Alaska and the Yukon Territory toTexas. Bromus inermis is similar to B. pumpellianus, differing mainly in having glabrous lemmas, nodes, and leaf blades, but lack of pubescence is not a consistently reliable distinguishing character. Bromus inermis also resembles a recently introduced species, B. riparius, from which it differs primarily in its shorter or nonexistent awns."

*_Bromus japonicus_ Thunb. ex Murray [FNA24, HC, HC2]
Fl. Jap. 52, pl. 11. 1784.
Japanese brome

Bromus japonicus Thunb. ex Murray var. _porrectus_ Hack.
Bromus patulus Mert. & W.D.J. Koch

FNA24: "Bromus japonicus grows in fields, waste places, and road verges. It is native to central and southeastern Europe and Asia, and is distributed throughout much of the United States and southern Canada, with one record from the Yukon Territory."

Bromus orcuttianus Vasey [FNA24, HC, HC2]
Folia Geobot. Phytotax. 8(2): 168. 1973.
Chinook brome

Bromopsis orcuttiana (Vasey) Holub

FNA24: "Bromus orcuttianus grows on dry hillsides and rocky slopes, and in open pine woods and meadows in the mountains, from 500?3500 m. It is found in the western United States, including Washington, Oregon, California, Nevada, and Arizona. It is not known from Mexico."

Bromus pacificus Shear [FNA24, HC, HC2]
Bull. Div. Agrostol., U.S.D.A. 23: 38, f. 21. 1900.
Pacific brome

Bromopsis pacifica (Shear) Holub

FNA24: "Bromus pacificus grows in moist thickets, openings, and ravines along the Pacific coast from southeastern Alaska to northern California, with a few occurrences further inland."

Bromus pumpellianus Scribn. [HC2]
Bull. Torrey Bot. Club 15(1): 9, t. 76D. 1888.
arctic brome

Bromopsis inermis (Leyss.) Holub ssp. _pumpelliana_ (Scribn.) W.A. Weber
Bromopsis pumpelliana (Scribn.) Holub
Bromus ciliatus L. var. _coloradensis_ Vasey ex Beal
Bromus inermis Leyss. ssp. _pumpellianus_ (Scribn.) Wagnon [HC]
Bromus inermis Leyss. var. _pumpellianus_ C.L. Hitchc. [HC]
Bromus inermis Leyss. var. _purpurascens_ (Hook.) Wagnon
Bromus inermis Leyss. var. _tweedyi_ (Scribn. ex Beal) C.L. Hitchc. [HC]
Bromus pumpellianus Scribn. var. _tweedyi_ Scribn. ex Beal
Bromus pumpellianus Scribn. var. _villosissimus_ Hultén

ssp. *pumpellianus* [FNA24, HC2]
Bull. Torrey Bot. Club 15(1): 9-10, f. s.n.; pl. D, f. 1-9 1888.
arctic brome

FNA24: "Bromus pumpellianus subsp. pumpellianus grows on sandy and gravelly stream banks and lake shores, sand dunes, meadows, dry grassy slopes, and road verges."

*_Bromus racemosus_ L. [FNA24, HC2]
Sp. Pl. (ed. 2) 1: 114. 1762.
bald brome

FNA24: "Bromus racemosus grows in fields, waste places, and road verges. It is native to western Europe and the Baltic region, and occurs throughout much of southern Canada and the United States. Hitchcock (1951) included B. hordeaceus subsp. pseudothominei in B. racemosus."

*_Bromus rubens_ L. [FNA24, HC, HC2]

Cent. Pl. I 5. 1755.
fox-tail brome

Anisantha rubens (L.) Nevski
Bromus madritensis L. ssp. _rubens_ (L.) Husn.

FNA24: "Bromus rubens is native to southern and southwestern Europe. It now grows in North America in disturbed ground, waste places, fields, and rocky slopes, from southern Washington to southern California, eastward to Idaho, New Mexico, and western Texas. It was found in Massachusetts before 1900 in wool waste used on a crop field; it is not established there. The record from New York represents a rare introduction; it is not known whether it is established.\'

*_Bromus secalinus_ L. [FNA24, HC, HC2]

Sp. Pl. 1: 76. 1753.
rye brome

Bromus secalinus L. var. _hirsutus_ Kindb.
Bromus secalinus L. var. _hirtus_ Asch. & Graebn.

FNA24: "Bromus secalinus is native to Europe. It is widespread in the Flora region, where it grows in fields, on waste ground, and along roadsides. Specimens with pubescent spikelets may be called B. secalinus var. velutinus (Schrad.) W.D.J. Koch."

Bromus sitchensis Trin. [FNA24, HC, HC2]

Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2(2): 173. 1832.
Alaska brome, Sitka brome

FNA24: "Bromus sitchensis grows on exposed rock bluffs and cliffs, and in meadows, often in the partial shade of forests along the ocean edge, and on road verges and other disturbed sites. Its range extends from the Aleutian Islands and Alaska panhandle through British Columbia to southern California. Bromus sitchensis resembles B. aleutensis, the two sometimes being treated as conspecific varieties. Bromus sitchensis is predominantly outcrossing, while B. aleutensis is predominantly self-fertilizing (C.L. Hitchcock 1969)."

var. *aleutensis* (Trin. ex Griseb.) Hultén [HC, HC2]

Acta Univ. Lund. 2, 38, no. 1: 254. 1942.
Aleut brome

Bromus aleutensis Trin. ex Griseb.

FNA24: "Bromus aleutensis grows in sand, gravel, and disturbed soil along the Pacific coast, from the Aleutian Islands of Alaska to western Washington, and on some lake shores of central British Columbia. It has also been found further east in Canada and in northern Idaho, always in disturbed sites, such as road edges. Bromus aleutensis might represent a modified version of B. sitchensis, in which reproduction occurs at a relatively early developmental state in response to the climatic conditions of the Aleutian Islands (Hultén 1968). B. aleutensis is predominantly self-fertilizing, and B. sitchensis is predominantly outcrossing. Anther lengths close to 4.2 mm suggest that at least some plants of B. aleutensis are outcrossing (Hitchcock 1969). Bromus aleutensis intergrades with B. carinatus var. marginatus to the south."

var. *carinatus* (Hook. & Arn.) R.E. Brainerd & Otting [HC, HC2]

Phytoneuron 2016-36: 2. 2016.
California brome

Bromus carinatus Hook. & Arn. [HC]
Bromus carinatus Hook. & Arn. var. _californicus_ Shear
Bromus carinatus Hook. & Arn. var. _carinatus_ [HC]
Bromus carinatus Hook. & Arn. var. _hookerianus_ (Thurb.) Shear
Ceratochloa carinata (Hook. & Arn.) Tutin

FNA24: "Bromus carinatus var. carinatus is primarily coastal and grows in shrublands, grasslands, meadows, and openings in chaparral and oak and yellow pine woodlands. It ranges from southern British Columbia through Washington, Oregon, and California to Baja California, Mexico, and extends eastward through Arizona to New Mexico."

var. *marginatus* (Nees ex Steud.) B. Boivin [HC2]
Naturaliste Canad. 94: 521. 1967.
large mountain brome

Bromus breviaristatus Buckley
Bromus carinatus Hook. & Arn. var. *linearis* Shear [HC]
Bromus carinatus Hook. & Arn. var. *marginatus* Hitchc. ex Scoggan
Bromus marginatus Nees ex Steud. var. *breviaristatus* (Buckley) Beetle
Bromus marginatus Nees ex Steud. var. *latior* Shear
Bromus marginatus Nees ex Steud. var. *seminudus* Shear
Ceratochloa marginata (Nees ex Steud.) W.A. Weber

FNA24: "Bromus carinatus var. marginatus is primarily an inland species and grows on open slopes, grass balds, shrublands, meadows, and open forests, in montane and subalpine zones. It grows from British Columbia to Saskatchewan, south throughout the western United States, and also extends into northern Mexico. Its elevational range is 350?2200 m in the northern part of its distribution, and 1500?3300 m in the south. Bromus carinatus var. marginatus is variable and intergrades with B. carinatus var. carinatus to the west, B. aleutensis to the north, and B. polyanthus to the southeast. As treated here, B. carinatus var. marginatus includes B. luzonensis J. Presl, which has been recognized mainly on the basis of its canescent sheaths and blades; this trait is highly variable and may be environmentally determined. Although the name Bromus carinatus var. marginatus was attributed to Hitchcock by Scoggan, there is no evidence that either A.S. or C.L. Hitchcock actually made the combination."

var. *polyanthus* (Scribn. ex Shear) R.E. Brainerd & Otting [HC2]
Phytoneuron 2016-36: 2. 2016.
smooth brome

Bromus laciniatus Beal
Bromus polyanthus Scribn. ex Shear
Ceratochloa polyantha (Scribn. ex Shear) Tzvelev

Not in WA [FNA, H&C].

var. *sitchensis* [HC, HC2]
Sitka brome

**Bromus squarrosus* L. [HC2]
Sp. Pl. 1: 76. 1753.
corn brome

Bromus squarrosus L. var. *squarrosus*

FNA24: "Bromus squarrosus grows in overgrazed pastures, fields, waste places, and road verges. Native to central Russia and southern Europe, it can be found mainly in southern Canada and the northern half of the United States. Saarela (2008) reported the presence of the two varieties described below in in his treatment of Bromus for British Columbia. The description in FNA 24 applied only to var. squarrosus." Bromus japonicus Thunb. "This species is but one element of a complex . . . and B squarrosus L. The last known from E Mont. and characterized . . ." [H&C p. 509]

**Bromus sterilis* L. [FNA24, HC, HC2]
Sp. Pl. 1: 77. 1753.
poverty brome

Anisantha sterilis (L.) Nevski

FNA24: "Bromus sterilis is native to Europe, growing from Sweden southward. In the Flora region, it grows in road verges, waste places, fields, and overgrazed rangeland. It is widespread in western and eastern North America, but is mostly absent from the Great Plains and the southeastern states."

Bromus suksdorfii Vasey [FNA24, HC, HC2]
Bot. Gaz. 10(2): 223. 1885.
Suksdorf's brome

Bromopsis suksdorfii (Vasey) Holub

FNA24: "Bromus suksdorfii grows on open slopes and in open subalpine forests, at about 1300?3300 m,

from southern Washington to southern California."

**Bromus tectorum* L. [FNA24, HC, HC2]
Sp. Pl. 1: 77. 1753.
soft brome, cheatgrass, cheat grass

Anisantha tectorum (L.) Nevski
Bromus tectorum L. var. *glabratus* Spenn.
Bromus tectorum L. var. *hirsutus* Regel
Bromus tectorum L. var. *nudus* Klett & Richt.

FNA24: "Bromus tectorum is a European species that is well established in the Flora region and other parts of the world. It grows in disturbed sites, such as overgrazed rangelands, fields, sand dunes, road verges, and waste places. In the southwestern United States, Bromus tectorum is considered a good source of spring feed for cattle, at least until the awns mature. It is highly competitive and dominates rapidly after fire, especially in sagebrush areas. The resulting dense, fine fuels permanently shorten the fire-return interval, further hindering reestablishment of native species. It now dominates large areas of the sagebrush ecosystem of the western Flora region. See Schahner et al. 2008 discuss the population genetics of this species in the midcontinental United States and cite earlier papers on a similar topic for other parts of the country. Specimens with glabrous spikelets have been called Bromus tectorum f. nudus (Klett & Richt.) H. St. John. They occur throughout the range of the species, and are not known to have any other distinguishing characteristics. For this reason, they are not given formal recognition in this treatment."

Bromus vulgaris (Hook.) Shear [FNA24, HC, HC2]
Bull. Div. Agrostol., U.S.D.A. 23: 43. 1900.
Columbian brome

Bromopsis vulgaris (Hook.) Holub
Bromus vulgaris (Hook.) Shear var. *eximius* Shear [HC]
Bromus vulgaris (Hook.) Shear var. *robustus* Shear
Bromus vulgaris (Hook.) Shear var. *vulgaris* [HC]

FNA24: "Bromus vulgaris grows in shaded or partially shaded, often damp, coniferous forests along the coast, and inland in montane pine, spruce, fir, and aspen forests, from sea level to about 2000 m. Its range extends from coastal British Columbia eastward to southwestern Alberta and southward to central California, northern Utah, and western Wyoming. Varieties have been described within Bromus vulgaris; because their variation is overlapping, none are recognized here."

Calamagrostis [HC, HC2]
reedgrass

Calamagrostis canadensis (Michx.) P. Beauv. [HC, HC2]
Ess. Agrostogr. 157 (15, 152). 1812.
bluejoint reedgrass
(see also *Calamagrostis stricta*)

Calamagrostis anomala Suksd.
Calamagrostis atropurpurea Nash
Calamagrostis canadensis (Michx.) P. Beauv. var. *imberbis* (Stebbins) C.L. Hitchc. [HC]

var. *canadensis* [FNA24, HC, HC2]
Ess. Agrostogr. 15, 152, 157. 1812.
bluejoint reedgrass

Calamagrostis canadensis (Michx.) P. Beauv. var. *macouniana* (Vasey) Stebbins [FNA24, HC, HC2], misapplied
Calamagrostis canadensis (Michx.) P. Beauv. var. *pallida* Stebbins [HC]
Calamagrostis canadensis (Michx.) P. Beauv. var. *robusta* Vasey [HC]
Calamagrostis canadensis (Michx.) P. Beauv. var. *typica* Stebbins
Calamagrostis expansa (Munro ex Hillebr.) Hitchc. var. *robusta* (Vasey) Stebbins
Calamagrostis inexpansa A. Gray var. *cuprea* Kearney
Calamagrostis scribneri Beal

var. *langsdorffii* (Link) Inman [HC2]
Rhodora 24: 143. 1922.
Langsdorff's jointed reedgrass

Calamagrostis canadensis (Michx.) P. Beauv. ssp. *langsdorfii* (Link) Hultén, orthographic variant
Calamagrostis canadensis (Michx.) P. Beauv. var. *lactea* (Suksd. ex Beal) C.L. Hitchc. [HC]
Calamagrostis canadensis (Michx.) P. Beauv. var. *langsdorfii* (Link) Inman
Calamagrostis canadensis (Michx.) P. Beauv. var. *scabra* (J. Presl) Hitchc. [HC]
Calamagrostis ×lactea Suksd. ex Beal
Calamagrostis langsdorfii (Link) Trin.
Calamagrostis nubila Louis-Marie

Calamagrostis howellii Vasey [FNA24, HC, HC2]
Botanical Gazette 6(10): 271. 1881.
Howell's reedgrass

FNA24: "Calamagrostis howellii grows on dry rocky slopes, banks, ledges, and in cliff crevices, sometimes on basalt, from 100-500m. It grows only in the Columbia River Gorge of Washington and Oregon."

Calamagrostis nutkaensis (J. Presl) Steud. [FNA24, HC, HC2]
Synopsis Plantarum Glumacearum 1: 190. 1854.
Nootka reedgrass

Deyeuxia nutkaensis J. Presl

Calamagrostis purpurascens R. Br. [FNA24, HC, HC2]
Bot. App. 731. 1823.
purple reedgrass

Calamagrostis lepageana Louis-Marie
Calamagrostis maltei (Polunin) Á. Löve & D. Löve
Calamagrostis purpurascens R. Br. ssp. *maltei* (Polunin) A.E. Porsild
Calamagrostis purpurascens R. Br. var. *maltei* Polunin
Calamagrostis purpurascens R. Br. var. *purpurascens*
Calamagrostis vaseyi Beal
Calamagrostis yukonensis Nash
Deschampsia congestiformis W.E. Booth

FNA24: "The hairy adaxial leaf surfaces are a reliable diagnostic characteristic for C. purpurascens. Many specimens from Washington and Oregon currently identified as C. purpurascens belong to C. tacomensis. In addition to differing in its leaf vestiture, C. purpurascens has shorter awns and panicle branches, and more scabrous glumes, than C. tacomensis."

Calamagrostis rubescens Buckley [FNA24, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 14: 92. 1862.
pinegrass

Calamagrostis fasciculata Kearney

FNA24: "Calamagrostis rubescens is similar to C. koelerioides. The two have traditionally been distinguished by the presence of hairs on the leaf collars of C. rubescens, and their absence from C. koelerioides; a more reliable differentiation is the shorter lemmas, glumes, and awns of C. rubescens."

Calamagrostis stricta (Timm) Koeler [HC2]
Descr. Gram. [Koeler] 105. 1802.
slimstem reedgrass

Calamagrostis neglecta (Ehrh.) P.G. Gaertn., B. Mey. & Scherb. [HC]
Calamagrostis robertii A.E. Porsild

ssp. *inexpansa* (A. Gray) C.W. Greene [FNA24, HC2]
Amer. J. Bot. 71: 286. 1984.
narrow-spiked reedgrass

Calamagrostis californica Kearney
Calamagrostis canadensis (Michx.) Beauv. var. *acuminata* Vasey ex Shear & Rydb. [HC]
Calamagrostis canadensis (Michx.) P. Beauv. var. *arcta* Stebbins

Calamagrostis chordorrhiza A.E. Porsild
Calamagrostis crassiglumis Thurb. [HC]
Calamagrostis expansa Rickett & Gilly
Calamagrostis fernaldii Louis-Marie
Calamagrostis hyperborea Lange
Calamagrostis hyperborea Lange var. *americana* (Vasey) Kearney
Calamagrostis hyperborea Lange var. *elongata* Kearney
Calamagrostis hyperborea Lange var. *stenodes* Kearney
Calamagrostis inexpansa A. Gray [HC]
Calamagrostis inexpansa A. Gray var. *barbulata* Kearney [HC]
Calamagrostis inexpansa A. Gray var. *brevior* (Vasey) Stebbins
Calamagrostis inexpansa A. Gray var. *inexpansa* [HC]
Calamagrostis inexpansa A. Gray var. *novae-angliae* Stebbins
Calamagrostis inexpansa A. Gray var. *robusta* (Vasey) Stebbins
Calamagrostis labradorica Kearney
Calamagrostis lacustris (Kearney) Nash
Calamagrostis lapponica (Wahlenb.) Hartm. var. *brevipilis* Stebbins
Calamagrostis pickeringii A. Gray var. *lacustris* (Kearney) Hitchc.
Calamagrostis stricta (Timm) Koeler var. *brevior* Vasey
Calamagrostis stricta (Timm) Koeler var. *lacustris* (Kearney) C.W. Greene

FNA24: "C. stricta ssp. inexpansa differs from subsp. stricta in its more robust growth and coarse habit."

ssp. *stricta* [FNA24, HC2]
Saccardoa 105. 1802.
narrow-spiked reedgrass

Calamagrostis neglecta (Ehrh.) P.G. Gaertn., B. Mey. & Scherb. ssp. *stricta* (Timm) Tzvelev
Calamagrostis neglecta (Ehrh.) P.G. Gaertn., B. Mey. & Scherb. var. *gracilis* Scribn. ex Kearney
Calamagrostis neglecta (Ehrh.) P.G. Gaertn., B. Mey. & Scherb. var. *micrantha* (Kearney) Stebbins
Calamagrostis neglecta (Ehrh.) P.G. Gaertn., B. Mey. & Scherb. var. *neglecta* [HC]

FNA24: "C. stricta ssp. inexpansa differs from subsp. stricta in its more robust growth and coarse habit."

Calamagrostis tacomensis K. Marr & Hebda [FNA24, HC2]
Madroño 53(3): 293, f. 5. 2006.
Rainier reedgrass

Calamagrostis sesquiflora (Trin.) Tzvelev [FNA24, HC, HC2], misapplied

FNA24: "This species has previously been identified as either C. purpurascens or C. sesquiflora. It differs from C. purpurascens in having glabrous leaves, generally longer awns and inflorescence branches, and smoother glumes. It differs from C. sesquiflora in having narrower leaves, callus hairs that are longer relative to the lemmas, longer inflorescence branches, and glume apices that are not twisted, as well as in often preferring drier habitats."

Calamagrostis tweedyi (Scribn.) Scribn. [FNA24, HC, HC2]
Contributions from the United States National Herbarium 3(1): 83. 1892.
Cascade reedgrass

**Calamovilfa* [HC, HC2]
sandreed

**Calamovilfa longifolia* (Hook.) Hack. ex Scribn. & Southw. [HC, HC2]
True Grasses 113 (216). 1890.
prairie sandreed

*var. *longifolia* [FNA24, HC2]
True Grasses 113. 1890.
prairie sandgrass, prairie sandreed

Cenchrus [HC, HC2]

bur-grass, hedgehog-grass, sandbur

**Cenchrus longispinus* (Hack.) Fernald [FNA25, HC, HC2]
Rhodora 45(538): 388. 1943.
longspine sandbur, mat sandbur

Cenchrus carolinianus Walter

General uncertainty regarding whether native or introduced. However, earliest collections in our area date to 1920\\'s, and the early floras (e.g., Piper and Beattie) do not include it. For a species with fruits that readily stick to human and beast, it is hard to envision that the early (i.e., 1800s) botanical explorers did not encounter this species. Differing in several bristle characters from Cenchrus spinifex; see FNA.

Cinna [HC, HC2]
wood reed-grass, woodreed

Cinna latifolia (Trevir. ex Göpp.) Griseb. [FNA24, HC, HC2]
Fl. Ross. 4(13): 435. 1852.
slender wood-reed

FNA24: "Cinna latifolia is a circumboreal species, extending from Norway to the Kamchatka peninsula in Russia, and from Alaska to Newfoundland. It grows in moist to wet soil in open coniferous or mixed forests, swamps, thickets, bogs, and streamsides, at 0-2600 m. It flowers in late summer and fall. Cinna latifolia differs from C. arundinacea in its 1 (rarely 3)-veined upper glumes and its smaller spikelets. A collection from the Aleutian Islands had abnormally large (to 5.5 mm) and often 2-flowered spikelets (Brandenburg et al. 1991). Cinna latifolia is a variable species for which varietal names have been proposed; because the variation is continuous, no varieties are recognized in this treatment."

**Coix*

Coleanthus [HC, HC2]
moss-grass

Coleanthus subtilis (Tratt.) Seidl [FNA24, HC, HC2]
Syst. Veg. 2: 276. 1917.
moss grass

FNA24: "Coleanthus subtilis is an ephemeral pioneer species of wet, open habitats. It grows on wet, muddy to sandy, calcium-deficient soils on the shores of lakes, sandbars, and islands. In the Flora region, it is known from the Columbia River, and around Hatzic, Arrow and Shuswap lakes in British Columbia. It also grows in Europe, Russia, and China. Throughout its range, C. subtilis is known from relatively few, scattered locations. It is easily overlooked because of its diminutive size, and because it flowers in early spring or late fall. It is not clear whether it is native or introduced in the Flora region."

**Cortaderia* [HC2]
pampas grass

**Cortaderia jubata* (Lemoine) Stapf [FNA25, HC2]
Botanical Magazine 124: pl. 7607. 1898.
purple pampas grass

Recently collected as an escape from cultivation in King & Snohomish Cos. FNA25: "Cortaderia jubata is found on the west coast of the coterminus United States, growing in disturbed, open ground such as brushy slopes, eroded banks and cliffs, road cuts, cut-over timber areas, and sand dunes. It is native to mountainous areas of Bolivia, Peru, and Ecuador. It was grown in the past as an ornamental because of its attractive panicles, but is now a serious weed in California, reproducing apomictically and invading many open habitats. It was mistakenly called Cortaderia rudiuscula Stapf by Hitchcock (1951). The florets of C. rudiuscula differ from those of C. jubata in being longer and narrower, having shorter, less hairy calluses, and in having no hairs that extend beyond the top of the palea. Cortaderia rudiuscula is not known from North America."

**Cortaderia selloana* (Schult. & Schult. f.) Asch. & Graebn. [FNA25, HC2]
Synopsis der Mitteleuropäischen Flora 2(1): 325. 1900.
pampas grass

not in H&C

Recently collected as an escape from cultivation in King & Snohomish Cos. FNA25: "Cortaderia selloana is native to central South America. It is cultivated as an ornamental in the warmer parts of North America. It was thought that it would not become a weed problem because most plants sold as ornamentals are unisexual, but it is now considered an aggressive weed in California and Bendigo, Australia. The weedy Australian plants are bisexual (Walsh 1994)."

**Corynephorus* [HC, HC2]

**Corynephorus canescens* (L.) P. Beauv. [FNA24, HC, HC2]
Ess. Agrostogr. 90, 149, 159. 1812.
gray hairgrass

Aira canescens L.

FNA24: "Corynephorus canescens is native to Europe. It grows on coastal sand dunes and inland on sandy soils, as well as in disturbed areas such as waste ground and ballast dumps. It has been recorded from scattered locations in North America, but its current status in these locations is not known. Douglas et al. (1994) reported that it no longer occurred in British Columbia, but it was later found near the original collection site (Lomer 94-256; UBC 209521)."

**Crypsis* [HC2]
prickle grass

**Crypsis alopecuroides* (Piller & Mitterp.) Schrad. [FNA25, HC2]
Fl. Germ. 1: 167. 1806.
foxtail pricklegrass

Heleochloa alopecuroides (Piller & Mitterp.) Host ex Roem. [HC]

FNA25: "Crypsis alopecuroides is common to abundant in sandy soils around drying lake margins in Oregon and southern Washington, and within the last forty years has become widespread in northern California; it is also known from several other western states. It was first collected in the Western Hemisphere in the late 1800s from shipyard areas in and around Philadelphia, but has not been collected in the eastern United States since. In the Eastern Hemisphere, it extends from France and northern Africa to the Urals and Iraq."

**Crypsis vaginiflora* (Forssk.) Opiz [FNA25, HC2]
Naturalientausch 8: 83. 1823.
modest pricklegrass

The Washington report in FNA is from Spokane County, though no specimens or basis for the report have been found. Several recent (2008, 2016) collections show it to be well established around the Potholes Reservoir in Grant County. Well established in California, and reported for WA, ID, and NV in FNA. FNA25: "Crypsis vaginiflora is common to abundant in clay or sandy clay soil in California, where it was first introduced in the late 1800s. It has since been found at a few locations in Washington, Idaho, and Nevada, and will probably spread to additional sites with suitable habitat in the future. It is native to Egypt and southwestern Asia."

**Cynodon* [HC, HC2]
cynodon

**Cynodon dactylon* (L.) Pers. [FNA25, HC, HC2]
Synopsis Plantarum seu Encheridium Botanicum 1. 1805.
bermuda grass

Capriola dactylon (L.) Kuntze
Panicum dactylon L.

FNA25: " The most commonly encountered variety, both in the Flora region and in other parts of the world, is C. dactylon var. dactylon, largely because it thrives in severely disturbed, exposed sites; it does not invade natural grasslands or forests. Determining how many other varieties are established in the Flora region is almost impossible, because there has been no global study of variation in the species. The presence of numerous cultivars complicates an already difficult problem. The two varieties keyed out below

are the only two that grow in the Flora region according to de Wet and Harlan (1970), but these authors do not appear to have considered the taxa recognized by Caro and Sánchez (1969). For most purposes, it is probably neither necessary nor feasible to identify the variety of C. dactylon encountered."

*Cynosurus [HC, HC2]
dogtail, dog's-tail grass

*Cynosurus cristatus L. [FNA24, HC, HC2]
Sp. Pl. 1: 72. 1753.
crested dogtail

FNA24: "Cynosurus cristatus is a European native that is now established in North America. It grows in a wide range of soils in dry or damp habitats. In Europe it is used for fodder and pasture, especially for sheep, but in North America it is regarded as a weedy species. It is self-incompatible."

*Cynosurus echinatus L. [FNA24, HC, HC2]
Sp. Pl. 1: 72. 1753.
bristly dog's-tail grass

FNA24: "Cynosurus echinatusis native to southern Europe. It is now established in dry, open habitats in North America, South America, and Australia."

*Dactylis [HC, HC2]
cock's-foot grass, orchard-grass

*Dactylis glomerata L. [FNA24, HC, HC2]
Sp. Pl. 1: 71. 1753.
orchard grass

Dactylis glomerata L. var. *ciliata* Peterm.
Dactylis glomerata L. var. *detonsa* Fr.
Dactylis glomerata L. var. *vivipara* Parl.

FNA24: "Dactylis glomerata grows in pastures, meadows, fence rows, roadsides, and similar habitats throughout North America. Native to Eurasia and Africa, it has been introduced throughout most of the cool-temperate regions of the world as a forage grass. It provides nutritious forage that is relished by all livestock, as well as by deer, geese, and rabbits. When abundant, the pollen can be a major contributor to hay fever. The species includes both diploid and tetraploid populations. Although several infraspecific taxa have been described, based generally on the size of the stomata and pollen, variation in pubescence, and panicle features, formal taxonomic recognition does not seem warranted. Numerous cultivars have been developed for agricultural use."

Danthonia [HC, HC2]
heathgrass, oatgrass

Sieglingia [HC]

Danthonia californica Bol. [FNA25, HC, HC2]
Proc. Calif. Acad. Sci. 2: 182. 1863.
California oatgrass

Danthonia americana Scribn.
Danthonia californica Bol. var. *americana* (Scribn.) Hitchc.
Danthonia californica Bol. var. *palousensis* H. St. John
Danthonia californica Bol. var. *piperi* H. St. John

FNA25: "Danthonia californica grows in prairies, meadows, and open woods. It has a disjunct distribution, one portion of its range being located in western North America, the other in Chile. An introduced population has been found at Mansfield, Massachusetts. Plants with pilose foliage have been called D. californica var. americana (Scribn.) Hitchc. and plants with sparsely pilose lemma backs D. californica var. macounii Hitchc., but the variation does not appear to be taxonomically significant."

*Danthonia decumbens (L.) DC. [FNA25, HC2]
Fl. Franç. (ed. 3) 3: 33. 1805.
common heath-grass, mountain heath-grass

Festuca decumbens L.
Sieglingia decumbens (L.) Bernh. [HC]

FNA25: "Danthonia decumbens grows throughout most of Europe, the Caucasus, and northern Turkey, and is now established on the west and east coasts of North America. It grows in heath lands, sandy or rocky meadows, clearings, and sometimes along roadsides. The species is sometimes placed in the monotypic genus Sieglingia, as Sieglingia decumbens (L.) Bernh."

Danthonia intermedia Vasey [FNA25, HC, HC2]
Bull. Torrey Bot. Club 10: 52. 1883.
timber oatgrass

Danthonia canadensis B.R. Baum & Findlay
Danthonia intermedia Vasey var. *cusickii* T.A. Williams

FNA25: "Danthonia intermedia grows in boreal and alpine meadows, open woods, and on rocky slopes and northern plains. Its range extends from Kamchatka, Russia, to North America, south along the cordillera, and east, through boreal and alpine regions, to Quebec and Newfoundland and Labrador. Its primarily cleistogamous reproduction has probably facilitated its establishment and spread through more boreal and alpine habitats than other members of the genus. Tzvelev (1976) treats the American plants as Danthonia intermedia Vasey subsp. intermedia and the Russian plants, which have 2n = 18, as Danthonia intermedia subsp. riabuschinskii (Kom.) Tzvelev."

Danthonia spicata (L.) P. Beauv. ex Roem. & Schult. [FNA25, HC, HC2]
poverty oatgrass

Danthonia spicata (L.) P. Beauv. ex Roem. & Schult. var. *longipila* Scribn. & Merr.
Danthonia spicata (L.) P. Beauv. ex Roem. & Schult. var. *pinetorum* Piper [HC]
Danthonia thermalis Scribn., orthographic variant

FNA25: "Danthonia spicata grows in dry rocky, sandy, or mineral soils, generally in open sunny places. Its range includes most of boreal and temperate North America and extends south into northeastern Mexico. Phenotypically, Danthonia spicata is quite variable, expressing different growth forms under different conditions (Dore and McNeill 1980; Darbyshire and Cayouette 1989). Slow clonal growth, extensive cleistogamy, and limited dispersal contribute to the establishment of morphologically uniform populations, some of which have been given scientific names. For instance, D. spicata var. pinetorum Piper is sometimes applied to depauperate plants and D allenii Austin misapplied to more robust or second growth plants (Dore and McNeill 1980). Plants of shady or moist habitats often lack the distinctive curled or twisted blades usually found on plants growing in open habits. Such plants, which tend to have smaller spikelets and pilose foliage, have been called D. spicata var. longipila Scribn. & Merr. The terminal inflorescence is usually primarily cleistogamous, but plants with chasmogamous inflorescences are found throughout the range of the species. Chasmogamous plants differ in having divergent inflorescence branches at anthesis, larger anthers, and well-developed lodicules."

Danthonia unispicata (Thurb.) Munro ex Macoun [FNA25, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 1863: 78 1863.
few-flower oatgrass, one-spike oatgrass

Authority follows FNA, though TROPICOS indicates that this name under the authorship used here is illegitimately published. FNA25: "Danthonia unispicata is restricted to western North America, where it grows in prairies and meadows, on rocky slopes, and in dry openings up to timberline in the mountains. It differs from D. californica in its shorter stature, usually densely pilose foliage, short, erect pedicels, and the usually erect cauline leaf blades. It is closely related to D. californica, and some authors prefer to treat it as Danthonia californica var. unispicata Thurb."

Deschampsia [HC, HC2]
hairgrass
(see also *Vahlodea*)

Deschampsia cespitosa (L.) P. Beauv. [HC, HC2]
Ess. Agrostogr. 91, 160, t. 18. f. 3. 1812.
tufted hairgrass

Aira caespitosa Muhl., orthographic variant

Aira holciformis (J. Presl) Steud.
Deschampsia beringensis Hultén
Deschampsia caespitosa (L.) P. Beauv. ssp. *genuina* (Reichenb.) Volk., orthographic variant
Deschampsia caespitosa (L.) P. Beauv. ssp. *glauca* (Hartm.) Hartm., orthographic variant
Deschampsia caespitosa (L.) P. Beauv. ssp. *orientalis* Hultén, orthographic variant
Deschampsia caespitosa (L.) P. Beauv. ssp. *parviflora* (Thuill.) K. Richt., orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *abbei* Boivin, orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *alpicola* (Rydb.) Á. & D. Löve & Kapoor, orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *glauca* (Hartm.) Lindm. f., orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *intercotidalis* Boivin, orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *littoralis* (Gaudin) Richter, orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *longiflora* Beal, orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *maritima* Vasey, orthographic variant
Deschampsia caespitosa (L.) P. Beauv. var. *parviflora* (Thuill.) Coss. & Germ., orthographic variant
Deschampsia cespitosa (L.) P. Beauv. ssp. *beringensis* (Hultén) W.E. Lawr.
Deschampsia cespitosa (L.) P. Beauv. ssp. *cespitosa*
Deschampsia cespitosa (L.) P. Beauv. ssp. *holciformis* (J. Presl) W.E. Lawr.
Deschampsia cespitosa (L.) P. Beauv. var. *arctica* Vasey [HC]
Deschampsia cespitosa (L.) P. Beauv. var. *cespitosa* [HC]
Deschampsia cespitosa (L.) P. Beauv. var. *longiflora* Beal [HC]
Deschampsia glauca Hartm.
Deschampsia holciformis J. Presl

Deschampsia danthonioides (Trin.) Munro [FNA24, HC, HC2]
Pl. Hartw. 342. 1857.
annual hair-grass

Aira danthonioides Trin.
Deschampsia calycina J. Presl
Deschampsia danthonioides (Trin.) Munro var. *gracilis* (Vasey) Munz

FNA24: "Deschampsia danthonioides grows in temperate and cool-temperate regions, usually in open, wet to dry habitats and often in disturbed ground. Its primary range extends from southern British Columbia, through Washington and Idaho, to Baja California, Mexico. It also grows, as a disjunct, in Chile and Argentina."

Deschampsia elongata (Hook.) Munro [FNA24, HC, HC2]
Pl. Hartw. 342. 1857.
slender hair-grass

Aira elongata Hook.

FNA24: "Deschampsia elongata grows in moist to wet habitats, from near sea level to alpine elevations, from Alaska and the Yukon south to northern Mexico and east to Montana, Wyoming, and Arizona. It also grows, as a disjunct, in Chile. The records from Maine and Colorado probably represent introductions."

Dichanthelium [HC2]
perennial panicgrass

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark [HC2]
hairy perennial panicgrass

ssp. *fasciculatum* (Torr.) Freckmann & Lelong [FNA25, HC2]
Sida 20(1): 167. 2002.
hairy panicgrass

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark ssp. *acuminatum* [KZ99], misapplied
Dichanthelium acuminatum (Sw.) Gould & C.A. Clark ssp. *thermale* (Bol.) Freckmann & Lelong [KZ99], misapplied
Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. *fasciculatum* (Torr.) Freckmann [KZ99]

Taxonomy follows FNA; Panicum ferventicola Schmoll (mentioned in Fl. of the PNW, Vol. 1) is a synonym of a taxon not in WA, called by FNA Dichanthelium acuminatum (Sw.) Gould & C.A. Clark ssp. sericeum (Schmoll) Freckman & Lelong. Reports of Dichanthelium acuminatum (Sw.) Gould &

C.A. Clark var. acuminatum (Kz99 and 1978 Annals of the Missouri Botanical Garden) are referred to D. acuminatum ssp. fasciculatum. Reports of Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. thermale (Bol.) Freckmann (Kz99 and Hitchcock & Chase 1971) are referred to D. acuminatum ssp. fasciculatum. FNA25: "Dichanthelium acuminatum subsp. fasciculatum grows primarily in disturbed areas, open or cut-over woods, thickets, and grasslands, in dry to moist soils, including river banks, lake margins, and marshy areas. It is widespread in temperate North America, growing from Canada to Mexico, but it is somewhat less common in the western part of its range, where it often occurs on moister areas. Dichanthelium acuminatum subsp. fasciculatum includes probably the most widespread, ubiquitous, and variable assemblages of forms in the species. It is not always clearly separable from the other subspecies of D. acuminatum, especially subsp. acuminatum, subsp. implicatum, and subsp. lindheimeri. Gene exchange with other Dichanthelium species (including D. dichotomum, D. laxiflorum, D. ovale, D. commutatum, and D. boreale) probably occurs not infrequently."

Dichanthelium oligosanthes (Schult.) Gould [HC2]
Brittonia 26: 60. 1974.
Scribner's perennial panicgrass

ssp. *scribnerianum* (Nash) Freckmann & Lelong [FNA25, HC2]
Sida 20(1): 170. 2002.
Scribner's panicgrass witchgrass

Dichanthelium oligosanthes (Schult.) Gould var. *helleri* (Nash) Mohlenbr.
Dichanthelium oligosanthes (Schult.) Gould var. *scribnerianum* (Nash) Gould [KZ99]
Panicum helleri Nash
Panicum oligosanthes Schult. var. *helleri* (Nash) Fernald
Panicum oligosanthes Schult. var. *scribnerianum* (Nash) Fernald
Panicum scribnerianum Nash [HC]

Taxonomy follows FNA, but the genus Dichanthelium is only weakly distinguished from the genus Panicum, and is probably best included in it. FNA25: "Dichanthelium oligosanthes subsp. scribnerianum grows in sandy or clayey banks and prairies. Its range extends from southern British Columbia to the east coast of the United States, and south into northern Mexico. It is the most widespread of the two varieties."

**Digitaria* [HC, HC2]*
crabgrass

**Digitaria ischaemum* (Schreb.) Muhl. [FNA25, HC, HC2]*
Descr. Gram. 131. 1817.
smooth crabgrass

Digitaria ischaemum (Schreb.) Muhl. var. *mississippiensis* (Gatt.) Fernald
Panicum ischaemum Schreb.
Syntherisma ischaemum (Schreb.) Nash

tropics of N and S America. FNA25: "Digitaria ischaemum is a Eurasian weed that is now common in lawns, gardens, fields, and waste ground in warm-temperate regions throughout the world, including much of the Flora region. Larger plants with 5-7 inflorescence branches 8-15 cm long have been called D. ischaemum var. mississippiensis (Gatt.) Fernald, but they intergrade with more typical plants, and so do not merit taxonomic recognition."

**Digitaria sanguinalis* (L.) Scop. [FNA25, HC, HC2]*
Fl. Carniol. (ed. 2) 1: 52. 1771.
hairy crabgrass

Panicum sanguinale L.
Syntherisma sanguinalis (L.) Dulac

FNA25: "Digitaria sanguinalis is a weedy Eurasian species that is now found in waste ground of fields, gardens, and lawns throughout much of the world, including the Flora region."

Diplachne [HC2]
sprangletop

Diplachne fusca (L.) P. Beauv. ex Roem. & Schult. [HC2]
clustered salt-grassprangletop, loose-flowered sprangletop

Leptochloa fusca (L.) Kunth

ssp. *fascicularis* (Lam.) P.M. Peterson & N. Snow [HC2]
bearded sprangletop

Diplachne acuminata Nash
Diplachne fascicularis (Lam.) P. Beauv.
Diplachne maritima E.P. Bicknell
Leptochloa acuminata (Nash) Mohlenbr.
Leptochloa fascicularis (Lam.) A. Gray [HC]
Leptochloa fascicularis (Lam.) A. Gray var. *acuminata* (Nash) Gleason
Leptochloa fascicularis (Lam.) A. Gray var. *maritima* (E.P. Bicknell) Gleason
Leptochloa fusca (L.) Kunth ssp. *fascicularis* (Lam.) N.W. Snow

FNA24: "Leptochloa fusca subsp. fascicularis extends from southern British Columbia and Ontario to Argentina, although it has not yet been reported from Georgia. Coastal populations from Massachusetts to Florida with long lemma awns have been called L. fascicularis var. maritima (E.P. Bicknell) Gleason. They do not merit taxonomic recognition because long awns and salinity tolerance are common throughout the species. Leptochloa fusca subsp. fascicularis differs from L. viscida, which grows in the same region, in its longer panicles, frequently unawned or mucronate lemmas, and whitish florets."

Distichlis [HC, HC2]
saltgrass

Distichlis spicata (L.) Greene [FNA25, HC, HC2]
Bulletin of the Californis Academy of Sciences 2. 1887.
alkaline grass, coastal salt grass

Distichlis spicata (L.) Greene ssp. *stricta* (Torr.) Thorne
Distichlis spicata (L.) Greene var. *borealis* (J. Presl) Beetle [HC]
Distichlis spicata (L.) Greene var. *divaricata* Beetle
Distichlis spicata (L.) Greene var. *nana* Beetle
Distichlis spicata (L.) Greene var. *stolonifera* Beetle
Distichlis spicata (L.) Greene var. *stricta* (Torr.) Scribn.
Distichlis stricta (Torr.) Rydb. [HC]
Distichlis stricta (Torr.) Rydb. var. *dentata* (Rydb.) C.L. Hitchc. [HC]
Distichlis stricta (Torr.) Rydb. var. *stricta* [HC]
Uniola spicata L.

FNA 25: "Distichlis spicata grows in saline soils of the Western Hemisphere and Australia. Numerous infraspecific taxa have been recognized in the past, but none appears to be justified. Recent North American accounts of Distichlis have usually recognized plants from maritime coasts as distinct from those growing inland, supposedly having more congested inflorescences, but the range of variation is similar in the two habitats."

Echinochloa [HC, HC2]
barnyard-grass

**Echinochloa colona* (L.) Link [FNA25, HC2]
Hort. Berol. 2: 209. 1833.
awnless barnyard grass, or jungle-rice

Echinochloa colonum (L.) Link [HC]
Panicum colonum L.

Reported from WA in FNA; spelling of colona follows FNA, corrected from colonum in H&C. FNA25: "Echinochloa colona is widespread in tropical and subtropical regions. It is adventive and weedy in North America, growing in low-lying, damp to wet, disturbed areas, including rice fields. The unbranched, rather widely-spaced panicle branches make this one of the easier species of Echinochloa to recognize. Hitchcock (1913) considered that colonum was a non-declining contraction, but dictionaries of Linnaeus'

time treated it as a declining adjective. Because Linnaeus was the first to name the species (as Panicum colonum), it seems best to follow the practice considered correct in his day; hence E. colona. (See also Nicolson 1986.)"

**Echinochloa crus-galli* (L.) P. Beauv. [FNA25, HC2]
Ess. Agrostogr. 53, 161, 169, pl. 11, f. 2. 1812.
barnyard grass, or large barnyard grass
(see also *Echinochloa muricata* var. *microstachya*)

Echinochloa crus-galli (L.) P. Beauv. var. *mitis* (Pursh) Peterm.
Echinochloa crusgalli (L.) P. Beauv. [HC]
Echinochloa muricata (P. Beauv.) Fernald var. *occidentalis* Wiegand
Echinochloa occidentalis (Wiegand) Rydb.

FNA25: "Echinochloa crus-galli is a Eurasian species that is now widely established in the Flora region, where it grows in moist, disturbed sites, including rice fields. Some North American taxonomists have interpreted Echinochloa crus-galli much more widely; others treat it as here, but recognize several infraspecific taxa based on such characters as trichome length and abundance, and awn length. There are several ecological and physiological ecotypes within the species, but the correlation between most of these and the species morphological variation has not been established, so no infraspecific taxa are recognized here."

**Echinochloa crus-pavonis* (Kunth) Schult. [HC2]
guleaf barnyard-grass

**var. crus-pavonis* [FNA25, HC2]
Mant. 2: 269 1824.
gulf barnyard grass

Reported for WA in FNA, native from BS south to northern Mexico not in H&C. FNA25: "Echinochloa crus-pavonis is a native species found in scattered locations from British Columbia to Arizona, east to Florida, and south into South America. It favors marshes and wet places at lower elevations, often being found in the water....Echinochloa crus-pavonis var. macera extends south only as far as northern Mexico."

Echinochloa muricata (P. Beauv.) Fernald [HC2]
American barnyard-grass

var. *microstachya* Wiegand [FNA25, HC2]
Rhodora 17(198): 106. 1915.
American barnyard grass, or watergrass

Echinochloa muricata (P. Beauv.) Fernald var. *wiegandii* (Fassett) Mohlenbr.
Echinochloa pungens (Poir.) Rydb. var. *microstachya* (Wiegand) Fernald & Griscom
Echinochloa wiegandii (Fassett) McNeill & Dore

FNA25: "Echinochloa muricata var. microstachya is the common variety in the western part of North America, extending east to the Missouri River and the Texas panhandle."

**Eleusine* [HC, HC2]

**Eleusine indica* (L.) Gaertn. [FNA25, HC, HC2]
Fruct. Sem. Pl. 1: 8. 1788.
goosegrass

Reported in FNA for WA. FNA25: "Eleusine indica is a common weed in the warmer regions of the world. In the Flora region, it usually grows in disturbed areas and lawns, and has been found in most states of the contiguous United States."

**Eleusine tristachya* (Lam.) Lam. [HC, HC2]

×Elyhordeum

×Elyhordeum macounii (Vasey) Barkworth & D.R. Dewey [FNA24]
Great Basin Naturalist 43(4): 570. 1983.

×Agrohordeum macounii (Vasey) Lepage

×*Agrohordeum macounii* (Vasey) Lepage var. *valencianum* Bowden
Elymus ×*macounii* Vasey
×*Elytesion macounii* (Vasey) Barkworth & D.R. Dewey

"These have been shown to be sterile hybrids of sporadic occurrence, in this case mostly of Agropyron trachycaulum (A. caninum) and Hordeum jubatum parentage" [H&C]. FNA24: "xElyhordeum macounii consists of hybrids between Elymus trachycaulus and Hordeum jubatum. It is quite common in western and central North America. Backcrosses to E. trachycaulus may have non-disarticulating rachises; they are likely to be identified as E. trachycaulus, falling between subsp. trachycaulus and subsp. subsecundus. Artificial, partially fertile octoploids were distributed to natural and experimental areas in several western states prior to 1960 (Bowden 1960); it is not known whether they have persisted."

×*Elyhordeum stebbinsianum* (Bowden) Bowden [FNA24]

×*Elymordeum stebbinsianum* Bowden

FNA24 map shows record from Klickitat County. FNA24: "xElyhordeum stebbinsianum consists of hybrids between Elymus glaucus and Hordeum brachyantherum. Bowden (1985) reported that they appear to be completely sterile. They have been found at scattered locations in western North America."

×*Elyleymus*

×*Elyleymus aristatus* (Merr.) Barkworth & D.R. Dewey [FNA24]

Elymus aristatus Merr.
Elymus glaucus Buckley var. *aristatus* (Merr.) Hitchc.
×*Elysitanion aristatum* (Merr.) Bowden

The range map from FNA24 does not include WA within the range of this taxon. Until proven otherwise, this species should be considered excluded from the WA flora. FNA24: "Dewey and Holmgren (1962) argued that xElyleymus aristatus comprises hybrids between Elymus elymoides and Leymus cinereus or L. triticoides. It has been found at many locations where the parents are sympatric."

Elymus [HC, HC2]

squirreltail, wheatgrass, wild-rye
(see also *Leymus*, *Taeniatherum*)

Sitanion [HC]

Elymus albicans (Scribn. & J.G. Sm.) Á. Löve [FNA24, HC2]

Taxon 19(1): 166. 1980.
Montana wild rye

Agropyron albicans Scribn. & J.G. Sm.
Agropyron albicans Scribn. & J.G. Sm. var. *griffithii* (Scribn. & J.G. Sm. ex Piper) Beetle, orthographic variant
Agropyron dasystachyum (Hook.) Scribn. ssp. *albicans* (Scribn. & J.G. Sm.) D.R. Dewey
Agropyron griffithii Scribn. & J.G. Sm. ex Piper, orthographic variant
Elymus albicans (Scribn. & J.G. Sm.) Á. Löve var. *griffithii* (Scribn. & J.G. Sm. ex Piper) Dorn, orthographic variant
Elymus griffithii (Scribn. & J.G. Sm. ex Piper) Á. Löve, orthographic variant
Elymus lanceolatus (Scribn. & J.G. Sm.) Gould ssp. *albicans* (Scribn. & J.G. Sm.) Barkworth & D.R. Dewey
Elytrigia dasystachya (Hook.) Á. Löve & D. Löve ssp. *albicans* (Scribn. & J.G. Sm.) D.R. Dewey
Roegneria albicans (Scribn. & J.G. Sm.) Beetle
Roegneria albicans (Scribn. & J.G. Sm.) Beetle var. *griffithii* (Scribn. & J.G. Sm. ex Piper) Beetle, orthographic variant

FNA24: "Elymus albicans grows primarily in the central Rocky Mountains and the western portion of the Great Plains. It tends to grow in shallow, rocky soils on wooded or sagebrush-covered slopes, rather than in deep loams. It is derived from hybrids between Pseudoroegneria spicata and E. lanceolatus. In practice, it is probably restricted to hybrids involving the awned variant of Pseudoroegneria spicata, because the hybrid origin of those involving the unawned variant would probably not be recognized. Populations of E. albicans differ in their reproductive abilities (Dewey 1970). In some, most plants yield good seed; in others, most plants are sterile. Some of the fertile populations appear to be self-perpetuating; others appear to

consist of recent hybrids and some backcrosses. Although treated here as a species, E. albicans could equally well be treated as a hybrid, Elymus ×albicans. Plants with glabrous lemmas, presumed to be derived from crosses with glabrous individuals of E. lanceolatus, have sometimes been treated as a distinct taxon, e.g., Agropyron albicans var. griffithsii (Scribn. & J.G. Sm.) Beetle or A. griffithsii Scribn. & J.G. Sm.; they are not formally recognized here."

Elymus canadensis L. [HC, HC2]
Sp. Pl. 1: 83?84. 1753.
Canadian wild rye

Elymus philadelphicus L.

var. *canadensis* [FNA24, HC2]
Sp. Pl. 1: 83-84. 1753.
Canadian wild rye, nodding wild rye

Elymus canadensis L. var. *glaucifolius* (Willd.) Torr.
Elymus canadensis L. var. *hirsutus* (Farw.) Dorn
Elymus philadelphicus L. var. *hirsutus* Farw.

FNA24: "Elymus canadensis var. canadensis is widespread across the northern range of the species, where anthesis is from late June to August, but it is also frequent as far south as Arizona, New Mexico, and Oklahoma. Tentatively included here are E. canadensis var. glaucifolius (Muhl.) Torr., which is strongly glaucous, with scabrous blades and hirsute or scabrous lemmas; plus E. canadensis var. villosus Bates, which has villous leaves and occurs rarely in the northern Great Plains."

Elymus curvatus Piper [FNA24, HC2]
Bull. Torrey Bot. Club 30(4): 233. 1903.
beardless wild rye, awnless wildrye

Elymus submuticus (Hook.) Smyth
Elymus virginicus L. var. *jenkinsii* Bowden
Elymus virginicus L. var. *submuticus* Hook. [HC]

FNA24: "Elymus curvatus grows in moist or damp soils of open forests, thickets, grasslands, ditches, and disturbed ground, especially on bottomland. It is widespread from British Columbia and Washington, through the Intermountain region and northern Rockies, to the northern Great Plains. It is infrequent or rare in the midwest, the Great Lakes region, and the northeast, and is virtually unknown in the southeast. It is similar to Elymus virginicus, and has sometimes been included in that species as E. virginicus var. submuticus Hook., but it is more distinct than the varieties of E. virginicus treated above. Although E. virginicus and E. curvatus overlap greatly in range, E. curvatus usually has a distinct growth form, and its anthesis is 1?2 weeks later (Brooks 1974). Its spikes range from being completely exserted, especially west of the Great Plains, to largely sheathed, especially east of the Mississippi River and in more stressed environments. This geographic trend parallels that within E. virginicus, but sheathed plants of E. curvatus can usually be distinguished by their short awns. Clear transitions to E. virginicus, usually var. jejunus, are rare, but, especially from Missouri to Wisconsin, there are occasional plants with 5?10 mm awns on a few lemmas, especially at the spike tips. Rarely, plants from Missouri and Iowa to Quebec have hispid to hirsute spikelets, suggesting introgression with E. virginicus var. intermedius. There are few records of apparent hybrids with other species."

Elymus elymoides (Raf.) Swezey [HC2]
bottlebrush, squirreltail

Elymus sitanion Schult.
Sitanion elymoides Raf.
Sitanion hystrix (Nutt.) J.G. Sm. [HC]
Sitanion hystrix (Nutt.) J.G. Sm. var. *hystrix* [HC]

ssp. *brevifolius* (J.G. Sm.) Barkworth [HC2]
longleaf squirreltail

Sitanion hystrix (Nutt.) J.G. Sm. var. *brevifolium* (J.G. Sm.) C.L. Hitchc. [HC]

ssp. *elymoides* [FNA24, HC2]
Nebraska Fl. Pl. 15. 1891.
bottlebrush squirreltail, California squirreltail

Elymus elymoides (Raf.) Swezey ssp. *californicus* (J.G. Sm.) Barkworth
Sitanion hystrix (Nutt.) J.G. Sm. var. *californicum* (J.G. Sm.) F.D. Wils.

FNA24: "Elymus elymoides subsp. elymoides grows in desert and shrub-steppe areas of western North America, extending to the western edge of the Great Plains and, as an adventive, occasionally further east. It is frequently associated with disturbed sites."

ssp. *hordeoides* (Suksd.) Barkworth [FNA24, HC2]
Phytologia 83(4): 306 [1908]. 1997.
bottlebrush squirreltail

Elymus hordeoides (Suksd.) Barkworth & D.R. Dewey
Sitanion hordeoides Suksd.
Sitanion hystrix (Nutt.) J.G. Sm. var. *hordeoides* (Suksd.) C.L. Hitchc. [HC]

FNA24: "Elymus elymoides subsp. hordeoides grows in dry, rocky, often shallow soils, particularly in Artemisia rigida?Poa secunda communities, from eastern Washington and Idaho to northern California and Nevada. It resembles some Elymus?Hordeum hybrids."

Elymus glaucus Buckley [HC, HC2]
blue wild-rye

ssp. *glaucus* [FNA24, HC2]
In Proc. Acad. Sc. Philad. 1862 (1863) 99. 1863.
blue wildrye

Elymus glaucus Buckley ssp. *jepsonii* (Burtt Davy) Gould
Elymus glaucus Buckley var. *glaucus* [HC]
Elymus glaucus Buckley var. *jepsonii* Burtt Davy [HC]
Elymus glaucus Buckley var. *tenuis* Vasey

FNA24: "Elymus glaucus subsp. glaucus grows throughout the range of the species, from sea level to 2500 m. It is absent from the area where E. glaucus subsp. mackenzii grows. It resembles E. hirsutus, differing in its erect spikes and in the pattern of its lemma pubescence. It also resembles the introduced E. dahuricus, from which it differs in its palea shape.Elymus glaucus subsp. glaucus grows throughout the range of the species, from sea level to 2500 m. It is absent from the area where E. glaucus subsp. mackenzii grows. It resembles E. hirsutus, differing in its erect spikes and in the pattern of its lemma pubescence. It also resembles the introduced E. dahuricus, from which it differs in its palea shape."

ssp. *virescens* (Piper) Gould [FNA24, HC2]
Madroño 9(4): 126. 1947.
blue wildrye

Elymus glaucus Buckley var. *breviaristatus* Burtt Davy [HC]
Elymus glaucus Buckley var. *virescens* (Piper) Bowden
Elymus virescens Piper

FNA24: "Elymus glaucus subsp. virescens generally grows in relatively dry or rocky soils along cliffs, bluffs, slopes, shores, and river banks, and in coniferous forests, chaparral, and other woodlands along the coast from Alaska to central California, at elevations from sea level to 1200 m."

Elymus ×hansenii Scribn. [FNA24]
Bull. Div. Agrostol., U.S.D.A. 11: 56, f. 12. 1898.

×*Elysitanion hansenii* (Scribn.) Bowden
Sitanion anomalum J.G. Sm.
Sitanion hansenii (Scribn.) J.G. Sm.

FNA24: "Elymus ×hansenii refers to hybrids between E. glaucus and either E. elymoides or E. multisetus. It is not clear which of the latter two species is involved. It is a fairly common hybrid in those parts of western North America where both parents grow. The glumes of the type specimen are as wide as those in E. glaucus, and some are divided longitudinally, as in E. elymoides and E. multisetus. As in other hybrids involving E. elymoides and E. multisetus, the rachis of E. ×hansenii disarticulates at maturity."

Elymus hirsutus J. Presl [FNA24, HC, HC2]
Reliq. Haenk. 1: 264. 1830.

boreal wild rye

FNA24: "Elymus hirsutus grows in moist to damp or dry soils in woods, thickets, and grasslands. Its range extends along the coastal mountains from the Aleutian Islands to northern Oregon, and inland to eastern British Columbia. Plants in the southern part of the range tend to have villous leaves and more erect spikes with shorter, straighter awns. Elymus hirsutus is similar to E. glaucus, but its more pendent spikes, lemma pubescence pattern, and shorter glumes enable most specimens to be readily identified. Intermediates do exist; it is not known whether they reflect introgression or extremes of variation. It also forms occasional hybrids with Leymus mollis and Hordeum brachyantherum."

Elymus lanceolatus (Scribn. & J.G. Sm.) Gould [HC2]

Agropyron lanceolatum Scribn. & J.G. Sm.

ssp. *lanceolatus* [FNA24, HC2]
Madroño 10: 94. 1949.
thick-spiked wheatgrass

Agropyron dasystachyum (Hook.) Scribn. [HC]
Agropyron riparum Scribn. & J.G. Sm.
Elymus subvillosus (Hook.) Gould

FNA24: "Elymus lanceolatus subsp. lanceolatus grows in clay, sand, loam, and rocky soils, and is widely distributed in the western Flora region. It is most likely to be confused with the octoploid Pascopyrum smithii; it differs morphologically from that species in having more evenly distributed leaves and acute glumes that tend to taper from midlength or higher, rather than acuminate glumes that tend to taper from below midlength. In addition, the midvein of the glumes of E. lanceolatus is straight, whereas that of Pascopyrum smithii "leans"• to the side distally."

ssp. *psammophilus* (J.M. Gillett & H. Senn) Á. Löve [FNA24, HC2]
Taxon 29(1): 167. 1980.
sand-dune wheatgrass

Agropyron psammophilum J.M. Gillett & H. Senn

FNA24: "Elymus lanceolatus subsp. psammophilus tends to grow in sandy soils. It was originally described from around the Great Lakes, but plants with similar vestiture have been found scattered throughout the western range of the species, almost always in association with sandy soils. Those from the Yukon and northern British Columbia tend to be shorter and have smaller spikelets and spikelet parts than those from Washington and Saskatoon, but there is considerable overlap in these characters. Plants from around the Great Lakes (Gillett and Senn 1960) were almost completely pollen sterile. Despite this, Gillett and Senn rejected the notion that they were hybrids."

ssp. *riparius* (Scribn. & J.G. Sm.) Barkworth [HC2]
stream bank wheatgrass

Elytrigia ripara (Scribn. & J.G. Sm.) Beetle

Elymus multisetus (J.G. Sm.) Burtt Davy [FNA24, HC2]
Univ. Calif. Publ. Bot. 1: 57. 1902.
big squirreltail

Sitanion jubatum J.G. Sm. [HC]

The name Elymus multisetus (J.G. Sm.) M.E. Jones is invalidly published according to TROPICOS. FNA24: "Elymus multisetus grows in dry, often rocky, open woods and thickets on slopes and plains, from central Washington and Idaho to southern California, Colorado, and northwestern Arizona, and from sea level to 2000 m. It has also been reported from Baja California, Mexico. It usually grows in less arid habitats than E. elymoides subsp. elymoides, but the two taxa are sometimes sympatric. Wilson (1963) reported a wide belt of introgression between E. multisetus and E. elymoides subsp. elymoides from southeastern California to southern Nevada, but not in other areas where they are sympatric. There are also probable hybrids with Elymus glaucus and Pseudoroegneria spicata."

Elymus ×pseudorepens (Scribn. & J.G. Sm.) Barkworth & D.R. Dewey [FNA24]
Great Basin Naturalist 43(4): 568 [1984]. 1983.
false quackgrass

Agropyron ×*pseudorepens* Scribn. & J.G. Sm.
Agropyron pseudorepens Scribn. & J.G. Sm. var. *magnum* Scribn. & J.G. Sm.
Agropyron pseudorepens Scribn. & J.G. Sm. var. *sennii* Boivin

FNA24: "Elymus ×pseudorepens consists of hybrids between E. lanceolatus and E. trachycaulus. It appears to be fairly common, having been reported from Alberta to Michigan and south to Arizona, New Mexico, and Arkansas."

**Elymus repens* (L.) Gould [FNA24, HC2]
Madroño 9: 127. 1947.
creeping wild rye

Agropyron repens (L.) P. Beauv. [HC]
Agropyron repens (L.) P. Beauv. var. *subulatum* Roem. & Schult.
Agropyron vaillantianum (Wulfen & Schreb.) Trautv.
Elytrigia repens (L.) Desv. ex B.D. Jacks.
Elytrigia repens (L.) Desv. ex B.D. Jacks. var. *vaillantiana* (Wulfen & Schreb.) Prokudin, orthographic variant
Elytrigia vaillantiana (Wulfen & Schreb.) Beetle, orthographic variant
Triticum repens L.
Triticum vaillantianum Wulfen & Schreb.

FNA24: "Elymus repens is native to Eurasia; it is now established through much of the Flora region, extending from Alaska to Greenland and south to California, Texas, and North Carolina. It grows well in disturbed sites, spreading rapidly via its long rhizomes, as well as by seed. It is also drought tolerant. Although it is listed a noxious weed in several states, it provides good forage. It differs from E. hoffmannii in having widely spaced, unequally prominent leaf veins and, usually, shorter awns. Godley (1947) demonstrated that lemma awn development, glaucousness, and the pubescence of the rachises are each effectively controlled by single genes. Long-awned plants are homozygous recessive, and awn-tipped plants homozygous dominant; glaucousness is dominant over non-glaucousness, and glabrous rachises over pubescent rachises. Awned plants appear to be established along the coasts of Newfoundland and Nova Scotia. They have generally been identified as Agropyron pungens (Pers.) Roem. & Schult., a species that has obtuse, mucronate lemmas. Elymus repens is almost always a hexaploid. Most studies indicate that its genomic constitution is StStH, but Mason-Gamer (2001) demonstrated that it is genetically more complex than is implied by such a simple formula."

Elymus scribneri (Vasey) M.E. Jones [FNA24, HC2]
Contr. W. Bot. 14: 20. 1912.
Scribner's wild rye

Agropyron scribneri Vasey [HC]

FNA24: "Elymus scribneri grows in rocky areas in open subalpine and alpine regions, at 2500?3200 m, often in windswept locations, in southwestern Alberta and the western United States. It is often confused with E. elymoides, but differs from that species in having only one spikelet per node, wider glumes, and more tardily disarticulating rachises. It also resembles E. sierrae, from which it differs in its disarticulating rachises, denser spikes, and shorter anthers. Several taxonomists have suggested that Elymus scribneri consists of fertile hybrids between E. violaceus and E. elymoides. This suggestion is supported by the frequency with which the three taxa are sympatric, the morphological variation exhibited by E. scribneri, and cytogenetic data (Dewey 1967)."

Elymus trachycaulus (Link) Gould ex Shinners [HC2]
slender wheatgrass

Agropyron caninum (L.) P. Beauv. var. *mitchellii* S.L. Welsh
Agropyron trachycaulum (Link) Malte ex H.F. Lewis
Roegneria trachycaula (Link) Nevski
Triticum trachycaulum Link

ssp. *trachycaulus* [FNA24, HC2]
Rhodora 56(662): 28. 1954.
bearded wheatgrass

Agropyron ×*brevifolium* Scribn.

Agropyron caninum (L.) P. Beauv. ssp. *majus* (Vasey) C.L. Hitchc. [HC]
Agropyron caninum (L.) P. Beauv. var. *majus* Scribn. [HC]
Agropyron pauciflorum (Schwein.) Hitchc. ex Silveus
Agropyron pauciflorum (Schwein.) Hitchc. ex Silveus ssp. *majus* (Vasey) Melderis
Agropyron pauciflorum (Schwein.) Hitchc. ex Silveus ssp. *novae-angliae* (Scribn.) Melderis
Agropyron pauciflorum (Schwein.) Hitchc. ex Silveus ssp. *teslinense* (A.E. Porsild & Senn) Melderis
Agropyron pauciflorum (Schwein.) Hitchc. ex Silveus var. *novae-angliae* (Scribn.) Taylor & MacBryde
Agropyron tenerum Vasey
Agropyron teslinense A.E. Porsild & Senn
Agropyron trachycaulum (Link) Malte ex H.F. Lewis var. *majus* (Vasey) Fernald
Agropyron trachycaulum (Link) Malte ex H.F. Lewis var. *novae-angliae* (Scribn.) Fernald
Elymus pauciflorus (Schwein.) Gould
Elymus trachycaulus (Link) Gould ex Shinners ssp. *novae-angliae* (Scribn.) Tzvelev
Elymus trachycaulus (Link) Gould ex Shinners ssp. *teslinensis* (A.E. Porsild & Senn) Á. Löve
Elymus trachycaulus (Link) Gould ex Shinners var. *majus* (Vasey) Beetle
Roegneria pauciflora (Schwein.) Hyl.

FNA24: "Elymus trachycaulus subsp. trachycaulus grows throughout the habitat and range of the species, and exhibits considerably more variation than subsp. subsecundus. Two aspects of the variation that seem particularly worthy of further study are the glume venation, and the spacing of spikelets in the spikes. Plants with glumes having 5?7 well-developed, narrowly spaced veins are restricted to lower elevations and the southern portion of the subspecies range; northern plants and plants at higher elevations generally have 3?5 weakly developed and widely spaced veins. The former glumes resemble those of E. glaucus, with which E. trachycaulus subsp. trachycaulus is often sympatric; the latter, those of E. violaceus. Spikelet spacing also varies considerably. In at least some instances, plants with widely spaced spikelets appear to be associated with more shady habitats."

Elymus violaceus (Hornem.) Feilberg [FNA24, HC2]
Meddel. Grønland, Biosci. 15: 12. 1984.
arctic wheatgrass, bearded wheatgrass

Agropyron caninum (L.) P. Beauv. var. *hornemannii* (W.D.J. Koch) Pease & A.H. Moore
Agropyron caninum (L.) P. Beauv. var. *latiglume* (Scribn. & J.G. Sm.) Pease & A.H. Moore [HC]
Agropyron latiglume (Scribn. & J.G. Sm.) Rydb.
Agropyron trachycaulum (Link) Malte ex H.F. Lewis var. *latiglume* (Scribn. & J.G. Sm.) Beetle
Agropyron violaceum (Hornem.) Lange
Agropyron violaceum (Hornem.) Lange var. *alboviride* (Hultén) Melderis
Elymus alaskanus (Scribn. & Merr.) Á. Löve ssp. *latiglumis* (Scribn. & J.G. Sm.) Á. Löve
Elymus trachycaulus (Link) Gould ex Shinners ssp. *latiglumis* Barkworth & D.R. Dewey
Elymus trachycaulus (Link) Gould ex Shinners ssp. *violaceus* (Hornem.) Á. Löve & D. Löve
Elymus trachycaulus (Link) Gould ex Shinners var. *latiglumis* (Scribn. & J.G. Sm.) Beetle
Roegneria violacea (Hornem.) Melderis

FNA24: "Elymus violaceus grows in arctic, subalpine, and alpine habitats, on calcareous or dolomitic rocks, from Alaska through arctic Canada to Greenland, and south in the Rocky Mountains to southern New Mexico. In western North America, it forms intermediates with E. scribneri, E. trachycaulus, and E. alaskanus. It is treated here as including E. alaskanus subsp. latiglumis [≡ Agropyron latiglume], E. alaskanus being restricted to plants with relatively short glumes that are often found in valleys and at lower elevations than E. violaceus. Western plants of E. violaceous tend to be more glaucous, have shorter spikes and spikelets, and more obovate glumes than plants from Greenland but, until more is known about the extent and genetic basis of the variation in and among E. violaceus, E. alaskanus, and E. trachycaulus, formal taxonomic recognition seems inappropriate."

Elymus wawawaiensis J.R. Carlson & Barkworth [FNA24, HC2]
Phytologia 83: 327. 1998.
wawawai wild rye

Not in H&C. FNA24: "Elymus wawawaiensis grows primarily in shallow, rocky soils of slopes in coulees and reaches of the Salmon, Snake, and Yakima rivers of Washington, northern Oregon, and Idaho. There are also a few records from localities at some distance from the Snake River and its tributaries. These probably reflect deliberate introductions. C.V. Piper, who worked for the U.S. Department of Agriculture in southeastern Washington from 1892?1902, frequently distributed seed from populations that he considered

superior to farmers in the region; he considered E. wawawaiensis to be a superior form of what is here called Pseudoroegneria spicata. Another source of introduced populations is "?Secar', a cultivar of E. wawawaiensis that is recommended as a forage grass for arid areas of the northwestern United States. Elymus wawawaiensis resembles a vigorous version of Pseudoroegneria spicata, and was long confused with that species. It differs in its more imbricate spikelets and narrower, stiff glumes. In its primary range, E. wawawaiensis is often sympatric with P. spicata, but the two tend to grow in different habitats, E. wawawaiensis growing in shallow, rocky soils and P. spicata in medium- to fine-textured loess soil. The two species also differ cytologically, E. wawawaiensis being an allotetraploid, and P. spicata consisting of diploids and autotetraploids."

Eragrostis [HC, HC2]
lovegrass

**Eragrostis cilianensis* (All.) Vignolo ex Janch. [FNA25, HC, HC2]
Mitt. Naturwiss. Vereins Univ. Wien, n.s., 5: 110. 1907.
stinkgrass

Eragrostis major Host
Eragrostis megastachya (Koeler) Link
Poa cilianensis All.

FNA25: "Eragrostis cilianensis is an introduced European species that now grows in disturbed sites such as pastures and roadsides, at 0-2300 m, through most of the contiguous United States and southern Canada. The English name refers to the odor of fresh plants."

**Eragrostis curvula* (Schrad.) Nees [FNA25, HC2]
weeping lovegrass

Recently collected in King Co. (Jacobson et al. 2001). FNA25: "Eragrostis curvula is native to southern Africa. It is often used for reclamation because it provides good ground cover but, once introduced, it easily escapes. In the Flora region, it grows on rocky slopes, at the margins of woods, along roadsides, and in waste ground, at 20-2400 m, usually in pine-oak woodlands, and yellow pine and mixed hardwood forests."

Eragrostis hypnoides (Lam.) Britton, Sterns & Poggenb. [FNA25, HC, HC2]
Preliminary Catalogue of Anthophyta and Pteridophyta Reported as Growing Spontaneously within One Hundred Miles of New York 69. 1888.
teal love grass

Poa hypnoides Lam.

FNA25: "Eragrostis hypnoides grows along muddy or sandy shores of lakes and rivers and in moist, disturbed sites, at 10-1600 m. It is native to the Americas, extending from southern Canada to Argentina."

Eragrostis lutescens Scribn. [FNA25, HC, HC2]
Circ. Div. Agrostol. U.S.D.A. 9: 7. 1899.
six-weeks love grass

FNA25: "Eragrostis lutescens grows on the sandy banks of streams and lakes and in moist alkaline flats of the western United States at 300-2000 m. It has not been reported from Mexico."

**Eragrostis mexicana* (Hornem.) Link [HC2]
Mexican lovegrass

*ssp. *virescens* (J. Presl) S.D. Koch & Sánchez Vega [FNA25, HC2]
Phytologia 58(6): 380. 1985.
Mexican lovegrass, orcutt's lovegrass

Eragrostis orcuttiana Vasey [HC]
Eragrostis virescens J. Presl

FNA25: "Eragrostis mexicana grows along roadsides, near cultivated fields, and in disturbed open areas, at 100-3000 m. It is native to the Americas, its native range extending from the southwestern United States through Mexico, Central and northern South America, to Argentina. Within the Flora region, it has been introduced beyond its native range, often becoming an established part of the flora. Eragrostis mexicana subsp. virescens has a disjunct distribution, growing in California and western Nevada and, in South America, from Ecuador to Chile, southern Brazil, and northern Argentina. It has

also been found, as an introduction, at various other locations in North America, including eastern North America."

*_Eragrostis minor_ Host [FNA25, HC2]
Icon. Descr. Gram. Austriac. 4: 15. 1809.
little lovegrass

Eragrostis eragrostis (L.) P. Beauv.
Eragrostis poaeoides P. Beauv. ex Roem. & Schult.

FNA25: "Eragrostis minor is a European species that now grows in gravelly roadsides and disturbed sites, especially near railroad yards, at 20-1600 m in southern Canada and the contiguous United States."

Eragrostis pectinacea (Michx.) Nees [HC, HC2]
tufted lovegrass

Eragrostis caroliniana (Biehler) Scribn.
Eragrostis purshii hort. ex Schrad.
Poa pectinacea Michx.

var. *pectinacea* [FNA25, HC2]
Fl. Afr. Austral. Ill. 406. 1841.
purple eragrostis, tufted eragrostis

Eragrostis diffusa Buckley

FNA:25 "Eragrostis pectinacea is native from southern Canada to Argentina. In the Flora region, it grows in disturbed sites such as roadsides, railroad embankments, gardens, and cultivated fields, at 0-1200 m. Eragrostis pectinacea var. pectinacea grows throughout the range of the species, including most of the contiguous United States. Within the Flora region, it is most common in the eastern states and usually flowers from July-November."

*_Eragrostis pilosa_ (L.) P. Beauv. [HC, HC2]
India lovegrass

Eragrostis multicaulis Steud. [HC]
Poa pilosa L.

*var. _pilosa_ [FNA25, HC2]
Ess. Agrostogr. 71, 162, 175. 1812.
India lovegrass

FNA25: "Eragrostis pilosa is native to Eurasia but has become naturalized in many parts of the world. In the Flora region, it grows in forest margins and disturbed sites such as roadsides, railroad embankments, gardens, and cultivated fields, at 0-2500 m. Eragrostis pilosa var. pilosa is more common than var. perplexa in the Flora region."

*_Eremopyrum_ [HC2]
annual wheatgrass

*_Eremopyrum triticeum_ (Gaertn.) Nevski [FNA24, HC2]
Trudy Sredne-Aziatsk. Gosud. Univ., Ser. 8b, Bot. 17: 52. 1934.
annual false wheatgrass

Agropyron prostratum (Pall.) P. Beauv.
Agropyron triticeum Gaertn. [HC]

FNA24: "Eremopyrum triticeum is known primarily from scattered disturbed sites in western North America, from southern Canada to Arizona and New Mexico. Like most weeds, it is probably more widely distributed than herbarium records indicate. It is tolerant of alkaline soils, and is summer-dormant."

Festuca [HC, HC2]
fescue
(see also *Schedonorus*, *Vulpia*)

Festuca brachyphylla Schult. & Schult. f. [HC2]
alpine fescue

Festuca brevifolia R. Br., homonym (illegitimate)
Festuca ovina L. ssp. *brevifolia* (S. Watson) Hack.
Festuca ovina L. var. *borealis* Lange
Festuca ovina L. var. *brachyphylla* (Schult. & Schult. f.) Hitchc.
Festuca ovina L. var. *brevifolia* S. Watson [HC]

ssp. *brachyphylla* [FNA24, HC2]
Mant. 3(Add. 1): 646. 1827.
alpine fescue

Festuca brevifolia R. Br. var. *genuina* St.-Yves

FNA24: "Festuca brachyphylla subsp. brachyphylla is circumpolar in its distribution. In the Flora region, it extends from Alaska to Newfoundland, south in the mountains to Washington in the west and in the high peaks of the Appalachian Mountains of eastern Quebec and New England in the east."

ssp. *coloradensis* Fred. [HC2]

ssp. *californica* [HC2]

Festuca campestris Rydb. [FNA24, HC2]
Mem. New York Bot. Gard. 1: 57. 1900.
prairie fescue

Festuca altaica Trin., misapplied
Festuca altaica Trin. var. *major* (Vasey) Gleason
Festuca scabrella Torr. var. *major* Vasey

FNA24: "Festuca campestris is a common species in prairies and montane and subalpine grasslands, at elevations to about 2000 m. Its range extends from southern British Columbia, Alberta, and southwestern Saskatchewan south through Washington, Oregon, Idaho, and Montana. It is highly palatable and provides nutritious forage. Festuca campestris differs from F. hallii in having larger spikelets, less stiffly erect panicles and, usually, in lacking rhizomes. Where the two are sympatric, F. campestris tends to grow at higher elevations."

**Festuca filiformis* Pourr. [FNA24, HC2]
Hist. & Mém. Acad. Roy. Sci. Toulouse 3: 319. 1788.
fine-leaf sheep fescue

Festuca capillata Lam.
Festuca ovina L. var. *capillata* (Lam.) Alef. [HC]
Festuca ovina L. var. *tenuifolia* (Sibth.) Sm.
Festuca tenuifolia Sibth.

FNA24: "Festuca filiformis is a European species that has been introduced to the Flora region as a turf grass. It grows well on poor, dry soils and is becoming a ruderal weed in some areas. It is particularly common in the northeastern United States and southeastern Canada, but has been reported from scattered locations elsewhere."

Festuca idahoensis Elmer [FNA24, HC, HC2]
Bot. Gaz. 36(1): 53. 1903.
bluebunch fescue, Idaho fescue
(see also *Festuca roemeri*)

Festuca idahoensis Elmer var. *idahoensis* [HC]
Festuca idahoensis Elmer var. *oregona* (Hack. ex Beal) C.L. Hitchc. [HC]
Festuca ingrata (Hack. ex Beal) Rydb.
Festuca occidentalis Hook. var. *ingrata* (Hack. ex Beal) B. Boivin
Festuca occidentalis Hook. var. *oregona* (Hack. ex Beal) B. Boivin
Festuca ovina L. var. *columbiana* Beal
Festuca ovina L. var. *ingrata* Hack. ex Beal
Festuca ovina L. var. *oregona* Hack. ex Beal

FNA24: "Festuca idahoensis grows in grasslands, open forests, and sagebrush meadow communities, mostly east of the Cascade Mountains, from southern British Columbia eastward to southwestern Saskatchewan and southward to central California and New Mexico. It extends up to 3000 m in the

southern part of its range. It is often a dominant plant, and provides good forage. The young foliage is particularly palatable. Festuca idahoensis differs from F. arizonica, with which it is sometimes confused, in its less prominently ribbed blades and glabrous ovary apices. It has frequently been included in F. ovina."

Festuca occidentalis Hook. [FNA24, HC, HC2]
Fl. Bor.-Amer. 2: 249. 1840.
western fescue

Festuca ovina L. var. *polyphylla* Vasey ex Beal

FNA24: "Festuca occidentalis grows in dry to moist, open woodlands, forest openings, and rocky slopes, up to 3100 m. It extends from southern Alaska and northern British Columbia to southwestern Alberta, south to southern California and eastward to Wyoming, and, as a disjunct, around the upper Great Lakes in Ontario, eastern Wisconsin, and Michigan. It is sometimes important as a forage grass, but is usually not sufficiently abundant."

**Festuca ovina* L. [FNA24, HC]
sheep fescue
(see also *Festuca brachyphylla*, *Festuca filiformis*)

Festuca ovina L. var. *ovina* [HC]

Festuca ovina as treated in H&C is considered misapplied in FNA24. FNA24: "Festuca ovina was introduced from Europe as a turf grass. It is not presently used in the North American seed trade. The sporadic occurrences are mostly from old lawns and cemeteries, or sites seeded for soil stabilization. Festuca ovina used to be interpreted very broadly in North America, including almost any fine-leaved fescue that lacked rhizomes. Consequently, much of the information reported for F. ovina, and many of the specimens identified as such, belong to other species. The only confirmed recent reports are from Ontario (Dore & McNeill 1980); Piatt County, Illinois; and Okanogan County, Washington. Species in this treatment that have frequently been included in F. ovina are F. arizonica, F. auriculata, F. baffinensis, F. brachyphylla, F. brevissima, F. calligera, F. edlundiae, F. frederikseniae, F. hyperborea, F. idahoensis, F. lenensis, F. minutiflora, F. saximontana, F. trachyphylla, and F. viviparoidea."

Festuca roemeri (Pavlick) E.B. Alexeev [FNA24, HC2]
Novosti Sist, Vysa. Rast. 22: 23. 1985.
Roemer's fescue

Festuca idahoensis Elmer var. *roemeri* Pavlick

In H&C this species is included within F. idahoensis. FNA24: "Festuca roemeri grows in grasslands and open forests, primarily west of the Cascade Mountains, from southeastern Vancouver Island southward to northwestern California."

var. *roemeri* [HC2]

Festuca rubra L. [HC, HC2]
red fescue

Festuca duriuscula L.
Festuca ovina L. var. *duriuscula* (L.) W.D.J. Koch
Festuca rubra L. ssp. *secunda* (J. Presl) Pavlick [FNA24]

*ssp. *arenaria* (Osbeck) F. Aresch. [FNA24]

Festuca arenaria Osbeck
Festuca rubra L. var. *arenaria* (Osbeck) Fr.
Festuca rubra L. var. *lanuginosa* F. Mertens & W. Koch

FNA24: "Festuca rubra subsp. arenaria is a European taxon that grows in maritime sands and gravels. It is known in the Flora region only from one specimen collected on Vancouver Island; it is not known to have persisted. The description is based on the range of variation seen in Europe." "probably not reaching us" [H&C]

ssp. *juncea* (Hack.) K. Richt.
rock fescue

Festuca rubra L. ssp. *pruinosa* (Hack.) Piper
Festuca rubra L. var. *juncea* (Hack.) P. Fourn.

FNA24: "Festuca rubra subsp. pruinosa grows in the crevices of rocks, in pilings, and occasionally on pebble or sand beaches, extending upward from the upper littoral zone of the Pacific and Atlantic coasts of North America and Europe. Plants growing on coastal sands from California to Vancouver Island that are loosely cespitose and have abaxial sclerenchyma in large strands are sometimes distinguished as F. rubra subsp. arenicola E.B. Alexeev [= F. ammobia Pavlick]. The rhizomes are rarely present on herbarium specimens."

ssp. *mediana* (Pavlick) Pavlick [FNA24]
Phytologia 82(2): 77. 1997.
dune red fescue

Festuca rubra L. var. *littoralis* Vasey ex Beal [HC]

FNA24: "Festuca rubra subsp. mediana grows in sand beaches and dunes along exposed coasts, from Vancouver Island to Oregon."

*ssp. *rubra* [FNA24]
Sp. Pl. 1: 74. 1753.
red fescue

Festuca rubra L. var. *rubra* [HC]

FNA24: "Festuca rubra subsp. rubra grows in disturbed soil. It is often planted as a soil binder, or as turf or forage grass, in mesic temperate parts of the Flora region. Originally from Eurasia, it has been widely introduced elsewhere in the world, including most of the Flora region, from southern Alaska east to Newfoundland and Greenland and south to California and Georgia. It also grows in Mexico. Because F. rubra subsp. rubra has often been misunderstood, confounded, and lumped with other taxa of the F. rubra complex, statements about its distribution, including that given here, should be treated with caution. It is to be expected throughout the Flora region, in all but the coldest and driest habitats."

Festuca saximontana Rydb. [HC2]
Bull. Torrey Bot. Club 36: 536 (1909). 1909.
Rocky Mountain fescue

var. *purpusiana* (St.-Yves) Fred. & Pavlick [HC2]
Bull. Torrey Bot. Club 36: 536. 1909.
Rocky Mountain fescue

Festuca ovina var. *purpusia* St. Yves
Festuca ovina L. var. *purpusiana* St.-Yves

FNA24: "Festuca saximontana grows in grasslands, meadows, open forests, and sand dune complexes of the northern plains and boreal, montane, and subalpine regions in the Flora region, extending from Alaska to Greenland, south to southern California, northern Arizona, and New Mexico in the west and to the Great Lakes region in the east. It is also reported from the Russian Far East. Festuca saximontana provides good forage for livestock and wildlife. It is closely related to F. brachyphylla, and is sometimes included in that species as F. brachyphylla subsp. saximontana (Rydb.) Hultén. It has also frequently been included in F. ovina. Festuca saximontana var. purpusiana grows in subalpine or lower alpine habitats. The distribution of this taxon is poorly known; it probably extends from Alaska south to northern California. It is also reported from the Chukchi Peninsula in eastern Russia (Tzvelev 1976)."

var. *saximontana* [HC2]
Bull. Torrey Bot. Club 36: 536. 1909.

Festuca brachyphylla Schult. & Schult. f. var. *rydbergii* (St.-Yves) Cronquist
Festuca ovina L. var. *rydbergii* St.-Yves [HC]
Festuca ovina L. var. *saximontana* (Rydb.) Gleason

FNA24: "Festuca saximontana grows in grasslands, meadows, open forests, and sand dune complexes of the northern plains and boreal, montane, and subalpine regions in the Flora region, extending from Alaska to Greenland, south to southern California, northern Arizona, and New Mexico in the west and to the Great Lakes region in the east. It is also reported from the Russian Far East. Festuca saximontana provides good forage for livestock and wildlife. It is closely related to F. brachyphylla, and is sometimes included in that species as F. brachyphylla subsp. saximontana

(Rydb.) Hultén. It has also frequently been included in F. ovina. Festuca saximontana var. saximontana grows throughout the range of the species."

Festuca subulata Trin. [FNA24, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2(2): 173. 1832.
bearded fescue

FNA24: Festuca subulata grows on stream banks and in open woods, meadows, shady forests, and thickets, to about 2800 m. Its range extends from the southern Alaska panhandle eastward to southwestern Alberta and western South Dakota, and southward to central California and Colorado. Festuca subulata differs from F. subuliflora in having blunter, glabrous calluses and glabrous, often scabrous or puberulent leaf blades that are obscurely ribbed."

Festuca subuliflora Scribn. [FNA24, HC, HC2]
Cat. Canad. Pl. 2(5): 396. 1890.
crinkle-awn fescue

FNA24: "Festuca subuliflora grows in shady sites in dry to moist forests, usually below 700 m. Its range extends from southwestern British Columbia to central California. Superficially, it resembles F. subulata; it differs in having more elongated and distinctly hairy calluses, and often in having softly pubescent foliage and more strongly ribbed blades."

**Festuca trachyphylla* (Hack.) Krajina [FNA24, HC2]
Acta Bot. Bohem. 9: 190. 1930.
hard fescue

Festuca brevipila R. Tracey
Festuca cinerea Vill., misapplied
Festuca duriuscula L., misapplied
Festuca duriuscula L. var. *cinerea* (Vill.) Krajina, misapplied
Festuca duriuscula L. var. *trachyphylla* (Hack.) Richter
Festuca longifolia Thuill. var. *trachyphylla* (Hack.) Howarth

FNA24: "Festuca trachyphylla is native to open forests and forest edge habitats of Europe. It has been introduced and has become naturalized in many temperate regions. In the Flora region, F. trachyphylla is generally sold under the name "?Hard Fescue', and is popular as a durable turf grass and soil stabilizer. It is particularly common in the eastern United States and southeastern Canada, but is probably grown throughout the temperate parts of the region. Its naturalized distribution can be expected to expand. For many years, Festuca trachyphylla was known, inappropriately, under other names, e.g., F. duriuscula L., F. ovina var. duriuscula (L.) W.D.J. Koch, and F. longifolia Thuill. Some European authors treat it as F. stricta subsp. trachyphylla (Hack.) Patzke. It has frequently been included in F. ovina."

**Festuca valesiaca* Schleich. ex Gaudin [FNA24, HC2]
Agrost. Helv. 1: 242. 1811.
Valais fescue

FNA24: "Festuca valesiaca is widely distributed through central Europe and northern Asia, where it grows in steppes, dry meadows, and open rocky or sandy areas. It is sold in the North American seed trade as F. pseudovina Hack. ex Wiesb., and has been collected at a few scattered localities in the Flora region, apparently having become established from deliberate seeding. The taxonomy of the Festuca valesiaca complex is controversial, with different authors naming morphological variants and polyploid populations within it. No attempt has been made to determine which are present in the Flora region."

Festuca viridula Vasey [FNA24, HC, HC2]
U.S.D.A. Div. Bot. Bull. 13(2): pl. 93. 1893.
green-leaf fescue

FNA24: "Festuca viridula grows in low alpine and subalpine meadows, forest openings, and open forests, at (900)1500?3000 m, from southern British Columbia east to Montana and south to central California and Nevada. It is highly palatable to livestock, and is an important forage species in some areas."

Festuca washingtonica E.B. Alexeev [FNA24, HC2]
Bjulleten Moskovskogo Oba?estva Ispytatelej Prirody, Otdel Biologi?eskij 87(2): 115. 1982.
Washington fescue

FNA24: "Festuca washingtonica grows in subalpine to low alpine regions of British Columbia and

Washington. It has also been reported from Oregon and northern California; these records have not been verified."

Glyceria [HC, HC2]
mannagrass

Glyceria borealis (Nash) Batch. [FNA24, HC, HC2]
Proc. Manchester Inst. Arts Sci. 1: 74. 1900.
small floating manna grass

Panicularia borealis Nash

FNA24: "Glyceria borealis is a widespread native species that grows in the northern portion of the Flora region, extending southward through the western mountains into northern Mexico. It grows along the edges and muddy shores of freshwater streams, lakes, and ponds. In the southern portion of its range, G. borealis is restricted to subalpine and alpine areas. The midcauline leaves of G. borealis almost always have densely papillose upper leaf surfaces. Voss (1972) stated that such surfaces are non-wettable and develop on the floating leaves. Glyceria borealis differs from G. notata in having acute lemmas and, usually, densely papillose midcauline leaves."

**Glyceria canadensis* (Michx.) Trin. [HC2]
Canada mannagrass, rattlesnake mannagrass

Panicularia canadensis (Michx.) Kuntze

**var. canadensis* [FNA24, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 1(4): 366. 1830.
rattlesnake manna grass

FNA24: "Glyceria canadensis is an attractive native species that grows in swamps, bogs, lakeshore marshes, and wet woods throughout much of eastern North America, extending from eastern Saskatchewan to Newfoundland, Illinois, and northeastern Tennessee. It is now established in western North America, having been introduced as a weed in cranberry farms. It forms sterile hybrids with G. striata; the hybrids are called G. ×ottawensis Bowden. For further comments, see the description of Glyceria striata."

**Glyceria declinata* Bréb. [FNA24, HC2]
Fl. Normandie 354. 1859.
low glyceria

FNA24: "Glyceria declinata is a European species that is established on the western seaboard of North America from southern British Columbia to southern California, and in northeastern Nevada, Arizona, the lower portion of the Mississippi valley, and on Long Island, New York. In Europe, it grows in low-calcium, acidic soils and tolerates drier conditions than other European species of Glyceria (Conert 1992). In Denmark, it tends to grow in areas that are highly trampled (Niels Jacobsen and Signe Frederiksen, pers. comm.). It is invading vernal pools in California. In western North America, G. declinata has been confused with G. ×occidentalis. The most reliable distinguishing characteristics are the lateral lemma lobes of G. declinata and its rather short, straight panicle branches. The two species also differ in their ploidy level, G. declinata being diploid and G. ×occidentalis tetraploid (Church 1949). This is reflected in the length of their guard cells, those of G. declinata being 0.2?0.3 Âµm and those of G. ×occidentalis being 0.4?0.5 Âµm. S.F. Hrusa found plants (Hrusa 13681, 15858, 16267; specimens in CDA) that have an annual growth habit. Apart from this, they fit within the circumscription of G. declinata, except that two of the three specimens have narrower (2?3 mm) leaves than normal; they were also collected relatively early in the season. For now, it seems best to include the plants in G. declinata pending a better understanding of their relationship to perennial members of the species."

Glyceria elata (Nash) M.E. Jones [FNA24, HC, HC2]
Biol. Ser. Bull. State Univ. Montana 15: 17 1910.
tall mannagrass

FNA24: "Glyceria elata grows in wet meadows and shady moist woods, from British Columbia east to Alberta and south to California and New Mexico. It is not known from Mexico. The anomalous record from Georgia may represent an inadvertent introduction. It is very similar to, and sometimes confused with, G. striata, but the two sometimes grow together and show no evidence of hybridization. Their differences in

growth habit and stature are evident in the field. Molecular data (Whipple et al. [in press]) confirm that G. elata and G. striata are distinct, closely related entities. Glyceria elata is also sometimes confused with G. grandis. It differs in having rounded glumes with veins that terminate below the apices, more readily disarticulating florets, and greener lemmas with more prow-shaped apices, as well as in having paleal keel tips that point towards each other. In its overall aspect, it also resembles G. pulchella, but has somewhat more lax panicle branches than that species, in addition to smaller spikelets and florets."

**Glyceria fluitans* (L.) R. Br. [HC2]
water mannagrass

Glyceria grandis S. Watson [HC, HC2]
American mannagrass

Glyceria maxima (Hartm.) Holmb. ssp. *grandis* (S. Watson) Hultén
Glyceria maxima (Hartm.) Holmb. var. *americana* (Torr.) B. Boivin
Panicularia grandis (S. Watson) Nash

var. *grandis* [FNA24, HC2]
Manual (ed. 6) 667. 1890.
reed mannagrass

FNA24: "Glyceria grandis grows on banks and in the water of streams, ditches, ponds, and wet meadows, from Alaska to Newfoundland and south in the mountains to California, Arizona, and New Mexico in the western United States, and to Virginia and Tennessee in the eastern United States. It is similar to G. maxima, differing primarily in its shorter, flatter lemmas and shorter anthers. It is also confused with G. elata and Torreyochloa pallida. It differs from the former in having acute glumes with long veins, more evenly dark florets, flatter lemma apices, and paleal keel tips that do not point towards each other. It differs from Torreyochloa pallida in its closed leaf sheaths and 1-veined glumes. Glyceria grandis var. grandis is the more widespread of the two varieties, growing throughout the range of the species."

Glyceria leptostachya Buckley [FNA24, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 14: 95. 1862.
slender-spike manna grass

Panicularia davyi Merr.

FNA24: "Glyceria leptostachya grows in swamps and along the margins of streams and lakes, on the western side of the coastal mountains from southern Alaska to San Francisco Bay. It is similar to the European Glyceria notata, differing primarily in its tendency to have fewer spikelets [3?8(10) vs. 5?15(19)] on its branches."

**Glyceria maxima* (Hartm.) Holmb. [FNA24, HC2]
Bot. Not. 1919: 97. 1919.
tall mannagrass

Collected in King County.

Glyceria ×occidentalis (Piper) J.C. Nelson [FNA24, HC, HC2]
Torreya 19: 224. 1919.
northwestern manna grass

FNA24: "Glyceria ×occidentalis has hitherto been considered an uncommon native species that grows along lakes, ponds, and streams, and in marshy areas of western North America. It differs from other species in the region primarily in its longer lemmas and anthers. Studies of chloroplast DNA in western North American species of Glyceria demonstrated that, contrary to C.L. Hitchcock's (1969) conclusion, G. fluitans is present in western North America, and that all specimens being identified as G. ×occidentalis had cpDNA resembling that of G. leptostachya or G. fluitans; there was no distinctive G. ×occidentalis cpDNA (Whipple et al. [in press]). This strongly suggests that G. ×occidentalis is a series of reciprocal hybids, and probably backcrosses, between G. fluitans and G. leptostachya. As the key indicates, G. ×occidentalis is intermediate between its two putative parents. The cpDNA study also confirmed that G. declinata is distinct from G. ×occidentalis (see discussion under that species)."

Glyceria striata (Lam.) Hitchc. [FNA24, HC, HC2]
Proc. Biol. Soc. Wash. 41: 157. 1928.
fowl manna grass

Glyceria nervata (Willd.) Trin.
Glyceria striata (Lam.) Hitchc. ssp. *stricta* (Scribn.) Hultén
Glyceria striata (Lam.) Hitchc. var. *stricta* (Scribn.) Fernald [HC]
Panicularia nervata (Willd.) Kuntze
Panicularia striata (Lam.) Hitchc.

FNA24: "Glyceria striata grows in bogs, along lakes and streams, and in other wet places. Its range extends from Alaska to Newfoundland and south into Mexico. Plants from the eastern portion of the range have sometimes been treated as G. striata var. striata, and those from the west as G. striata var. stricta (Scribn.) Fernald. Eastern plants tend to have somewhat narrower leaves and thinner culms than western plants, but the variation appears continuous. In the west, larger specimens are easy to confuse with G. elata. The two species are sometimes found growing together without hybridizing; this and molecular data (Whipple et al. [in prep.]) support their recognition as separate species. The differences between the two in growth habit and stature are evident in the field; they are not always evident on herbarium specimens. In its overall aspect, G. striata also resembles G. pulchella, but it has somewhat more lax panicle branches in addition to smaller spikelets and florets. Glyceria ×gatineauensis Bowden is a sterile hybrid between G. striata and G. melicaria. It resembles G. melicaria but has longer (up to 12 cm), less appressed panicle branches and is a triploid with 2n = 30. It was described from a population near Eardley, Quebec. An additional specimen, tentatively identified as G. ×gatineauensis, was collected in 1929 from French Creek in Upshur County, West Virginia. Glyceria ×ottawensis Bowden is a sterile hybrid between G. striata and G. canadensis. It is intermediate between the two parents, and is known only from the original populations near Ottawa. It has sometimes been included in G. ×laxa (Scribn.) Scribn. [= G. canadensis var. laxa]; that taxon often produces viable seed, indicating that it is not a hybrid."

Graphephorum [HC2]
graphephorum

Graphephorum wolfii (Vasey) Vasey ex Coult. [HC2]
beardless false oat

Trisetum wolfii Vasey [HC]

FNA24: "Trisetum wolfii grows in moist meadows, marshes, and stream banks in aspen groves and parks in the spruce-fir forest zone, at medium to high, but usually not alpine, elevations.It is native to southwestern Canada and the western United States."

Hesperostipa [HC2]
needle grass, needle-and-thread, porcupine-grass

Hesperostipa comata (Trin. & Rupr.) Barkworth [HC2]
needle-and-thread

Stipa comata Trin. & Rupr. [HC]

ssp. *comata* [FNA24, HC2]
Phytologia 74(1): 16. 1993.
needle and thread

Stipa comata Trin. & Rupr. ssp. *intonsa* Piper
Stipa comata Trin. & Rupr. var. *comata* [HC]

FNA24: "Hesperostipa comata subsp. comata grows on well-drained soils of cool deserts, grasslands, and sagebrush associations, at elevations of 200?2500 m. It is widespread and often abundant in western and central North America, particularly in disturbed areas. It is similar to H. neomexicana, differing primarily in having awns that are either not hairy or have hairs that are no more than 0.5 mm long, and in having thinner, longer ligules. Intermediates to H. neomexicana exist but are not common."

ssp. *intermedia* (Scribn. & Tweedy) Barkworth [FNA24, HC2]
Phytologia 74(1): 16. 1993.
Tweedy's needlegrass

Stipa comata Trin. & Rupr. var. *falcata* B. Boivin
Stipa comata Trin. & Rupr. var. *intermedia* Scribn. & Tweedy [HC]

Stipa comata Trin. & Rupr. var. *suksdorfii* H. St. John

FNA24: "Hesperostipa comata subsp. intermedia is found in pinyon-juniper woodlands, at elevations of 2175?3075 m, in the Sierra Nevada and Rocky Mountains, from southern Canada to New Mexico. It resembles H. curtiseta, but differs in its evenly pubescent lemmas and its often lacerate ligules."

Hierochloe occidentalis Buckley [HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 14: 100. 1862.
California sweet grass, California sweetgrass

Anthoxanthum occidentale (Buckley) Veldkamp
Hierochloe macrophylla Thurb. ex Bol.

FNA24: "Anthoxanthum occidentale grows in moist to fairly dry forested areas, from Kickitat County, Washington south to the coastal mountains of San Juis Obispo County, California. Its long flag leaf blades and more elongate spikelet parts make it easier to distinguish from A. hirtum than the key suggests."

Hierochloe odorata (L.) P. Beauv. [HC, HC2]
hairy sweetgrass, vanillagrass

Anthoxanthum hirtum (Schrank) Y. Schouten & Veldkamp
Anthoxanthum hirtum (Schrank) Y. Schouten & Veldkamp ssp. *arcticum* (J. Presl) G.C. Tucker
Hierochloe hirta (Schrank) Borbás ssp. *arctica* (J. Presl) G. Weim.
Hierochloe odorata (L.) P. Beauv. ssp. *arctica* (J. Presl) Tzvelev

**Holcus* [HC, HC2]
velvet-grass

**Holcus lanatus* L. [FNA24, HC, HC2]
Sp. Pl. 2: 1048. 1753.
common velvet grass

Nothoholcus lanatus (L.) Nash

FNA24: "Holcus lanatus grows in disturbed sites, moist waste places, lawns, and pastures, in a wide range of edaphic conditions and at elevations from 0-2300 m. A native of Europe, it was widely distributed in North America by 1800. It is an ancestor of the polyploid complex represented by Holcus mollis."

**Holcus mollis* L. [HC, HC2]
creeping softgrass, creeping velvet-grass

*ssp. *mollis* [FNA24, HC2]
Syst. Nat. (ed. 10) 2: 1305. 1759.
creeping velvet grass

FNA24: "Holcus mollis grows in moist soil and disturbed sites, including lawns and damp pastures. It is a European introduction that has persisted in the Flora region, becoming a problematic weed in ungrazed pastures, prairie remnants, and oak savannahs in portions of the Pacific Northwest. It is also sold as an ornamental. There are two subspecies: Holcus mollis L. subsp. mollis (stems not thickened and tuberous at the base; panicles lax, brownish or purplish) and H. mollis subsp. reuteri (Boiss.) Malag. (stems thickened and tuberous at the base; panicles narrow, whitish). North American introductions belong to subsp. mollis."

Hordeum [HC, HC2]
barley

Hordeum brachyantherum Nevski [HC, HC2]
meadow barley

Critesion brachyantherum (Nevski) Barkworth & D.R. Dewey
Hordeum nodosum L.

ssp. *brachyantherum* [FNA24, HC2]
Trudy Bot. Inst. Akad. Nauk S.S.S.R., Ser. 1, Fl. Sist. Vyssh. Rast. 2: 61. 1936.
meadow barley

Critesion jubatum (L.) Nevski ssp. *breviaristatum* (Bowden) Á. Löve & D. Löve

Hordeum boreale Scribn. & J.G. Sm.
Hordeum jubatum L. ssp. *breviaristatum* Bowden
Hordeum jubatum L. var. *boreale* (Hitchc.) B. Boivin
Hordeum nodosum L. var. *boreale* Hitchc.

FNA24: "Hordeum brachyantherum subsp. brachyantherum grows in pastures and along streams and lake shores, from sea level to 4000 m. Its range extends from Kamchatka through western North America to Baja California, Mexico. It is also known from disjunct locations in Newfoundland and Labrador and the eastern United Sates. The latter are probably recent introductions; the Newfoundland populations are harder to explain. One population from California is known to be hexaploid."

Hordeum depressum (Scribn. & J.G. Sm.) Rydb. [FNA24, HC, HC2]
Bull. Torrey Bot. Club 36: 539. 1909.
dwarf barley

Critesion depressum (Scribn. & J.G. Sm.) Á. Löve

FNA24: "Hordeum depressum grows in vernal pools and ephemeral habitats, often in alkaline soil. It is restricted to the western United States."

Hordeum jubatum L. [HC, HC2]
foxtail barley

Critesion jubatum (L.) Nevski

ssp. *jubatum* [FNA24, HC2]
Sp. Pl. 1: 85. 1753.
foxtail barley

FNA24: "Hordeum jubatum subsp. jubatum is the more widespread of the two subspecies, extending from eastern Siberia through most of North America to northern Mexico. Native in western and northern portions of the Flora region, it is considered to be adventive in the eastern and southeastern portion of its range. It grows in moist soil along roadsides and other disturbed areas, as well as in meadows, the edges of sloughs and salt marshes, and on grassy slopes."

**Hordeum marinum* Huds. [HC2]
Mediterranean barley

**ssp. *gussoneanum* (Parl.) Thell. [HC2]
Mediterranean barley

Critesion geniculatum (All.) Á. Löve
Critesion hystrix (Roth) Á. Löve
Critesion marinum (Huds.) Á. Löve ssp. *gussonianum* (Parl.) Barkworth & D.R. Dewey, orthographic variant
Hordeum geniculatum All. [HC]
Hordeum gussonianum Parl., orthographic variant
Hordeum hystrix Roth
Hordeum marinum Huds. ssp. *gussonianum* (Parl.) Thell., orthographic variant

FNA24: "Hordeum marinum subsp. gussoneanum grows in grassy fields, waste places, and open ground. It was introduced to North America from the Mediterranean area, and it is now an established weed, especially in western North America."

**Hordeum murinum* L. [HC, HC2]
mouse barley, smooth barley, wall barley

**ssp. *glaucum* (Steud.) Tzvelev [FNA24, HC2]
Novosti Sist, Vysa. Rast. 8: 67. 1971.
mouse barley

Critesion glaucum (Steud.) Á. Löve
Critesion murinum (L.) Á. Löve ssp. *glaucum* (Steud.) W.A. Weber
Hordeum glaucum Steud. [HC]
Hordeum stebbinsii Covas

FNA24: "Hordeum murinum subsp. glaucum grows in grasslands, fields, and waste places. It is native to the eastern Mediterranean area. It is now common in arid areas of the western United States, and is also known from scattered locations elsewhere in the Flora region."

*ssp. *leporinum* (Link) Arcang. [FNA24, HC2]
Comp. Fl. Ital. 805. 1882.
mouse barley

Critesion murinum (L.) Á. Löve ssp. *leporinum* (Link) Á. Löve
Hordeum leporinum Link [HC]

FNA24: "Hordeum murinum subsp. leporinum grows in waste places, roadsides, and disturbed areas in arid regions. It is native to the Mediterranean region. It is now established in the Flora region, being most common in the western United States. A hexaploid cytotype has been found in Turkey, Armenia, Turkmenistan, and Iran. It has been named H. leporinum var. simulans Bowden. It is treated here as part of H. murinum subsp. leporinum."

*ssp. *murinum* [FNA24, HC2]
Sp. Pl. 1: 85. 1753.
mouse barley

Critesion murinum (L.) Á. Löve ssp. *murinum*

FNA24: "Hordeum murinum subsp. murinum grows in waste places that are somewhat moist. It is native to Europe. Within the Flora region, it has the most restricted distribution of the three subspecies, being found from Washington to Arizona, and in scattered locations from Maine to Virginia."

Hordeum pusillum Nutt. [FNA24, HC, HC2]
Gen. N. Amer. Pl. 1: 87. 1818.
little barley

Critesion pusillum (Nutt.) Á. Löve
Hordeum pusillum Nutt. var. *pubens* Hitchc.

FNA24: "Hordeum pusillum grows in open grasslands, pastures, and the borders of marshes, and in disturbed places such as roadsides and waste places, often in alkaline soil. It is native, widespread, and often common in much of the Flora region. Its range extends into northern Mexico, but it is not common there."

**Hordeum vulgare* L. [HC, HC2]
barley

Hordeum aegiceras Nees ex Royle
Hordeum distichon L.
Hordeum hexastichum L.
Hordeum vulgare L. var. *trifurcatum* (Schltdl.) Alef.

*ssp. *vulgare* [FNA24, HC2]
Sp. Pl. 1: 84-85. 1753.
common barley

FNA24: "Hordeum vulgare is native to Eurasia. Plants in the Flora region belong to the cultivated subspecies, H. vulgare L. subsp. vulgare. The progenitor of cultivated barley, H. vulgare subsp. spontaneum (K. Koch) Thell., has a brittle rachis, tough awn, and, often, shrunken seeds. It does not grow in the Flora region. Hordeum vulgare subsp. vulgare was first domesticated in western Asia. It is now grown in most temperate parts of the world. In the Flora region, it occurs as a cultivated species that is often found as an adventive in fields, roadsides, and waste places throughout the region, not just at the locations shown on the map. There are many distinctive, but interfertile, forms. Bothmer et al. (1995) presented an artificial classification of such forms."

Koeleria [HC, HC2]
junegrass

Koeleria macrantha (Ledeb.) Schult. [FNA24, HC2]
Mant. 2: 345. 1824.
Koeler's prairie grass, prairie Junegrass

Koeleria cristata Pers. [HC]
Koeleria cristata Pers. var. *longifolia* Vasey ex Burtt Davy
Koeleria cristata Pers. var. *pinetorum* Abrams
Koeleria gracilis Pers.
Koeleria nitida Nutt.
Koeleria yukonensis Hultén

FNA24: "Koeleria macrantha is widely distributed in temperate regions of North America and Eurasia. In North America, it grows in semi-arid to mesic conditions, on dry prairies or in grassy woods, generally in sandy soil, from sea level to 3900 m. It differs from Sphenopholis intermedia, with which it is frequently confused, in its less open panicles, and in having spikelets that disarticulate above the glumes. The species is treated here as a polymorphic, polyploid complex. North American plants have sometimes been treated as a separate species, Koeleria nitida Nutt., but no morphological characters for distinguishing them from Eurasian members of the complex are known (Greuter 1968). Some plants from Oregon and Washington have densely pubescent culms, and high-elevation populations from western North America often are densely cespitose, with very short culms and purple leaves and inflorescences, but both variants appear to intergrade with more typical plants."

Leersia [HC, HC2]
cutgrass

Leersia oryzoides (L.) Sw. [FNA24, HC, HC2]
Prodr. 21. 1788.
rice cut grass

Homalocenchrus oryzoides (L.) Pollich
Phalaris oryzoides L.

FNA24: "Leersia oryzoides grows in wet, heavy, clay or sandy soils, and is often aquatic. It is found across most of southern Canada, extending south throughout the contiguous United States into northern Mexico, and flowers from July to October. It has also become established in Europe and Asia."

Leymus [HC2]
wildrye

Leymus cinereus (Scribn. & Merr.) Á. Löve [FNA24, HC2]
Bulletin of the Torrey Botanical Club 29(7): 467. 1902.
Great Basin lyme grass

Aneurolepidium piperi (Bowden) B.R. Baum
Elymus cinereus Scribn. & Merr. [HC]
Elymus cinereus Scribn. & Merr. var. *cinereus* [HC]
Elymus cinereus Scribn. & Merr. var. *pubens* (Piper) C.L. Hitchc. [HC]
Elymus condensatus J. Presl var. *pubens* Piper
Elymus piperi Bowden

FNA24: "Leymus cinereus grows along streams, gullies, and roadsides, and in gravelly to sandy areas in sagebrush and open woodlands. It is widespread and common in western North America. Leymus cinereus also resembles Psathyrostachys juncea, differing in its non-disarticulating rachises, larger spikelets with more florets, and longer ligules. Spontaneous hybridization between L. cinereus and L. triticoides is known; the hybrids do not have a scientific name. The rhizomes found in some specimens may reflect introgression from L. triticoides through such hybrids."

Leymus condensatus (J. Presl) Á. Löve [HC2]
giant wildrye

Leymus flavescens (Scribn. & J.G. Sm.) Pilg. [FNA24, HC2]
Botanische Jahrbucher fur Systematik, Pflanzengeschichte und Pflanzengeographie 74: 6. 1947.
sand lyme grass

Elymus arenicola Scribn. & J.G. Sm.
Elymus flavescens Scribn. & J.G. Sm. [HC]
Leymus arenicola (Scribn. & J.G. Sm.) Pilg.

FNA24: "Leymus flavescens grows on sand dunes and open sandy flats, and ditch- and roadbanks, of the Snake and Columbia river valleys [MARY: there are also 3 Montana counties shown on the map. KMC]. The central Washington population is growing on a road cut; it seems to be well established there. Plants identified as Elymus arenicolus Scribn. & J.G. Sm. have less densely pubescent lemmas than other specimens. Leckenby, the collector of the type specimen, noted that they grew on sand or sand drifts along the Columbia River, but could not withstand flooding. He could find no seed. Such specimens are included here, but they may represent hybrids between L. flavescens and L. triticoides."

Leymus mollis (Trin.) Pilg. [HC2]
Bot. Jahrb. Syst. 74(1): 6. 1947.
American dunegrass

Elymus arenarius L. ssp. *mollis* (Trin.) Hultén
Elymus arenarius L. var. *scabrinervis* (Bowden) B. Boivin
Elymus mollis Trin. [HC]
Leymus arenarius (L.) Hochst. ssp. *mollis* (Trin.) Tzvelev

ssp. *mollis* [FNA24, HC2]
Bot. Jahrb. Syst. 74(1): 6. 1947.
yellow ryegrass

Elymus arenarius L. var. *villosus* E. Mey.
Elymus capitatus Scribn.

FNA24: "In the Flora region, Leymus mollis subsp. mollis grows primarily on the west coast; on the east coast, it grows in New Brunswick and Nova Scotia, particularly along the St. Lawrence River, and on the coast of Greenland. It does not grow along the arctic coast. Outside the Flora region, it is native in the coastal region of eastern Asia, growing primarily along the coast and in the mouths of larger rivers, and on the shores of large lakes near the coast from the Korean Peninsula to the Kamchatka Peninsula. It was introduced to Iceland, but is now rare there. Leymus ×vancouverensis is thought to be a hybrid between L. mollis subsp. mollis and L. triticoides, although its range extends beyond the current range of L. triticoides."

**Leymus racemosus* (Lam.) Tzvelev [FNA24, HC2]
Bot. Mater. Gerb. Bot. Inst. Komarova Acad. Nauk SSSR 20: 429. 1960.
mammoth lyme grass, mammoth wildrye

Elymus arenarius L. var. *giganteus* (Vahl) Schmalh.
Elymus giganteus Vahl [HC]
Elymus racemosus Lam.
Leymus giganteus (Vahl) Pilg.

FNA24: "Leymus racemosus is native to Europe and central Asia, where it grows on dry, sandy soils. It has been introduced into the Flora region, and collected at various locations, particularly in the northwestern contiguous United States; it is not clear how many of the populations represented by these specimens are still extant. Tsvelev (1976) recognized 4 subspecies. Because there are few North American specimens, and these are incomplete, no attempt has been made to determine to which subspecies the North American plants belong."

Leymus triticoides (Buckley) Pilg. [FNA24, HC2]
Bot. Jahrb. Syst. 74: 6. 1947.
beardless lyme grass, beardless wildrye

Elymus condensatus J. Presl var. *triticoides* (Buckley) Thurb.
Elymus orcuttianus Vasey
Elymus triticoides Buckley [HC]
Elymus triticoides Buckley var. *pubescens* Hitchc. [HC]
Elymus triticoides Buckley var. *triticoides* [HC]

FNA24: "Leymus triticoides grows in dry to moist, often saline meadows. Its range extends from southern British Columbia to Montana, south to California, Arizona, and New Mexico, but its populations are widely scattered. It is not known from Mexico. There is considerable variation within the species, but no pattern of variation suggesting the existence of infraspecific taxa is known. It is very similar to L. multicaulis, strains of which were initially released as L. triticoides by the U.S. Department of Agriculture. The most consistent

differences between them appear to be in the venation of the leaf blades and the vestiture of the calluses. Leymus triticoides is also very similar to L. simplex, differing from it in the number of spikelets at the midspike nodes. Leymus triticoides hybridizes with other species of Leymus; hybrids with L. mollis are called L. ×vancouverensis (see p. ??), those with L. condensatus are called L. ×multiflorus (see p. ??). Hybrids with L. cinereus are known, but have not been formally named. Plants identified as Elymus arenicolus Scribn. & J.G. Sm. are here included in L. flavescens, but may represent hybrids between L. triticoides and L. flavescens."

Leymus ×vancouverensis (Vasey) Pilg. [FNA24, HC2]
Bot. Jahrb. Syst. 74: 6. 1946.
Vancouver wildrye

Elymus vancouverensis Vasey
Elymus vancouverensis Vasey var. *californicus* Bowden
Elymus vancouverensis Vasey var. *crescentianus* Bowden

FNA24: "Leymus ×vancouverensis grows at scattered locations on beaches along the Pacific coast, from southern British Columbia to California. It is a sterile hybrid, probably between L. mollis and L. triticoides (Bowden 1957). The northern populations are outside the current range of L. triticoides."

**Lolium* [HC, HC2]*
ryegrass

**Lolium multiflorum* Lam. [FNA24, HC, HC2]
Fl. Franç. 3: 621. 1779.
annual ryegrass, Italian ryegrass, perennial ryegrass

Lolium multiflorum Lam. ssp. *italicum* (A. Braun) Schinz & R. Keller
Lolium multiflorum Lam. var. *diminutum* Mutel
Lolium multiflorum Lam. var. *muticum* DC.
Lolium perenne L. ssp. *italicum* (A. Braun) Husnot
Lolium perenne L. ssp. *multiflorum* (Lam.) Husn.
Lolium perenne L. var. *aristatum* Willd.
Lolium perenne L. var. *multiflorum* (Lam.) Parnell

FNA24: "Lolium multiflorum, a European species, now grows in most of the Flora region. It is planted as a cover crop, as a temporary lawn grass, for roadside restoration, and for soil or forage enrichment; it often escapes from cultivation, becoming established in disturbed sites. Lolium multiflorum and L. perenne are interfertile and intergrade. Lolium multiflorum differs from L. perenne in being a taller, shorter-lived perennial or annual with wider leaves that are rolled, rather than folded, in the bud. Hybrids between the two species are called Lolium ×hybridum Hausskn. Lolium multiflorum also hybridizes with L. rigidum; those hybrids are called Lolium ×hubbardii Jansen & Wacht. ex B.K. Simon."

**Lolium perenne* L. [FNA24, HC, HC2]
Sp. Pl. 1: 83. 1753.
English ryegrass, perennial ryegrass

Lolium multiflorum Lam. var. *ramosum* Guss. ex Arcang.
Lolium perenne L. var. *cristatum* Pers.

FNA24: "Lolium perenne, a Eurasian species, is now established in disturbed areas throughout much of the Flora region. It is commercially important, being included in lawn seed mixtures as well as being used for forage and erosion prevention. Lolium perenne intergrades and is interfertile with L. multiflorum; it also intergrades with L. rigidum. Typical L. perenne differs from L. multiflorum in being a shorter, longer-lived perennial with narrower leaves that are folded, rather than rolled, in the bud. Hybrids between the two species are called Lolium ×hybridum Hausskn."

**Lolium persicum* Boiss. & Hohen. [HC2, FNA]
Diagn. Pl. Orient. ser. 1, 13: 66. 1854.
Persian ryegrass

Recently collected (2018) in Clark County, WA.

**Lolium temulentum* L. [HC, HC2]
darnel, tare

Lolium arvense With.
Lolium temulentum L. var. *leptochaeton* A. Braun
Lolium temulentum L. var. *macrochaeton* A. Braun

*ssp. *temulentum* [FNA24, HC2]
Sp. Pl. 1: 83. 1753.
darnel

Lolium temulentum L. var. *arvense* (With.) Bab.

FNA24: "Lolium temulentum subsp. temulentum is found occasionally in disturbed sites throughout much of the Flora region. It is native to the Eastern Hemisphere, where it is known only as a weed, especially of grain fields. Awn presence or absence and length vary, and have no taxonomic significance. The seeds sometimes become infected with an endophytic fungus, assumed to be the source of the toxic pyrrolizidine alkaloids loline, 6-methyl loline, and lolinine, but not temuline, which is now considered an artifact of isolation (Dannhardt and Steindl 1985). Because primitive agricultural practices could not separate seeds of Lolium temulentum from those of wheat, infected seeds often resulted in poisonous flour."

Melica [HC, HC2]
melic, oniongrass

Melica aristata Thurb. ex Bol. [FNA24, HC, HC2]
Proc. Calif. Acad. Sci. 4: 103. 1870.
bearded melic grass

FNA24: "Melica aristata grows from 1000?3000 m in open fir and pine woods. It is restricted to the Flora region, being native from Washington to southern California. It has also been found in Kentucky, possibly as an introduction from contaminated seed. Melica aristata is easily distinguished from most species of Melica by its conspicuous awns."

Melica bulbosa Geyer ex Porter & J.M. Coult. [FNA24, HC, HC2]
Syn. Fl. Colorado 149. 1874.
onion grass

Bromelica bulbosa (Geyer ex Porter & J.M. Coult.) W.A. Weber
Melica bella Piper
Melica bella Piper ssp. *intonsa* Piper
Melica bulbosa Geyer ex Porter & J.M. Coult. var. *bulbosa* [HC]
Melica bulbosa Geyer ex Porter & J.M. Coult. var. *inflata* (Bol.) Boyle
Melica bulbosa Geyer ex Porter & J.M. Coult. var. *intonsa* (Piper) M. Peck [HC]
Melica inflata (Bol.) Vasey

FNA24: "Melica bulbosa grows from 1370?3400 m, mostly in open woods on dry, well-drained slopes and along streams. It is restricted to the western half of the Flora region. Two records from Texas, in Jeff Davis and Sutton counties, have not been verified. Melica bulbosa differs from M. spectabilis in its sessile corm and longer glumes. In addition, in M. bulbosa the spikelets have purplish bands which appear to be concentrated towards the apices; in M. spectabilis the bands appear more regularly spaced. It differs from M. californica in its more narrowly acute spikelets, more strongly colored lemmas, and lack of corms, and from M. fugax in not having swollen rachilla internodes."

**Melica ciliata* L. [HC2]
silky melic

*ssp. *taurica* (K. Koch) Tzvelev [HC2]

Melica fugax Bol. [FNA24, HC, HC2]
Proc. Calif. Acad. Sci. 4: 104. 1870.
small melic grass

Melica fugax Bol. ssp. *madophylla* Piper
Melica fugax Bol. var. *inexpansa* Suksd.
Melica fugax Bol. var. *macbridei* (Rowland ex A. Nelson) Beetle

FNA24: "Melica fugax grows at elevations to 2200 m on dry, open flats, hillsides, and woods, from British Columbia to California and east to Idaho and Nevada. It is usually found on soils of volcanic origin, and

rarely below 1300 m. Melica fugax is often confused with M. bulbosa, but its rachilla internodes are unmistakable and unique among the species in the Flora region, being swollen when fresh and wrinkled when dry. One specimen, C.L. Hitchcock 15521 [WTU 114265] from Elmore County, Idaho, appears to be a hybrid. It has shrunken caryopses and combines the rachilla of M. fugax with the lemma pubescence, size, and overall appearance of M. subulata, but lacks corms."

Melica harfordii Bol. [FNA24, HC, HC2]
Proc. Calif. Acad. Sci. 4: 102. 1870.
Harford's melic grass

Melica harfordii Bol. var. *minor* Vasey

FNA24: "Melica harfordii grows primarily in the Pacific coast ranges from Washington to California, as well as in the Sierra Nevada and a few other inland locations, usually on dry slopes or in dry, open woods. The awns in M. harfordii often escape attention because they do not always extend beyond the lemma."

Melica smithii (Porter ex A. Gray) Vasey [FNA24, HC, HC2]
Bull. Torrey Bot. Club 15: 294. 1888.
Smith's melic grass

Avena smithii Porter ex A. Gray
Bromelica smithii (Porter ex A. Gray) Farw.

FNA24: "Melica smithii grows in cool, moist woods from British Columbia and Alberta south to Oregon and Wyoming and, as a disjunct, from the Great Lakes region to western Quebec. It often forms colonies in the eastern portion of its range. Its disjunct distribution pattern is unusual among North America's grasses."

Melica spectabilis Scribn. [FNA24, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 1885: 45, t. 1, f. 11-13. 1886.
showy melic grass

Bromelica spectabilis (Scribn.) W.A. Weber
Melica bulbosa Geyer ex Porter & J.M. Coult. var. *spectabilis* (Scribn.) B. Boivin

FNA24: "Melica spectabilis grows in moist meadows, flats, and open woods, from 1200?2600 m, primarily in the Pacific Northwest and the Rocky Mountains. It is often confused with M. bulbosa, differing in its shorter glumes, "tailed"• corm, and the more marked and evenly spaced purplish bands of its spikelets."

Melica subulata (Griseb.) Scribn. [FNA24, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 1885: 47. 1886.
Alaska oniongrass

Melica subulata (Griseb.) Scribn. var. *pammelii* (Scribn.) C.L. Hitchc. [HC]
Melica subulata (Griseb.) Scribn. var. *subulata* [HC]

FNA24: "Melica subulata grows from sea level to 2300 m in mesic, shady woods. Its range extends from the Aleutian Islands of Alaska through British Columbia to California, east to Lawrence County, South Dakota, and into Colorado."

**Miscanthus* [HC2]

**Miscanthus sinensis* Andersson [HC2]
Chinese silvergrass

**Molinia* [HC, HC2]
moorgrass

**Molinia caerulea* (L.) Moench [FNA24, HC, HC2]
Methodus 183. 1794.
purple moor grass

Known in Washington from along beach just south of West Point lighthouse at Discovery Park in Seattle, King County. FNA24: "Molinia caerulea is established at scattered locations in the Flora region, but not at all the locations where it has been found. For instance, the record for Pennsylvania reflects a collection made in 1945 from an abandoned field; there are no extant populations known in the area. Most records are from southeastern Canada and the northeastern United States, but it has also been reported as being established in western Oregon. Plants with long, lax panicle branches have been called Molinia caerulea

subsp. arundinacea (Schrank) H. Paul rather than M. caerulea (L.) Moench subsp. caerulea, but there are many intermediates."

Muhlenbergia [HC, HC2]
muhlenbergia, muhly

Muhlenbergia andina (Nutt.) Hitchc. [FNA25, HC, HC2]
United States Department of Agriculture: Bulletin 772: 145. 1920.
foxtail muhly

Muhlenbergia comata (Thurb.) Thurb. ex Benth.

FNA25: "Muhlenbergia andina grows in damp places such as stream banks, gravel bars, marshes, lake margins, damp meadows, around springs, and in canyons, at elevations of 700-3000 m. It grows only in the western part of southern Canada and the contiguous United States."

Muhlenbergia asperifolia (Nees & Meyen ex Trin.) Parodi [FNA25, HC, HC2]
Revista Fac. Agron. Veterin. (Buenos Aires) 6: 117, f. 1. 1928.
or alkali muhly, scratchgrass

Sporobolus asperifolius (Nees & Meyen ex Trin.) Nees & Meyen

FNA25: "Muhlenbergia asperifolia grows in moist, often alkaline meadows, playa margins, and sandy washes, on grassy slopes, and around seeps and hot springs, at elevations of 55-3000 m. Its geographic range includes northern Mexico. Muhlenbergia asperifolia is morphologically similar to the southeastern M. torreyana, but differs in having glabrous, weakly compressed culms and more widely divergent panicle branches. The caryopses of Muhlenbergia asperifolia are frequently infected by a smut, Tilletia asperifolia Ellis & Everhart, which produces a globose body filled with blackish-brown spores."

Muhlenbergia filiformis (Thurb. ex S. Watson) Rydb. [FNA25, HC, HC2]
Bull. Torrey Bot. Club 32(11): 600. 1905.
pullup muhly

Muhlenbergia filiformis (Thurb. ex S. Watson) Rydb. var. *fortis* E.H. Kelso
Muhlenbergia idahoensis H. St. John
Muhlenbergia simplex (Scribn.) Rydb.

Muhlenbergia glomerata (Willd.) Trin. [FNA24, HC, HC2]
Gram. Unifl. Sesquifl. 191, 297, t. 5, f. 10. 1824.
spiked muhly

Muhlenbergia glomerata (Willd.) Trin. var. *cinnoides* (Link) F.J. Herm.
Muhlenbergia racemosa (Michx.) Britton, Sterns & Poggenb. var. *cinnoides* (Link) B. Boivin

FNA24: "Muhlenbergia glomerata grows in meadows, marshes, bogs, alkaline fens, lake margins, stream banks, beside irrigation ditches and hot springs, and on gravelly slopes, in many different plant communities, at elevations of 30-2300 m. It is most common in southern Canada and the northeastern United States, but grows sporadically throughout the western United States. It is not known from Mexico." H&C: "Although listed in Hitchcock's Manual for much of our area, the plant is rather rare. I have seen only one plant from Wash. and none from Oreg., and it is not at all common in Ida and w. Montana."

Muhlenbergia mexicana (L.) Trin. [HC, HC2, JPM2]
Gram. Unifl. Sesquifl. 189, 190, 297, t. 5, f. 8. 1824.
wirestem muhly

Agrostis mexicana L.

Muhlenbergia minutissima (Steud.) Swallen [FNA24, HC, HC2]
Contr. U.S. Natl. Herb. 29(4): 207. 1947.
annual muhly, least muhly

Sporobolus confusus (E. Fourn.) Vasey
Sporobolus microspermus (Lag.) Hitchc.
Sporobolus minutissumus (Steud.) Hitchc.

FNA24: "Muhlenbergia minutissima grows in sandy and gravelly drainages, rocky slopes, flats, road cuts, and open sites. It is usually found in yellow pine and oak-pine forests, pinyon-juniper woodlands,

thorn-scrub forests, and oak-grama savannahs, at elevations of 1200-3000 m. Its range extends from the western United States to southern Mexico."

Muhlenbergia richardsonis (Trin.) Rydb. [FNA24, HC, HC2]
Bull. Torrey Bot. Club 32(11): 600. 1905.
matted muhly

Muhlenbergia squarrosa (Trin.) Rydb.
Sporobolus depauperatus (Torr. ex Hook.) Scribn.

FNA24: "Muhlenbergia richardsonis grows in open sites in alkaline meadows, prairies, sandy arroyo bottoms, talus slopes, rocky flats and the shores of rivers, at elevations of 60-3300 m. It is the most widespread species of Muhlenbergia in the Flora region, extending from the Yukon Territory to Quebec in the north and to northern Baja California, Mexico, in the south. Morden and Hatch (1996) reported that it also grows in Alaska, but no voucher specimen has been located. Muhlenbergia richardsonis is often confused with M. cuspidata, which differs in lacking rhizomes and having shorter ligules, and sometimes with M. filiformis, which differs in being a weak annual with glabrous internodes and obtuse, erose glumes."

Nassella [HC, HC2]
nassella, tussockgrass

Oryzopsis [HC, HC2]
ricegrass
(see also *Achnatherum*, *Piptatheropsis*)

Oryzopsis asperifolia Michx. [FNA24, HC, HC2]
Flora Boreali-Americana 1: 51, pl. 9. 1803.
white-grain mountain-rice grass

FNA24: "Oryzopsis asperifolia grows in both deciduous and coniferous woods, generally on open, rocky ground in areas with well-developed duff. It is found from the Yukon and Northwest Territories south to New Mexico along the Rocky Mountains, and from British Columbia east to Newfoundland and Maryland. It is listed as endangered or threatened in Indiana, Ohio, New Jersey, Maryland, and Virginia."

Panicum [HC, HC2]
panic grass, witchgrass
(see also *Dichanthelium*, *Panicum*)

Panicum capillare L. [HC, HC2]
witchgrass

ssp. *capillare* [FNA24, HC2]
Flora Boreali-Americana 1: 51, pl. 9. 1803.
or common panicgrass, witchgrass

Panicum capillare L. var. *occidentale* Rydb.
Panicum hirticaule J. Presl ssp. *hirticaule* [KZ99], misapplied

FNA24: "Panicum capillare subsp. capillare is the common subspecies, growing in weedy and dry habitats throughout the range of the species. Plants in the western United States and Canada have spikelets over 2.6 mm long more often than those in the east. Robust plants germinating early in the season and growing on better soils tend to spread more, and have wider, shorter blades and more exserted panicles than plants in the eastern United States and Canada growing under comparable conditions. They are sometimes included in P. capillare var. occidentale Rydb., but these traits are not well correlated, and several environmental factors apparently affect their expression. Plants in the eastern part of the range with a well-exserted main panicle at anthesis usually arise from seeds germinating relatively late in the season." KZ99 (citing the 1996 Annals of the Missouri Botanical Garden) reports Panicum hirticaule J. Presl var. hirticaule from WA, but it is not found in the Pacific Northwest acording to FNA.

**Panicum dichotomiflorum* Michx. [HC, HC2]
fall panicum

ssp. *dichotomiflorum* [FNA24, HC2]

Fl. Bor.-Amer. 1: 48. 1803.
fall panicum, western witchgrass

Panicum dichotomiflorum Michx. var. *dichotomiflorum* [KZ99]
S: Panicum dichotomiflorum Michx. var. *geniculatum* (Alph. Wood) Fernald

FNA24: "Panicum dichotomiflorum subsp. dichotomiflorum is the most common of the three subspecies and is found throughout the range of the species. In the past, members of this subspecies have been treated as two different taxa, var. geniculatum (Alph. Wood) Fernald and var. dichotomiflorum, with more erect, slender plants having fewer long-exserted panicles with slender, ascending branches and less crowded spikelets being placed in var. dichotomiflorum. Such plants are more common in the southern part of the subspeciesrange, but the traits are poorly correlated and the differences are at least in part affected by photoperiod, nighttime temperatures, and the time of seed germination."

**Panicum miliaceum* L. [HC, HC2]
millet

*ssp. *miliaceum* [FNA24, HC2]
Sp. Pl. 1: 58. 1753.
broomcorn, hog millet, panic millet, proso millet

FNA24: "Panicum miliaceum subsp. miliaceum is the subspecies used in bird seed. It probably rarely persists because of the retention of the upper florets on the plant and, in northern states, poor seed survival over winter."

*ssp. *ruderale* (Kitag.) Tzvelev [FNA24, HC2]
broomcorn, hog millet, panic millet

FNA24: "Panicum miliaceum subsp. ruderale is now naturalized over much of the Flora region. It may become a major weed, especially in corn fields."

Panicum virgatum L. [FNA]
Sp. Pl. 1. 1753.

**Parapholis* [HC, HC2]
sickle-grass

**Parapholis incurva* (L.) C.E. Hubb. [HC, HC2]
Blumea Supplement 3. 1946.
sicklegrass

Pascopyrum [HC2]
wheatgrass

Pascopyrum smithii (Rydb.) Barkworth & D.R. Dewey [FNA24, HC2]
Amer. J. Bot. 72(5): 772. 1985.
western-wheat grass

Agropyron molle (Scribn. & J.G. Sm.) Rydb.
Agropyron smithii Rydb. [HC]
Agropyron smithii Rydb. var. *molle* (Scribn. & J.G. Sm.) M.E. Jones
Agropyron smithii Rydb. var. *palmeri* (Scribn. & J.G. Sm.) A. Heller
Elymus smithii (Rydb.) Gould
Elytrigia smithii (Rydb.) Nevski
Elytrigia smithii (Rydb.) Nevski var. *mollis* (Scribn. & J.G. Sm.) Beetle

FNA24: "Pascopyrum smithii is native to sagebrush deserts and mesic alkaline meadows, growing in both clay and sandy soils. Pascopyrum smithii is probably derived from a Leymus triticoides?Elymus lanceolatus cross (Dewey 1975); it is frequently confused with both. Leymus triticoides differs in usually having 2 spikelets per node and glumes that are narrower at the base. In E. lanceolatus, the leaves tend to be more evenly distributed and the glumes have straight midveins, become narrow beyond midlength, and tend to be wider at 3/4 length (0.35?1.6 mm). In addition, the first rachilla internodes of E. lanceolatus are often longer and narrower (the length/width ratio averaging 2.6, versus 1.8 in P. smithii). No infraspecific taxa of P. smithii are recognized here."

Paspalum [HC, HC2]

Paspalum distichum L. [FNA25, HC, HC2]
Syst. Nat. (ed. 10) 855. 1759.
knotgrass, Thompsongrass

Digitaria paspaloides Michx., orthographic variant
Paspalum distichum L. var. *indutum* Shinners
Paspalum paspaloides (Michx.) Scribn.

FNA25: "Paspalum distichum grows on the edges of lakes, ponds, rice fields, and wet roadside ditches. It is native in warm regions throughout the world, being most abundant in humid areas. In the Western Hemisphere, it grows from the United States to Argentina and Chile." We decide to consider P. distichum introduced in Washington due to the few collections that have been made over the years and its occurrence in human-disturbed localities.

**Pennisetum* [HC2]

**Pennisetum glaucum* (L.) R. Br. [FNA25, HC2]
Prodr. 1: 195. 1810.
pearl millet

Setaria glauca (L.) P. Beauv. [ILBC7]

**Pennisetum setaceum* (Forssk.) Chiov. [FNA25]
Boll. Soc. Bot. Ital. 1923: 113. 1923.
tender fountaingrass

Recently collected as a very local escape from cultivation in King Co., not yet an established member of the flora. Further documentation of its establishment is needed before addition to the Flora Checklist. An invasive weed in the southern US. FNA25: "Pennisetum setaceum is a desert grass native to the eastern Mediterranean region. It is a popular ornamental throughout the southern United States, but it is also an invasive weed."

Phalaris [HC, HC2]
canarygrass

**Phalaris arundinacea* L. [FNA24, HC, HC2]
Sp. Pl. 1: 55. 1753.
reed canary grass

Phalaris arundinacea L. var. *picta* L. [HC]
Phalaroides arundinacea (L.) Rauschert
Phalaroides arundinacea (L.) Rauschert var. *picta* (L.) Tzvelev

Flora PNW 2nd: "collections by D. Douglas (e Cascades along Columbia River), D. Lyall (WA Cascades), and others from before 1860 are apparently the native North American race, but inseparable morphologically from the invasive European intro race in our area used for rangeland improvement by ± 1885.".

FNA24: "Phalaris arundinacea is a circumboreal species, native to north temperate regions; it occurs, as an introduction, in the Southern Hemisphere. It grows in wet areas such as the edges of lakes, ponds, ditches, and creeks, often forming dense stands; in some areas it is a problematic weed. North American populations may be a mix of native strains, European strains, and agronomic cultivars (Merigliano and Lesica 1998). The interpretation adopted here is that of Baldini (1995), who treated Phalaris arundinacea sensu stricto as the most widespread species in a complex of three species. The other two species are P. rotgesii (Husn.) Baldini, a diploid that is restricted to France and Italy, and P. caesia Nees, a hexaploid that grows in southern Europe, western Asia, and eastern to southern Africa. Phalaris rotgesii has glumes 2-3.8 mm long, sterile florets 1-1.5 mm long, bisexual florets 2-3 mm long, and anthers about 2 mm long. The corresponding measurements for P. caesia are 6-7 mm, about 2.5 mm, 4-5 mm, and 3.5-4 mm, respectively. Other taxonomists have included P. rotgesii

**Phalaris canariensis* L. [FNA24, HC, HC2]
Sp. Pl. 1: 54-55. 1753.

common canary grass

FNA24: "Phalaris canariensis is native to southern Europe and the Canary Islands, but is now widespread in the rest of the world, frequently being grown for birdseed. The exposed ends of the glumes are almost semicircular in outline, making this one of our easier species of Phalaris to identify."

*_Phalaris paradoxa_ L. [FNA24, HC, HC2]
Sp. Pl. (ed. 2) 2: 1665. 1763.
Mediterranean canary grass

Phalaris paradoxa L. var. _praemorsa_ (Lam.) Coss. & Durieu

FNA24: "Phalaris paradoxa is native to the Mediterranean region; it is now found throughout the world, primarily in harbor areas and near old ballast dumps. It is an established weed in parts of Arizona and California. Within an inflorescence, the most reduced sterile spikelets are located near the base, and the most nearly normal spikelets are near the top."

Phleum [HC, HC2]
Timothy

Phleum alpinum L. [FNA24, HC, HC2]
Sp. Pl. 1: 59. 1753.
mountain Timothy

*_Phleum pratense_ L. [HC, HC2]
Timothy

*ssp. _pratense_ [FNA24, HC2]
Sp. Pl. 1: 59. 1753.
common Timothy

Phleum nodosum L.
Phleum pratense L. ssp. _nodosum_ (L.) Arcang.
Phleum pratense L. var. _nodosum_ (L.) Huds.

FNA24: "Phleum pratense grows in pastures, rangelands, and disturbed sites throughout most of the mesic, cooler regions of North America. Originally introduced from Eurasia as a pasture grass, it is now well established in many parts of the world, including the Flora region. North American plants belong to the polyploid Phleum pratense L. subsp. pratense, which differs from the diploid P. pratense subsp. bertolonii (DC.) Bornm. in having obtuse ligules. Depauperate specimens of P. pratense are hard to distinguish from P. alpinum (see next species)."

Phragmites [HC, HC2]
reed

Phragmites australis (Cav.) Trin. ex Steud. [HC2]
common reed

Phragmites phragmites (L.) H. Karst.

ssp. *americanus* Saltonst., P.M. Peterson, & Soreng [FNA25, HC2]
Sida 21(2):683-692. 2004.
common reed

*ssp. _australis_ [FNA25, HC2]
Nomencl. Bot. (ed. 2) 1: 143. 1840.
common reed

FNA24 (online): "Phragmites australis is one of the most widely distributed flowering plants, growing in most temperate and tropical regions of the world, spreading quickly by rhizomes. Once established, it is difficult to eradicate. Phragmites australis (Invasive). The appropriate name for these plants is not clear although they probably originated in Europe. The name Pragmites australis, and hence the name Phragmites australis subsp. australis, is based on plants collected from what is now Sydney, Autralia. Unfortunately, there has been no study of plants from Australia, nor of plants from Europe, so it is not clear what name to use for the European plants. Nevertheless because of the importance from a management point of view of being able to distinguish the invasive strain from the native strains,

names have been treated for the strains in North America that are not invasive. For additional information, see the invasive plants network site and their page for distinguishing the invasive strain."

Piptatheropsis [HC2]
piptatherum

Piptatheropsis exigua (Thurb.) Romasch., P.M. Peterson & Soreng [HC2]
Taxon 60(6): 1713.
little mountain-ricegrass

Oryzopsis exigua Thurb. [HC]
Piptatherum exiguum (Thurb.) Dorn

FNA24: "Piptatherum exiguum grows on rocky slopes and outcrops in upper montane habitats, from central British Columbia to southwestern Alberta and south to northern California, Nevada, Utah, and northern Colorado. The limited DNA evidence available suggests that it is a basal species within Piptatherum (Jacobs et al. 2006)."

Pleuropogon [HC, HC2]
pleuropogon, semaphoregrass

Pleuropogon refractus (A. Gray) Benth. ex Vasey [FNA24, HC, HC2]
Grass. U.S. 40. 1883.
nodding false semaphore grass

Lophochlaena refracta A. Gray, superfluous renaming (illegitimate)

FNA24: "Pleuropogon refractus grows in wet meadows, riverbanks, and shady places, from sea level to about 1000 m. Its range extends from British Columbia south to California."

Poa [HC, HC2]
bluegrass

Poa alpina L. [HC, HC2]
alpine bluegrass

ssp. *alpina* [FNA24, HC2]
Sp. Pl. 1: 67. 1753.
alpine blue grass

FNA24: "Poa alpina is a fairly common circumboreal forest species of subalpine to arctic habitats, extending south in the Rocky Mountains to Utah and Colorado in the west, and to the northern Great Lakes region in the east. It often grows in disturbed ground and is calciphilic. Poa ×gaspensis is a natural hybrid which seems to be between P. alpina and P. pratensis subsp. alpigena; it differs from P. alpina in its extravaginal branching, rhizomatous habit, and webbed calluses. The range of chromosome numbers suggests that P. alpina is predominantly apomictic. Poa alpina subsp. alpina is the more common of the two subspecies. In the Flora region, it grows throughout the range of the species."

**Poa annua* L. [FNA24, HC, HC2]
Sp. Pl. 1: 68. 1753.
annual blue grass

Poa annua L. var. *aquatica* Asch.
Poa annua L. var. *reptans* Hausskn.

FNA24: "Poa annua is one of the world's most widespread weeds. It thrives in anthropomorphic habitats outside of the arctic. A native of Eurasia, it is now well established throughout most of the Flora region. Poa annua is a gynomonoecious tetraploid (possibly rarely polyhaploid), and is thought to have arisen from hybridization between P. infirma and P. supina (Tutin 1952). It is similar to P. infirma, differing in having larger anthers. It differs from P. chapmaniana in having glabrous calluses and three larger anthers, rather than one. Forms with glabrous lemmas occur sporadically within populations."

Poa arctica R. Br. [HC2]
Chlor. Melvill. 30. 1823.
Arctic bluegrass

Poa pratensis L. var. *gelida* (Roem. & Schult.) Böcher

ssp. *arctica* [HC2]

Poa bolanderi Vasey [FNA24, HC, HC2]
Bot. Gaz. 7(3): 32-33. 1882.
Bolander's blue grass

Poa horneri H. St. John

FNA24: "Poa bolanderi grows mainly in pine to fir forest openings of mountain slopes in the western United States, from Washington to California and Utah. It differs from P. howellii in having smooth to scabrous, rather than puberulent, lemmas; it also grows at higher elevations, mostly at 1500?3000 m."

**Poa bulbosa* L. [HC, HC2]
Sp. Pl. [Linnaeus] 1: 70. 1753.
bulbous bluegrass

*ssp. *vivipara* (Koeler) Arcang. [FNA24, HC2]
Sp. Pl. 1: 70 1753.
bulbous bluegrass

FNA24: "Poa bulbosa is a European species that is now established in the Flora region. In southern Europe and the Middle East, it is considered an important early spring forage. Poa bulbosa subsp. vivipara was introduced from Europe into the Pacific Northwest as a forage grass; it has since spread across temperate areas of the Flora region, particularly in the Pacific Northwest and northern Great Basin. It is highly tolerant of grazing and disturbance.

**Poa compressa* L. [FNA24, HC, HC2]
Sp. Pl. 1: 69. 1753.
flat-stem blue grass

FNA24: "Poa compressa is common in much of the Flora region. It is sometimes considered to be native, but this seems doubtful. It is rare and thought to be introduced in Siberia and only local in the Russian Far East, but is common in Europe. In the Flora region, it is often seeded for soil stabilization, and has frequently escaped. It grows mainly in riparian areas, wet meadows, and disturbed ground. Its distinctly compressed nodes and culms, exserted lower culm nodes, rhizomatous growth habit, and scabrous panicle branches make it easily identifiable."

Poa confinis Vasey [FNA24, HC, HC2]
U.S.D.A. Div. Bot. Bull. 13(2): pl. 75. 1893.
coastline blue grass

FNA24: "Poa confinis grows on sandy beaches and forest margins of the west coast, a habitat that is being lost to invasion by exotic species and development. It is closely related to P. diaboli, from which it differs by a suite of characters. The two species are ecologically and geographically distinct. Poa confinis differs from P. pratensis in having glabrous or sparsely hairy lemmas and diffusely webbed calluses. It is gynodioecious."

Poa curtifolia Scribn. [FNA24, HC, HC2]
Circ. Div. Agrostol. U.S.D.A. 16: 3. 1899.
little mountain blue grass

FNA24: "Poa curtifolia is endemic to upper serpentine slopes in the Wenatchee Mountains, Kittitas and Chelan counties, Washington. It has narrow panicles like P. pringlei and P. suksdorfii. It differs from P. secunda, with which it is sometimes confused, in having all blades short, flat, and firm, and few spikelets per branch. '

Poa cusickii Vasey [HC, HC2]
Cusick's bluegrass

ssp. *cusickii* [FNA24, HC2]
Contr. U.S. Natl. Herb. 1(8): 271. 1893.
Cusick's bluegrass

Poa cusickii Vasey var. *cusickii* [HC]
Poa filifolia Vasey

Poa hansenii Scribn.

FNA24: "Poa cusickii grows in rich meadows in sagebrush scrub to rocky alpine slopes, from the southwestern Yukon Territory to Manitoba and North Dakota, south to central California and eastern Colorado. It is gynodioecious or dioecious. Poa cusickii subsp. cusickii grows mainly in mesic desert upland and mountain meadows, on and around the Columbia plateaus of northern California, Oregon, southern Washington, and adjacent Idaho and Nevada. It is highly variable, with fairly open- to contracted-panicle populations, and from gynodioecious to dioecious populations. The modal and mean longest branch lengths of the narrower-panicled populations of subsp. cusickii serve to distinguish it from subsp. pallida in most cases. It appears to have hybridized with P. pringlei around Mount Shasta, California, and Mount Rose, Nevada. Poa stebbinsii, an endemic in the high Sierra Nevada, is easily distin-guished from P. cusickii subsp. cusickii by its long hyaline ligules."

ssp. *epilis* (Scribn.) W.A. Weber [FNA24, HC2]
Phytologia 51(6): 375. 1982.
skyline bluegrass

Poa cusickii Vasey var. *epilis* (Scribn.) C.L. Hitchc. [HC]
Poa epilis Scribn.

FNA24: "Poa cusickii grows in rich meadows in sagebrush scrub to rocky alpine slopes, from the southwestern Yukon Territory to Manitoba and North Dakota, south to central California and eastern Colorado. It is gynodioecious or dioecious. Poa cusickii subsp. epilis tends to grow around timberline. It is strictly pistillate. It is usually quite distinct from subspp. cusickii and pallida, and differs from subsp. purpurascens in having on average more and shorter spikelets, lemmas that are shorter and rarely pubescent, and both intra- and extravaginal branching. It occurs throughout most of the range of the species, but is absent from the Yukon Territory, and uncommon in the Cascade Mountains. It is fairly uniform even though widespread.

ssp. *pallida* Soreng [FNA24, HC2]
Syst. Bot. 16(3): 518. 1991.
Cusick's bluegrass

FNA24: "Poa cusickii grows in rich meadows in sagebrush scrub to rocky alpine slopes, from the southwestern Yukon Territory to Manitoba and North Dakota, south to central California and eastern Colorado. It is gynodioecious or dioecious. Poa cusickii subsp. pallida grows in forb-rich mountain grasslands to alpine habitats, from the southern Yukon Territory to California, across the Great Basin and through the Rocky Mountains to central Colorado. It is found mainly east and north of subsp. cusickii, but pistillate plants extend into the range of that subspecies in the eastern alpine peaks of California, Nevada, and Oregon. The shorter branch length serves to distinguish it from the narrow-panicled subsp. cusickii forms in most cases. It hybridizes with P. fendleriana, forming P. ×nematophylla. The hybrids may have hairy lemmas or, less often, broader leaf blades and glabrous lemmas. Poa cusickii subsp. pallida was included in Hitchock's (1951) circumscription of Poa pringlei, along with P. keckii and P. suksdorfii."

ssp. *purpurascens* (Vasey) Soreng [FNA24, HC2]
Phytologia 71(5): 396 [1992]. 1991.
Cusick's bluegrass

Poa cusickii Vasey var. *purpurascens* (Vasey) C.L. Hitchc. [HC]

FNA24: "Poa cusickii grows in rich meadows in sagebrush scrub to rocky alpine slopes, from the southwestern Yukon Territory to Manitoba and North Dakota, south to central California and eastern Colorado. It is gynodioecious or dioecious. Poa cusickii subsp. purpurascens grows in subalpine habitats in the coastal mountains from southern British Columbia to southern Oregon, with sporadic occurrences eastward in British Columbia to the Rocky Mountains and south to the central Sierra Nevada. It tends to differ from subsp. epilis in having predominantly extravaginal branching, fewer and longer spikelets, and longer lemmas that are usually sparsely hairy on the keel and marginal veins. It differs from P. chambersii in lacking rhizomes and in being strictly pistillate; and from P. porsildii in its longer spikelets and in tending to have longer panicles with more spikelets.

Poa fendleriana (Steud.) Vasey [HC, HC2]
muttongrass

ssp. *longiligula* (Scribn. & T.A. Williams) Soreng [FNA24, HC2]
Great Basin Naturalist 45(3): 408. 1985.
muttongrass

Poa fendleriana (Steud.) Vasey var. *longiligula* (Scribn. & T.A. Williams) Gould
Poa longiligula Scribn. & T.A. Williams

FNA24: "Poa fendleriana grows on rocky to rich slopes in sagebrush-scrub, interior chaparral, and southern (rarely northern) high plains grasslands to forests, and from desert hills to low alpine habitats. Its range extends from British Columbia to Manitoba and south to Mexico. It is one of the best spring fodder grasses in the eastern Great Basin, Colorado plateaus, and southern Rocky Mountains. It is dioecious. Each of the subspecies has regions of sexual reproduction in which staminate plants are common within populations, and extensive regions where only apomictic, pistillate plants are found. The sexual populations set little seed; the apomictic populations are highly fecund. Poa fendleriana subsp. longiligula tends to grow to the west of the other two subspecies, in areas where winter precipitation is more consistent and summer precipitation less consistent. Apomixis is far more common and widespread than sexual reproduction in this subspecies. Apomictic populations range from southwestern British Columbia to Baja California, Mexico, throughout the Great Basin and Colorado plateaus, and eastward across the Rocky Mountains. Sexual populations are mainly confined to northern Arizona, California, Nevada, and Utah."

Poa glauca Vahl [HC2]

ssp. *rupicola* (Nash) W.A. Weber [FNA24, HC2]
Phytologia 51(6): 375. 1982.
timberline bluegrass

Poa glauca Vahl var. *rupicola* (Nash) B. Boivin
Poa rupicola Nash [HC]

"Mostly near or above timberline; Yuk., B.C., and Alta southward through the Rocky Mts., to Utah, Colo., and N. M., e. to S. D., w. to n. e. Oreg., Nev., the Sierra Nev., Calif." [H&C p 677] FNA24: "Poa glauca subsp. rupicola is endemic to dry alpine areas of western North America. It is often confused in herbaria with subsp. glauca and P. interior, but its calluses lack even a vestige of a web, and its lemmas have at least a few hairs between the lemma veins. It is often sympatric with both taxa outside of California. It is not common in the northern Rocky Mountains."

Poa howellii Vasey & Scribn. [FNA24, HC, HC2]
U.S.D.A. Div. Bot. Bull. 13(2): pl. 78. 1893.
Howell's bluegrass

Poa bolanderi Vasey ssp. *howellii* D.D. Keck
Poa bolanderi Vasey var. *howellii* (Vasey & Scribn.) M.E. Jones

FNA24: "Poa howellii grows primarily on rocky banks and wooded slopes, from the coastal ranges of southern British Columbia to southern California. It differs from P. bolanderi in having puberulent, rather than smooth or scabrous, lemmas, and in growing at lower elevations, mostly from near sea level to 1000 m."

**Poa infirma* Kunth [HC2]
Nova Genera et Species Plantarum 1816.
weak bluegrass

Collected once (2012) as sidewalk waif on San Juan Island, San Juan County. Perhaps more common than currently documented.

Poa interior Rydb. [FNA24, HC, HC2]
Sp. Pl. 1: 69-70. 1753.
interior bluegrass, woods blue grass

Poa nemoralis L. ssp. *interior* (Rydb.) W.A. Weber
Poa nemoralis L. var. *interior* (Rydb.) Butters & Abbe

FNA24: "Poa interior, a native species, grows from Alaska to western Quebec and New York, south to Arizona and New Mexico. It is restricted to the Flora region. It is fairly common from boreal forests to low alpine habitats of the Rocky Mountains. It grows in subxeric to mesic habitats, such as mossy rocks and

scree, usually in forests. It is usually tetraploid. In alpine habitats, Poa interior is often quite short, and often sympatric with P. glauca. It is most reliably distinguished from P. glauca by lemmas that are glabrous between the marginal veins and keels or, rarely, sparsely puberulent on the lateral veins. It usually also differs from P. glauca subsp. rupicola in having at least a few hairs on its calluses. It can be distinguished from P. nemoralis by its longer ligules, lower top culm node, and wider glumes and lemmas. It is sometimes difficult to distinguish from P. palustris, but differs in having lemmas with wider hyaline margins and straight or gradually arched keels, a densely tufted habit, and scantly webbed calluses."

Poa laxiflora Buckley [FNA24, HC, HC2]
Proceedings of the Academy of Natural Sciences of Philadelphia 14: 96. 1862.
loose-flower blue grass

FNA24: "Poa laxiflora is restricted to mesic, old growth, mixed conifer forests of the Pacific coast, from Alaska south through the western foothills of the northern Cascades to Oregon. It is not a common species. A bulbiferous specimen was collected in the Queen Charlotte Islands. Inclusion of Poa laxiflora in Poa sect. Homalopoa is tentative; it may belong to sect. Sylvestres."

Poa leibergii Scribn. [FNA24, HC, HC2]
Bulletin, Division of Agrostology United States Department of Agriculture 8: 6, pl. 2. 1897.
Leiberg's blue grass

Poa vaseyochloa Scribn.

FNA24: "Poa leibergii grows on mossy ledges and around vernal pools and the outer margins of Camassia swales, in sagebrush desert to low alpine habitats, especially where snow persists. It is found primarily on and around the basaltic Columbia plateaus, and is gynodioecious. All reports of P. leibergii from California, and most of those from Nevada, are based on misidentified specimens of P. cusickii subsp. cusickii and P. stebbinsii."

Poa leptocoma Trin. [FNA24, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 1(4): 374. 1830.
marsh blue grass
(see also *Poa paucispicula*)

Poa leptocoma Trin. var. *leptocoma* [HC]

FNA24: "Poa leptocoma grows around lakes and ponds and along streams, in subalpine and alpine to low arctic habitats, in western North America from Alaska to California and New Mexico, and on the Kamchatka Peninsula, Russia. It often grows with or near P. reflexa, from which it differs in its more scabrous panicle branches, shorter anthers, glabrous or pectinately ciliate palea keels, and preference for wet sites. The two also differ in their ploidy level, P. leptocoma being hexaploid, and P. reflexa tetraploid. It differs from P. paucispicula in its more scabrous panicle branches, narrower glumes and lemmas, and its more sparsely hairy calluses and lemmas. Although its chloroplast haplotype is similar to that of species in sect. Oreinos, its ITS sequence is distinct and resembles that of P. paucispicula."

Poa lettermanii Vasey [FNA24, HC, HC2]
Contributions from the United States National Herbarium 1(8): 273. 1893.
Letterman's blue grass

Poa montevansii E.H. Kelso
Puccinellia lettermanii (Vasey) Ponert

FNA24: "Poa lettermanii grows on rocky slopes of the highest peaks and ridges in the alpine zone, from northern British Columbia to western Alberta and south to California and Colorado, usually in the shelter of rocks or on mesic to wet, frost-scarred slopes. It is one of only three known diploid Poa species native to the Western Hemisphere. Its glabrous calluses and lemmas usually distinguish it from P. abbreviata; it also differs in having flat or folded leaf blades, and shorter spikelets with glumes that are longer than the adjacent florets. Poa montevansii E.H. Kelso is tentatively included here, although its slightly longer lemmas that slightly exceed the glumes suggest that it may represent rare, glabrous forms of P. abbreviata."

Poa macrantha Vasey [FNA24, HC, HC2]
Bulletin of the Torrey Botanical Club 15: 11. 1888.
sand-dune blue grass

Poa douglasii Nees ssp. *macrantha* (Vasey) D.D. Keck

Poa douglasii Nees var. *macrantha* (Vasey) B. Boivin

FNA24: "Poa macrantha is a dioecious coastal sand dune species that grows from southern Alaska to northern California. It competes better than P. douglasii with the invasion of its habitat by Ammophila and other exotic species. It used to be treated as a subspecies of P. douglasii; a few intermediates with that species have been found around the mouth of Little River, California. Although clearly related, the two species are reasonably divergent in a number of characters. Poa macrantha is readily distinguished from P. douglasii by its glabrous rachises and usually longer glumes and lemmas." H&C suggest (p 669) treating P. macrantha as a geographic race of P. douglasii Nees.

Poa marcida Hitchc. [FNA24, HC, HC2]
Proceedings of the Biological Society of Washington 41: 158. 1928.
withered blue grass

Poa saltuensis Fernald & Wiegand var. *marcida* (Hitchc.) B. Boivin

FNA24: "Poa marcida is an uncommon endemic of breaks in rich, mesic, generally old growth forests of the Pacific coast, from Vancouver Island through the western foothills of the northern Cascade Mountains to central Oregon. It differs from P. saltuensis in its closed sheaths and attenuate lemmas."

Poa ×multnomae Piper [HC2]

Poa gracillima Vasey var. *multnomae* (Piper) C.L. Hitchc. [HC]

**Poa nemoralis* L. [FNA24, HC, HC2]
Sp. Pl. 1: 69-70 1753.
woodland bluegrass

FNA24: "Introduced from northern Eurasia, Poa nemoralis is established primarily at low elevations in deciduous and mixed conifer/deciduous forests. It is now common in southeastern Canada and the northeastern United States, and is spreading in the west. It can be distinguished from P. glauca and P. interior by its consistently short ligules, high top culm node, relatively long flag leaf blades, and narrow glumes and lemmas. It is usually hexaploid."

Poa nervosa (Hook.) Vasey [FNA24, HC, HC2]
U.S.D.A. Div. Bot. Bull. 13(2): pl. 81. 1893.
Hooker's blue grass
(see also *Poa wheeleri*)

Poa nervosa (Hook.) Vasey var. *nervosa* [HC]

FNA24: "Poa nervosa occurs infrequently at low elevations in the western foothills of the northern Cascade Mountains and adjacent coast ranges, extending eastward up the Columbia Gorge as far as Multnomah Falls. It usually grows in wet habitats, such as mossy cliffs with seeps and around waterfalls, but it is also found in rich, old growth, mixed deciduous and conifer forests. It appears to be sexually reproducing and sequentially gynomonoecious. Poa nervosa differs from P. wheeleri in having densely pubescent leaf collar margins, and glabrous or more sparsely and shortly pubescent sheaths. It also differs in usually having well-developed anthers, and in being tetraploid. The two species are geographically isolated and ecologically distinct. Plants from the Columbia River Gorge in Oregon, including P. ×multnomae Piper, that approach P. tenerrima are presumed to be derived from hybridization between P. nervosa and P. secunda."

**Poa palustris* L. [FNA24, HC, HC2]
Syst. Nat. (ed. 10) 2: 874. 1759.
fowl blue grass

Poa crocata Michx.
Poa eyerdamii Hultén
Poa glauca Vahl var. *crocata* (Michx.) M.E. Jones
Poa triflora Gilib.

FNA24: "Poa palustris is native to boreal regions of northern Eurasia and North America, and is widespread in cool-temperate and boreal riparian and upland areas. European plants have also been introduced to other parts of North America. Plants in the Pacific Northwest and the southern United States are usually regarded as introduced, but some populations may be native. Poa palustris is used for soil stabilization and waterfowl feed. Poa palustris from drier woods and meadows tends to resemble P.

interior. The best features for recognizing it include its loose growth habit, more steeply ascending leaf blades, well-developed callus webs, narrowly hyaline lemma margins, and incurving lemma keels. It also has a tendency to branch at the nodes above the base."

Poa paucispicula Scribn. & Merr. [FNA24, HC2]
Contributions from the United States National Herbarium 13(3): 69, pl. 15. 1910.
Alaska blue grass

Poa leptocoma Trin. ssp. *paucispicula* (Scribn. & Merr.) Tzvelev
Poa leptocoma Trin. var. *paucispicula* (Scribn. & Merr.) C.L. Hitchc. [HC]
Poa merrilliana Hitchc.

FNA24: "Poa paucispicula grows in arctic and alpine regions, from the north coast of Alaska and the western Northwest Territories south to Washington, Idaho, and Wyoming; it also grows in arctic far east Russia. It is a delicate species that prefers open, mesic, rocky slopes. It has sometimes been included in P. leptocoma, a member of Poa sect. Oreinos. It differs from P. leptocoma in having smoother branches, fewer spikelets, and broader glumes. Chloroplast DNA studies confirm that it is not closely related to species of sect. Oreinos; ITS data support its relationship to P. leptocoma."

Poa pratensis L. [HC, HC2]
Kentucky bluegrass

ssp. *angustifolia* (L.) Lej. [HC2]

*ssp. *irrigata* (Lindm.) H. Lindb. [HC2]

*ssp. *pratensis* [FNA24, HC2]
Sp. Pl. 1: 67-68. 1753.
Kentucky blue grass

Poa pratensis L. var. *domestica* Laest.
Poa pratensis L. var. *iantha* Laest.

FNA24: "More than 60 cultivars of Poa pratensis have been released in the Flora region. Plants grown from commercially distributed seed have generally been placed in subsp. pratensis by North American authors, but they appear to include genetic contributions from at least three major subspecies, e.g., subspp. angustifolia, pratensis, and irrigata. These and intermediate forms, especially those favoring subspp. irrigata and pratensis, are best simply referred to as Poa pratensis sensu lato or labeled as cultivated material.The chromosome counts listed here are numbers reported for the species that are probably not subspp. alpigena, angustifolia, or colpodea; they may represent subspp. irrigata or pratensis. Poa pratensis subsp. pratensis grows throughout most of the range of the species, but is absent from the high arctic, and only sporadic in the low arctic. It usually has a few narrow, flat or involute, intravaginal shoot leaves, in addition to some broader, extravaginal shoot leaves, and is intermediate between subspp. angustifolia and irrigata. For a comparison, see the descriptions of those subspecies."

Poa secunda J. Presl [HC2]

ssp. *juncifolia* (Scribn.) Soreng [FNA24, HC2]
Phytologia 71(5): 401 [1992]. 1991.
alkali bluegrass, big bluegrass, Nevada bluegrass

Poa ampla Merr.
Poa brachyglossa Piper
Poa confusa Rydb.
Poa juncifolia Scribn. [HC]
Poa juncifolia Scribn. ssp. *porteri* D.D. Keck
Poa juncifolia Scribn. var. *ampla* (Merr.) Dorn
Poa nevadensis Vasey ex Scribn. [HC]
Poa nevadensis Vasey ex Scribn. var. *juncifolia* (Scribn.) Beetle

FNA24: "Poa secunda subsp. juncifolia is usually more robust than subsp. secunda, and generally inhabits moister and sometimes saline habitats. It comprises two fairly distinct variants: a robust upland variant that is frequently used for revegetation (P. ampla Merr., Big Bluegrass) that grows in deep, rich, montane soils; and a riparian and wet meadow variant (P. juncifolia Scribn., Alkali Bluegrass). Apart from generally having glabrous lemmas, short ligules on the vegetative shoots, and

leaf blades that hold their form better, P. secunda subsp. juncifolia differs anatomically in the predominance of sinuous-walled, rectangular long cells in the blade epidermis; smooth-walled, fusiform long cells are predominant in P. secunda subsp. secunda. Plants with glabrous lemmas and long ligules on the vegetative shoots have been called P. nevadensis Vasey ex Scribn.; they are intermediate between the subspecies. Chromosome numbers for P. secunda subsp. juncifolia center on 2n = 63, indicating a high degree of apomixis."

ssp. *secunda* [FNA24, HC2]
Reliq. Haenk. 1(4-5): 271. 1830.
curly blue grass
(see also *Poa multnomae*)

Poa buckleyana Nash
Poa buckleyana Nash var. *sandbergii* (Vasey) M.E. Jones
Poa canbyi (Scribn.) Howell
Poa gracillima Vasey [HC]
Poa gracillima Vasey var. *gracillima* [HC]
Poa incurva Scribn. & T.A. Williams [HC]
Poa laevigata Scribn.
Poa orcuttiana Vasey
Poa sandbergii Vasey [HC]
Poa scabrella (Thurb.) Benth. ex Vasey [HC]
Poa secunda J. Presl var. *elongata* (Vasey) Dorn
Poa secunda J. Presl var. *incurva* (Scribn. & T.A. Williams) Beetle
Poa secunda J. Presl var. *stenophylla* (Vasey ex Beal) Beetle
Poa stenantha Trin. var. *sandbergii* (Vasey) B. Boivin

FNA24: "Poa secunda subsp. secunda comprises several forms or ecotypes which intergrade morphologically and overlap geographically. Its chromosome numbers are centered on 2n = 84. It generally grows in more xeric habitats than subsp. juncifolia; it is also common in alpine habitats. Some of the major variants, and the names that have been applied to them, are: scabrous plants, primarily from west of the Cascade/Sierra Nevada axis (P. scabrella (Thurb.) Benth. ex Vasey, Pine Bluegrass); smoother, large plants extending eastward (P. canbyi (Scribn.) Howell, Canby Bluegrass); tiny, early-spring-flowering plants of stony and mossy ground (P. sandbergii Vasey, Sandberg Bluegrass); and slender, sparse plants, generally of mesic shady habitats, with panicles that remain open (P. gracillima Vasey, Pacific Bluegrass). Alpine plants have been called P. incurva Scribn. & T.A. Williams. Poa secunda subsp. secunda can be difficult to separate from P. stenantha var. stenantha. It differs in having more rounded lemma keels, hairs between the veins of the lemmas, and calluses that are glabrous or have hairs shorter than 0.2 mm. It also resembles P. tenerrima, but lacks that species' combination of persistently wide, open panicles, very scabrous branches, short-truncate ligules, and very fine foliage."

Poa stenantha Trin. [HC, HC2]
narrow-flowered bluegrass

Poa englishii H. St. John & Hardin
Poa macroclada Rydb.

var. *stenantha* [FNA24, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 1(4): 376. 1830.
narrow-flower blue grass

FNA24: "Poa stenantha grows in coastal meadows and on cliffs in subarctic and boreal forests; it is less common in moist, more southern subalpine and low alpine meadows and thickets. Its range extends from western Alaska to the northern Cascades and Rocky Mountains and, as a disjunct, to Patagonia. Poa stenantha was originally described as growing in Kamchatka, Russia, but the Russian plants have since been referred to other species. Poa stenantha var. stenantha can be difficult to separate from P. secunda subsp. secunda. Its main distinguishing features are its strongly keeled lemmas with glabrous intercostal regions, and, when present, callus hairs longer than 0.2 mm. Plants with large panicles and glabrous calluses have been called P. macroclada Rydb. Such plants grow infrequently in the U.S. Rocky Mountain portion of the species' range. They intergrade with the more compact typical form."

Poa suksdorfii (Beal) Vasey ex Piper [FNA24, HC, HC2]
Contr. U.S. Natl. Herb. 11: 135. 1906.
western blue grass

FNA24: "Poa suksdorfii is a high alpine species of open rocky ground in the Pacific Northwest. It used to be interpreted (Hitchcock 1951) as including California populations that are now placed in Poa pringlei or P. keckii. Poa suksdorfii has narrow panicles like P. pringlei and P. curtifolia."

**Poa trivialis* L. [FNA24, HC, HC2]
Sp. Pl. 1: 67. 1753.
rough-stalk blue grass

FNA24: "Poa trivialis is an introduced European species. Only Poa trivialis subsp. trivialis is present in the Flora region. Several cultivars have been planted for pastures and lawns, and have often escaped cultivation. Poa trivialis sometimes grows with P. paludigena, but has distinctly longer ligules and anthers. It is easily recognized by its flat blades, long ligules, sickle-shaped lower glumes, prominent callus webs, and lemmas with pubescent keels and pronounced lateral veins."

*ssp. *trivialis* [HC2]

Poa unilateralis Scribn. ex Vasey [HC2]
sea-bluff bluegrass

ssp. *pachypholis* (Piper) D.D. Keck ex Soreng [FNA24, HC2]
Novon 8(2): 199. 1998.
San Francisco blue grass

Poa pachypholis Piper [HC]

FNA24: "Poa unilateralis subsp. pachypholis is known from populations in Lincoln County, Oregon, and Pacific County, Washington."

Poa wheeleri Vasey [FNA24, HC2]
Cat. Pl. 55. 1874.
Wheeler's blue grass

Poa curta Rydb. [HC]
Poa nervosa (Hook.) Vasey var. *wheeleri* (Vasey) C.L. Hitchc. [HC]

FNA24: "Poa wheeleri is common at mid- to high elevations, generally on the east side of the coastal mountains from British Columbia to California, and from Manitoba to New Mexico. It generally grows in submesic coniferous forests to subalpine habitats. Most plants have densely retrorsely pubescent or scabrous sheaths, involute innovation blades that are pubescent adaxially, and pistillate florets. Poa wheeleri, a high polyploid apomictic species, probably arose from hybridization between P. cusickii and another member of the Poa nervosa complex. It resembles P. rhizomata and P. chambersii more than P. nervosa sensu stricto. It differs from P. chambersii in having at least some proximal sheaths that are densely retrorsely scabrous or pubescent (sometimes obscurely so), and folded or involute innovation blades that are scabrous to hispidulous on the adaxial surfaces. For a comparison with P. nervosa, see description. Natural hybrids have been found between P. wheeleri and P. pratensis."

Podagrostis [HC2]
bent, bentgrass

Podagrostis aequivalvis (Trin.) Scribn. & Merr. [FNA24, HC2]
Symb. Bot. Upsal. 17: 15. 1960.
arctic bent

Agrostis aequivalvis (Trin.) Trin. [HC]

FNA24: "Podagrostis aequivalvis grows along lake, bog, and stream margins, and in forest fens. it is common in the coastal regions of Alaska and British Columbia, and occurs less frequently inland, as well as to about 1500 m in the Cascade Mountains south to Oregon."

Podagrostis humilis (Vasey) Björkman [FNA24, HC2]
Symb. Bot. Upsal. 17: 15. 1960.
alpine bent, mountain bent

Agrostis humilis Vasey [HC]

FNA24: "Podagrostis humilis is a western North American species that grows in undisturbed alpine and subalpine meadows and screes at over 3500 m, down to meadows, fens, and open woodlands at less than 200 m. It usually differs from P. thurberiana in overall size and in having narrower, more basally concentrated leaves. In the field, dwarf forms of P. humilis mimic Agrostis variabilis; they differ from that species in having paleas."

Podagrostis thurberiana (Hitchc.) Hultén [FNA24, HC2]
Flora of the Aleutian Islands 75. 1937.
Thurber's bent

Agrostis thurberiana Hitchc. [HC]

FNA24: "Podagrostis thurberiana is a western North American species that grows in undisturbed alpine and subalpine meadows and screes at over 3500 m, down to meadows, fens, and open woodlands at less than 200 m, sometimes growing with P. humilis. It usually differs from that species in being taller in having wider, less basally concentrated leaves."

**Polypogon* [HC, HC2]
beard-grass, polypogon

**Polypogon australis* Brongn. [FNA24, HC, HC2]
Voy. Monde 2: 21. 1829.
Chilean rabbit's-foot grass

FNA24: "Polypogon australis is native to South America. It has become established in western North America, where it grows alongside ditches and streams. The records from Washington and Oregon are from ballast dumps; it is not known from recent collections in those states." Introduced and collected once, near Bingen, Kilicktat Co., Wash, (Suksdorf, 10091, in 1919) but not otherwise known from our area. [H&C p 683].

**Polypogon fugax* Nees ex Steud. [HC2]
Synopsis Plantarum Glumacearum 1: 184. 1854.
Asia Minor bluegrass

An uncommon escape in large cities, including Seattle.

**Polypogon interruptus* Kunth [FNA24, HC, HC2]
Nov. Gen. Sp. (quarto ed.) 1: 134, pl. 44 [1816]. 1815.
ditch rabbit's-foot grass

Polypogon lutosus (Poir.) Hitchc., misapplied

We follow several floras (e.g., Jepson 2nd, Intermountain Flora), which treats this as native to South America, but see comments from FNA below.

FNA24: "Polypogon interruptus grows in moist soil at lower elevations. It is native to the Western Hemisphere, extending south from the western United States into northern Mexico, and through the American tropics to Argentina and Bolivia. The more eastern records may indicate introductions; it is not known whether or not the species persists at these locations."

**Polypogon maritimus* Willd.
Neue Schriften Ges. Naturf. Freunde Berlin iii. (1801) 442. 1801.
Mediterranean rabbitsfoot grass

First collected in WA in 2019 in Klickitat County.

**Polypogon monspeliensis* (L.) Desf. [FNA, HC, HC2]
Fl. Atlant. 1: 67. 1798.
annual rabbit's-foot grass

Alopecurus monspeliensis L.

FNA24: "Polypogon monspeliensis is native to southern Europe and Turkey. It is now a common weed throughout the world, including much of the Flora region. It grows in damp to wet, often alkaline soils, particularly in disturbed areas."

**Polypogon viridis* (Gouan) Breistr. [FNA24, HC2]
Bull. Soc. Bot. France 110(89): 56. 1963.
beardless rabbit's-foot grass

Agrostis semiverticillata (Forssk.) C. Chr. [HC]
Agrostis verticillata Vill.
Agrostis viridis Gouan
Polypogon semiverticillatus (Forssk.) Hyl.

FNA24: "Polypogon viridis grows in mesic habitats associated with rivers, streams, and irrigation ditches. It is native from southern Europe to Pakistan, but is now established in the Flora region, particularly the southwestern United States. Records from the Atlantic coast are based on ballast dumps; there have been no recent collections from these locations. In Europe, Polypogon viridis hybridizes with P. monspeliensis, forming P. ×adscendens Guss. ex Bertol.; no such hybrids have been reported from the Flora region."

**Psathyrostachys* [HC2]

**Psathyrostachys juncea* (Fisch.) Nevski [FNA24, HC2]
Fl. URSS 2: 714. 1934.
Russian-wild rye

Elymus junceus Fisch.
×*Leymostachys korovinii* Tzvelev

FNA24: "Psathyrostachys juncea is native to central Asia, primarily to the Russian and Mongolian steppes. It was introduced into North America as a forage grass. It has become established at various locations from the Yukon Territory through the prairie provinces to Arizona. It is drought resistant and tolerant of saline soils. In its native range, it grows on stony slopes and adjacent to roads,at elevations up to 5500 m. Psathyrostachys juncea closely resembles Leymus cinereus, differing primarily in having a rachis that breaks up at maturity. Immature plants can be identified by their shorter ligules and the more uniform appearance of the spikelets compared to Leymus cinereus. Plants with pilose florets have been treated as a distinct taxon; such recognition is not merited." Not in H&C

×Pseudelymus [HC2]

×Pseudelymus saxicola (Scribn. & J.G. Sm.) Barkworth & D.R. Dewey [FNA24, HC2]
Great Basin Naturalist 43(4): 570. 1983.

Agropyron saxicola (Scribn. & J.G. Sm.) Piper
×*Agrositanion saxicola* (Scribn. & J.G. Sm.) Bowden
Elymus ×*saxicola* Scribn. & J.G. Sm.

FNA24: "xPseudelymus saxicola consists of a hybrid between Pseudoroegneria spicata and Elymus elymoides. It is a rather common hybrid in western North America. It differs from E. albicans, which is thought to be derived from hybrids between P. spicata and E. lanceolatus, in lacking rhizomes, having longer awns on its glumes and lemmas, and having disarticulating rachises. It is more likely to be confused with E. xsaundersii, but differs in its longer glume and lemma awns." See ref. to E. saxicola under Agropyron scribneri Vasey, H&C p 457.

Pseudoroegneria [HC2]
wheatgrass

Pseudoroegneria spicata (Pursh) Á. Löve [FNA24, HC2]
Taxon 29(1): 168. 1980.
?bluebunch wheatgrass

Agropyron inerme (Scribn. & J.G. Sm.) Rydb.
Agropyron spicatum (Pursh) Scribn. & J.G. Sm. [HC]
Agropyron spicatum (Pursh) Scribn. & J.G. Sm. var. *inerme* (Scribn. & J.G. Sm.) A. Heller
Agropyron spicatum (Pursh) Scribn. & J.G. Sm. var. *pubescens* Elmer [HC]
Agropyron spicatum (Pursh) Scribn. & J.G. Sm. var. *spicatum* [HC]
Agropyron vaseyi Scribn. & J.G. Sm.
Elymus spicatus (Pursh) Gould

Elytrigia spicata (Pursh) D.R. Dewey
Pseudoroegneria spicata (Pursh) Á. Löve ssp. *inermis* (Scribn. & J.G. Sm.) Á. Löve
Pseudoroegneria spicata (Pursh) Á. Löve ssp. *spicata*
Roegneria spicata (Pursh) Beetle

FNA24: "Pseudoroegneria spicata is primarily a western North American species, extending from the east side of the coastal mountains to the western edge of the Great Plains, and from the Arctic Ocean to northern Mexico. It was also collected by Farwell in Keenewaw County, Michigan in 1895 (Voss 1972). It grows on medium-textured soils in arid and semiarid steppe, shrub-steppe, and open woodland communities, and was one of the dominant species in grassland communities of the Columbia and Snake river plains (Daubenmire 1939, 1960). It is still an important forage plant in the northern portion of the Intermountain region. Several cultivars have been developed. Rhizomatous plants are favored in relatively moist habitats, and cespitose plants in dry habitats (Daubenmire 1960). Daubenmire noted that rhizomatous plants produce few inflorescences and, possibly for this reason, are collected less frequently than cespitose plants. Daubenmire also found that awn length varies continuously within plants grown from seed. He concluded that the ability to produce rhizomes and unawned plants is heritable, that the two characters are not linked, and that the form which becomes dominant at a local site is determined by environmental conditions. The unawned phase tends to be more restricted in its distribution than the awned phase, being dominant in the native grasslands of southern British Columbia, eastern Washington, northern Idaho, and northern and eastern Oregon; the awned phase is found throughout the range of the species. Many populations include awned and unawned plants, as well as some that have poorly developed awns on some lemmas. Awned autotetraploid populations grow in mesic grassland and woodland communities of the hills and mountains of southern British Columbia and eastern Washington. Based on informal observations, plant breeders working with Pseudoroegneria spicata consider that awn presence is determined by a single major gene, and modified by some minor genes. The unawned condition is apparently dominant, as seed from crosses of heterozygotic, diploid, unawned parents gives rise to around 50% awned offspring. The above observations make it clear that the awned and unawned phases of Pseudoroegneria spicata are of little taxonomic significance, despite their evident morphological difference. If it is considered necessary to distinguish between them, the awned phase can be called Pseudoroegneria spicata (Pursh) Á. Löve forma spicata and the unawned phase P. spicata forma inermis (Scribn. & J.G. Sm.) Barkworth. Plants with densely pubescent leaves are known from the east slope of the Cascade Mountains in Washington. Plants with nearly as densely pubescent leaves are found elsewhere in southern Washington and northeastern Oregon. Such pubescent plants may be called Pseudoroegneria spicata forma pubescens (Elmer) Barkworth. Pseudoroegneria spicata used to be confused with Elymus wawawaiensis, from which it differs in its more widely spaced spikelets and wider, less stiff glumes. The two species are geographically sympatric, but P. spicata grows in medium- to fine-textured loess soils, and E. wawawaiensis in shallow, rocky soils. Pseudoroegneria spicata may also be confused with Elymus arizonicus, particularly with immature specimens of that species or specimens mounted so that they appear to have erect, rather than drooping, spikes. It differs in having shorter, truncate ligules and generally thicker culms than E. arizonicus, and in having a distribution that extends much further north. Pseudoroegneria spicata has been suggested as one of the parents in numerous natural hybrids with species of Elymus in the Flora region. These hybrids are usually mostly sterile, but development of even a few viable seeds permits introgression to occur, as well as the formation of distinctive populations. It is often difficult to detect such hybrids, particularly if they involve the unawned form of Pseudoroegneria. The named hybrids are treated under ×Pseudelymus (p. ??). Others are discussed under the Elymus parent."

**Pseudosasa japonica* (Siebold & Zucc. ex Steud.) Makino ex Nakai
J. Arnold Arbor. 6: 150. 1925.
Japanese bamboo

Likely more common than currently documented.

Puccinellia [HC, HC2]
alkaligrass
(see also *Torreyochloa*)

**Puccinellia distans* (Jacq.) Parl. [FNA24, HC, HC2]
Fl. Ital. 1: 367. 1848.
weeping alkaligrass, European alkali grass

Poa distans Jacq.

Puccinellia distans (Jacq.) Parl. ssp. *distans*
Puccinellia distans (Jacq.) Parl. var. *tenuis* (Uechtr.) Fernald & Weath.
Puccinellia retroflexa (Curtis) Holmb.
Puccinellia suksdorfii H. St. John
Pucciniella distans (L.) Parl

Note different authority for specific name, H&C vs. FNA. FNA24: "Puccinellia distans is a Eurasian native, reportedly introduced in North America, where it is widespread, particularly as a weed in non-littoral environments, including the margins of salted roads. It is also found occasionally in coastal environments."

Puccinellia lemmonii (Vasey) Scribn. [FNA24, HC, HC2]
Botanical Gazette 3(2): 13. 1838.
Lemmon's alkali grass

FNA24: "Puccinellia lemmonii grows in non-littoral saline environments in the western portion of the contiguous United States. Reports from Saskatchewan are probably based on depauperate specimens of P. nuttalliana."

**Puccinellia maritima* (Huds.) Parl. [HC, HC2]
coast alkaligrass

Glyceria maritima (Huds.) Wahlenb.

Puccinellia nutkaensis (J. Presl) Fernald & Weath. [FNA24, HC, HC2]
Rhodora 18: 22. 1916.
Nootka alkali grass, shining alkali grass

Phippsia nutkaensis (J. Presl) Á. Löve & D. Löve
Poa nutkaensis J. Presl
Puccinellia coarctata Fernald & Weath.
Puccinellia glabra Swallen
Puccinellia grandis Swallen
Puccinellia lucida Fernald & Weath. [HC]

Likely to be more common in WA than previous thought based on results from 2005-09 San Juan Island surveys. H&C (1973) notes "... PS to Seattle and Silverdale where prob no longer persistent". FNA24: "Puccinellia nutkaensis grows in coastal habitats of continental North America and Greenland, generally in sand and stones in protected intertidal environments. It is variable in form, ranging from diminutive plants that resemble P. pumila to tall, erect plants, often with dense or open inflorescences, resembling P. nuttalliana. Larger plants on the Pacific coast have been called P. grandis Swallen, and those on the Atlantic coast P. lucida Fernald & Weath., but there are many plants of intermediate stature."

Puccinellia nuttalliana (Schult.) Hitchc. [FNA24, HC, HC2]
A Flora of California 1: 162. 1912.
Nuttall's alkali grass

Puccinellia airoides S. Watson & J.M. Coult.
Puccinellia cusickii Weath. [HC]

FNA24: "Puccinellia nuttalliana is a widespread and variable species, restricted to the Flora region. It grows principally in the interior, but is also found in coastal settings, where it is difficult to distinguish from P. nutkaensis. Northern, primarily boreal or southern arctic populations with relatively short lemmas and anthers (2?2.8 mm and 0.6?0.9 mm, respectively), and with a few long hairs on the lower palea veins, have sometimes been recognized as P. borealis Swallen."

Puccinellia pumila (Vasey) Hitchc. [FNA24, HC, HC2]
Amer. J. Bot. 21(3): 129. 1934.
dwarf alkali grass

Puccinellia ambigua T.J. Sørensen
Puccinellia paupercula (Holm) Fernald & Weath.
Puccinellia paupercula (Holm) Fernald & Weath. var. *alaskana* (Scribn. & Merr.) Fernald & Weath.
Puccinellia tenella (Lange) Holmb. ssp. *alaskana* (Scribn. & Merr.) Tzvelev

FNA24: "Puccinellia pumila is primarily North American, growing on the Pacific, Arctic, and Atlantic coasts. It also grows in Kamchatka, Russia (Tsvelev 1995). It generally grows in sand and among stones in

protected intertidal environments. A few specimens with exceptionally long glumes and lemmas were treated by Fernald and Weatherby (1916) as P. paupercula var. longiglumis Fernald & Weath.; they are regarded here as representing extremes of P. pumila. Puccinellia alaskana Scribn. & Merr., here included in P. pumila, was considered a subspecies of P. langeana (Berlin) T.J. Sørensen ex Hultén [= P. tenella] by Sørensen (1953), but more closely resembles P. pumila. It differs morphologically from P. pumila mainly in its relatively distinct lemma veins. It also differs from most specimens of P. pumila in having smaller lemmas (2.5?3 mm) and anthers (0.5?0.9 mm), and in being diploid. It represents the Aleutian Islands component of the geographic distribution given for P. pumila. Its status is currently under investigation. Molecular data obtained as this volume went to press (Consaul et al. [in prep.]) tend to support recognition of P. alaskana as a distinct species."

*_Redfieldia_ [HC2]

*_Redfieldia flexuosa_ (Thurb. ex A. Gray) Vasey [FNA25, HC2]
Bulletin of the Torrey Botanical Club 14: 133. 1887.
blowout grass

FNA25: "Redfieldia flexuosa grows on sand hills and dunes. It is a common and important soil binder in blowout areas and has been planted for that purpose beyond its native range. It is only fair livestock forage but, because it grows in areas subject to blowout, this should not be of concern." Not in H&C Reported as an introduction in Washington for erosion control by Hatch (2003).

*_Sasa_

*_Sasa palmata_ (hort. ex Burb.) E.G. Camus
Bambusées 25. 1913.
broadleaf bamboo

Collected as a garden escape along roadsides in lowland western Washington. Not considered to be a naturalized element of the flora at this time based on specimens collected.

*_Schedonorus_ [HC2]
fescue, tall fescue

*_Schedonorus arundinaceus_ (Schreb.) Dumort. [FNA24, HC2]
Observ. Gramin. Belg. 106. 1824.
tall fescue, tall rye grass

Festuca arundinacea Schreb. [HC]
Festuca elatior L.
Festuca elatior L. ssp. _arundinacea_ (Schreb.) Hack.
Festuca elatior L. var. _arundinacea_ (Schreb.) Wimm.
Lolium arundinaceum (Schreb.) Darbysh.

FNA24: "chedonorus arundinaceus is a Eurasian species that has been introduced to the Flora region. It is grown for forage, soil stabilization, and coarse turf. It is now cultivated in all but the coldest and most arid parts of North America, and often escapes. It is frequently infected with the endophytic fungi Neotyphodium coenophialum, which confers insect and drought resistance to the plant, among other benefits; it also produces ergot alkaloids that are toxic to livestock. Varieties with endophyte strains that do not produce toxic ergot alkaloids have been developed (Nihsen et al. 2004). NOTE ADDED May 2009: The name Schedonorus arundinaceus is correct, not S. phoenix. There is a potential problem with the name S. arundinaceus but Drs. Kanchi Gandhi and Mary Barkworth will take action to address it in the near future. The grass portion of the PLANTS database, which shows S. phoenix as the correct name, has not been updated to reflect nomenclatural and taxonomic changes since 2006 although many changes to other parts of the database have been made. Keeping any web site current, including this one, is a problem. "

*_Schedonorus pratensis_ (Huds.) P. Beauv. [FNA24, HC2]
Ess. Agrostogr. 99, 163, 177. 1812.
meadow fescue, meadow rye grass

Festuca pratensis Huds. [HC]
Lolium pratense (Huds.) Darbysh.

FNA24: "Schedonorus pratensis is a Eurasian species that is now widely established in the Flora region. It

used to be a popular forage grass in the contiguous United States and southern Canada, but is now rarely planted."

Schizachyrium [HC2]
bluestem

Schizachyrium scoparium (Michx.) Nash [HC2]
broom bluestem, little bluestem

Andropogon scoparius Michx. [HC]
Andropogon scoparius J. Presl, misapplied

var. *scoparium* [FNA25, HC2]
Fl. S.E. U.S. 59, 1326. 1903.
broom beardgras, broom bluestem, little bluestem

FNA24: "Schizachyrium scoparium var. scoparium grows in a variety of soils and in open habitats. It was once a dominant component of the prairie grasslands that extended through the central plains of North America and into Mexico, but it has largely been replaced by fields of maize, wheat, sorghum, sunflowers, and field mustard. It is the most variable of the varieties recognized within S. scoparium, with morphological features that vary independently and continuously across its range, coming together in distinctive combinations in some regions. Some of these phases have been named as varieties, or even species, but they have proven to be untenable taxonomic entities when plants from throughout the range of the species are considered."

**Sclerochloa* [HC, HC2]
hardgrass

**Sclerochloa dura* (L.) P. Beauv. [FNA24, HC, HC2]
Ess. Agrostogr. 98, 174, 177, pl. 19, f. 4. 1812.
common hard grass

Cynosurus durus L.

FNA24: "First collected in the United States in 1895, Sclerochloa dura is probably more widespread than indicated, because it is easily overlooked. It grows in lawns, campsites, roadsides, athletic fields, fairgrounds, and other disturbed sites. It is frequently found in severely compacted soils, because it can withstand heavy traffic by vehicles and pedestrians. Sclerochloa dura is sometimes confused with Poa annua. The two species are superficially similar, occupy similar habitats, and have a similar phenology, but S. dura has blunt, glabrous lemmas and racemose inflorescences, whereas P. annua has obtuse to acute lemmas that are smooth and usually sericeous or crisply puberulent over the veins, and paniculate inflorescences. Plants of S. dura become stramineous in age, making them easy to locate because areas dominated by this species change color."

**Scleropoa* [HC, HC2]

**Scleropoa rigida* (L.) Griseb. [HC, HC2]
fern grass

Catapodium rigidum (L.) C.E. Hubb.
Desmazeria rigida (L.) Tutin
Poa rigida L.

[Europe] In our area known only from Oreg., in Baker County and from near Portland and Salem [H&C p. 693]. FNA24: "Desmazeria rigida is native to Europe, and appears to have no distinctive habitat preferences. In the Flora region, it is now established as a weed in disturbed sites such as roadsides, ditches, and the edges of fields. It is probably more widespread than indicated on the map because herbarium records of weed distributions are often poor."

Scribneria [HC, HC2]

Scribneria bolanderi (Thurb.) Hack. [FNA24, HC, HC2]
Botanical Gazette 11(5): 105. 1886.
Scribner's grass

FNA24: "Scribneria is a monospecific genus that is native from Washington to Mexico. Scribneria bolanderi grows between 500-3000 m. It grows in diverse habitats, ranging from dry, sandy or rocky soils to seepages and vernal pools. It is often overlooked because it is relatively inconspicuous. Its range extends south into Baja California, Mexico."

*_Secale_ [HC, HC2]
rye

*_Secale cereale_ L. [FNA24, HC, HC2]
Sp. Pl. 1: 84 1753.
cultivated rye

Triticum cereale (L.) Salisb.

FNA24: "Secale cereale is one of the world's most important cereal grasses; it is also widely used in North America for soil stabilization and, particularly in Canada, for whisky. When dry, the spike is often distinctly nodding. Frederiksen and Petersen (1998) placed cultivated plants with a nondisarticulating rachis into Secale cereale L. subsp. cereale, and wild or weedy plants with a more fragile rachis into Secale cereale subsp. ancestrale Zhuk."

*_Secale strictum_ (C. Presl) C. Presl [HC2]

Secale montanum Guss. [HC]

*_Setaria_ [HC, HC2]
bristlegrass, foxtail

*_Setaria faberi_ R.A.W. Herrm. [FNA25, HC2]
Beitr. Biol. Pflanzen 10(1): 51. 1910.
Chinese foxtail

Recently collected in King Co.

*_Setaria italica_ (L.) P. Beauv. [FNA25, HC, HC2]
Ess. Agrostogr. 51, 170, 178 1812.
Italian bristlegrass, foxtail millet

FNA24: "Setaria italica was cultivated in China as early as 2700 B.C. and during the Stone Age in Europe. Nowdays it is grown mostly for hay or as a pasture grass, but it has been used as a substitute for rice in northern China. It is sometimes cultivated in North America, but it is better known as a weed in moist ditches, mostly in the northeastern United States. It is closely related to S. viridis, differing in the longer (3 mm) spikelets and smooth, shiny upper florets which readily disarticulate above the lower florets. It exhibits considerable variation in seed and bristle color, bristle length, and panicle shape. Using these characters, Hubbard (1915) recognized several infraspecific taxa; they are not treated here."

*_Setaria pumila_ (Poir.) Roem. & Schult. [HC2]

*ssp. _pallide-fusca_ (Schumach.) B.K. Simon [HC2]
yellow foxtail, pigeon grass

Setaria pumila (Poir.) Roem. & Schult. ssp. _pallidefusca_ (Schum.) B.K. Simon, orthographic variant

FNA25: "Setaria pumila subsp. pallidefusca is native to tropical Africa. It is now established as a weed in southeastern Louisiana, but it has also been collected in the past on ballast dumps in Portland, Oregon."

*ssp. _pumila_ [FNA25, HC2]
Syst. Veg. 2: 891. 1817.
yellow foxtail

Pennisetum glaucum (L.) R. Br. [FNA25, HC2], misapplied
Setaria glauca (L.) P. Beauv. [ILBC7], misapplied
Setaria lutescens (Weigel ex Stuntz) F.T. Hubb. [HC]

FNA25: "Setaria pumila subsp. pumila is a European adventive that has become a common weed in lawns and cultivated fields throughout temperate North America."

*_Setaria verticillata_ (L.) P. Beauv. [FNA25, HC, HC2]

Ess. Agrostogr. 51, 171, 178. 1812.
hooked bristlegrass, rough bristlegrass

Chaetochloa verticillata (L.) Scribn.
Panicum verticillatum L.
Setaria carnei Hitchc.

FNA25: "Setaria verticillata is a European adventive that is now common throughout the cooler regions of the contiguous United States and in southern Canada. It is an aggressive weed in the vineyards of central California. Reports of S. carnei Hitchc. from North America are based on misidentification of this species. Setaria verticillata resembles S. adhaerans, but differs in having longer panicles and spikelets, sheath margins that are ciliate distally, and blades that are scabrous, not hairy. Setaria verticillata is a more northern species than S. adhaerans, but their ranges overlap in the Flora region."

**Setaria viridis* (L.) P. Beauv. [HC, HC2]

Chaetochloa viridis (L.) Scribn.
Panicum viride L.
Setaria viridis (L.) P. Beauv. var. *breviseta* (Döll) Hitchc.
Setaria viridis (L.) P. Beauv. var. *weinmannii* (Roem. & Schult.) Borbás

*var. *viridis* [FNA25, HC2]
Ess. Agrostogr. 51, 171, 178. 1812.
green bristlegrass

FNA25: "Setaria viridis var. viridis is an aggressive adventive weed throughout temperate North America. It is the most common annual representative of Setaria in the Flora region."

**Sorghum* [HC, HC2]
sorghum

**Sorghum bicolor* (L.) Moench [FNA25, HC2]
Methodus 207. 1794.
sorghum

Sorghum vulgare Pers. [HC]

FNA25: "Sorghum bicolor was domesticated in Africa 3000 years ago, reached northwestern India before 2500 B.C., and became an important crop in China after the Mongolian conquest. It was introduced to the Western Hemisphere in the early sixteenth century, and is now an important crop in the United States and Mexico. Numerous cultivated strains exist, some of which have been formally named. They are all interfertile with each other and with other wild species of Sorghum. All the cultivated sorghums are placed in Sorghum bicolor subsp. bicolor. Grain sorghums have short panicles and panicle branches, broomcorns have elongate panicles and panicle branches, and sweet sorghums or sorgho produce an abundance of sweet juice in their stems. For a more detailed treatment, see Harlan and de Wet (1972)."

**Sorghum halepense* (L.) Pers. [FNA25, HC, HC2]
Revisio Generum Plantarum 3: 368. 1898.
Johnson grass

Holcus halepensis L.

Rhizomatous noxious weed. FNA25: "Sorghum halepense is native to the Mediterranean region. It is sometimes grown for forage in North America, but it is considered a serious weed in warmer parts of the United States. It hybridizes readily with S. bicolor, and derivatives of such hybrids are widespread. The annual Sorghum almum Parodi, which has wider (2-2.8 mm) sessile spikelets with more veins in the lower glumes (13-15 versus 10-13) than S. halepense, is one such derivative."

Spartina [HC, HC2]
cordgrass

**Spartina alterniflora* Loisel. [FNA25, HC, HC2]
Fl. Gall. 719. 1807.
saltwater cordgrass, smooth cordgrass

Spartina alterniflora Loisel. var. *glabra* (Muhl. ex Elliott) Fernald

Spartina alterniflora Loisel. var. *pilosa* (Merr.) Fernald

FNA25: "partina alterniflora is found on muddy banks, usually of the intertidal zone, in eastern North and South America, but it is not known from Central America. In addition, it has become established on the west coast of North America, England, southeastern France, and China. It hybridizes with S. maritima in Europe, with S. pectinata in Massachusetts, and with S. foliosa in California. The rhizomes and scales of S. alterniflora have large air spaces, presumably an adaptation to the anaerobic soils of its usual habitat. Decaploid plants tend to be larger than octoploids, but they cannot be reliably distinguished without a chromosome count. Spartina alterniflora is considered a serious threat to coastal ecosystems in Washington and California. It out-competes many of the native species in these habitats and frequently invades mud flats and channels, converting them to marshlands. Pure S. alterniflora grows within the lower elevational marsh zones in its native range but, in San Francisco Bay, its hybrids with S. foliosa grow both below and above the range of that species."

**Spartina anglica* C.E. Hubb. [FNA25, HC2]
Bot. J. Linn. Soc. 76(4): 364. 1978.
English cordgrass

FNA25: "Spartina anglica is a naturally formed amphidiploid, derived from S. ×townsendii, that was first recognized as a separate species in 1968. It has been introduced (like S. ×townsendii) for reclamation of tidal mudflats. It differs from Spartina ×townsendii in its wider and more widely divergent upper blades, longer ligules, longer, more hairy spikelets, and longer, well-filled anthers."

**Spartina densiflora* Brongn. [FNA25, HC2]
Voy. Monde 2(2): 14. 1829.
Chilean cordgrass

Recently reported from Grays Harbor County, WA. FNA25: "Spartina densiflora is native to South America, where it grows in coastal marshes and at inland sites. It was introduced to Humboldt Bay, Humboldt County, California, possibly during the nineteenth century. It is now established there and in several locations around San Francisco Bay and in Washington, Oregon, and Texas, as well as the Mediterranean coast of Europe. In California, it has often been mistaken for S. foliosa, from which it differs in its indurate culms, narrow, inrolled leaves, and cespitose growth habit and tendency to grow among Salicornia in the upper intertidal zone or in open mud. The chromosome count was obtained by Gerish (1979), who reported it for Spartina foliosa, but Spicher and Josselyn (1985) demonstrated that the plants he worked with were almost certainly S. densiflora, a species that hitherto had been misidentified as the native S. foliosa."

Spartina gracilis Trin. [FNA25, HC, HC2]
Mém. Acad. Imp. Sci. Saint-Pétersbourg, Sér. 6, Sci. Math., Seconde Pt. Sci. Nat. 6,4(1-2): 110. 1840.
alkali cordgrass

FNA25: "Spartina gracilis is found on the margins of alkaline lakes and along stream margins and river bottoms. Its range extends from the southern portion of the Northwest Territories, Canada, to central Mexico."

**Spartina patens* (Aiton) Muhl. [FNA25, HC2]
Descr. Gram. 55. 1817.
saltmeadow cordgrass

Spartina patens (Aiton) Muhl. var. *juncea* (Michx.) Hitchc.
Spartina patens (Aiton) Muhl. var. *monogyna* (M.A. Curtis) Fernald

FNA25: "Spartina patens grows in coastal salt and brackish waters. It is native to the east coast of North and Central America, extending through the Caribbean Islands to the north coast of South America, but is now established at scattered locations on the west coast of Canada and the United States. On the east coast, it is usually one of the dominant components of coastal salt marshes, frequently extending from the dry, sandy beach above the intertidal zone well up into the drier portions of the marshes. The older inland collections are from areas associated with brine deposits or saline soils, but there is some indication that the species range is increasing inland because of the use of salt to de-ice roads in winter. The inflorescence of Spartina patens is similar to that of S. bakeri when young, but its inflorescence branches usually diverge at maturity, whereas those of S. bakeri remain appressed. Spartina patens is probably one of the parents of S. ×caespitosa, S. pectinata being the other. Unlike S. ×caespitosa, S. patens grows in both disturbed and undisturbed habitats."

Spartina pectinata Link [FNA25, HC, HC2]
Jahrb. Gewächsk. 1(3): 92-93. 1820.
freshwater cordgrass, prairie cordgrass

Spartina michauxiana Hitchc.
Spartina pectinata Link var. *suttiei* (Farw.) Fernald

FNA25: "Spartina pectinata is native to Canada and the United States, but it has been introduced at scattered locations on other continents. On the Atlantic coast, it grows in marshes, sloughs, and flood plains, being a common constituent of ice-scoured zones of the northeast and growing equally well in salt and fresh water habitats. In western North America, it grows in both wet and dry soils, including dry prairie habitats and along roads and railroads. Spartina pectinata is thought to be one of the parents of S. ×caespitosa, the other parent being S. patens."

**Spartina ×townsendii* H. Groves & J. Groves [FNA25, HC, HC2]
Rep. Bot. Exch. Club 1880: 37. 1881.
Townsend's cordgrass

Sterile hybrid often confused with Spartina anglica, reported in H&C from Stanwood, Snohomish Co. FNA25: "Spartina ×townsendii is a sterile hybrid between the European S. maritima and the American S. alterniflora. It seems to have formed spontaneously at several locations in Europe, often taking over the areas formerly occupied by its progenitors. At some locations it has given rise to the fertile amphiploid S. anglica, from which it differs morphologically in its narrower, less divergent upper blades, shorter ligules, shorter, less hairy spikelets, and poorly filled, indehiscent anthers. Spartina ×townsendii has been used throughout the world for tideland reclamation because it is easy to establish, but it displaces native species."

Sphenopholis [HC, HC2]
prairie-grass, wedgegrass

Sphenopholis intermedia (Rydb.) Rydb. [FNA24, HC2]
Bull. Torrey Bot. Club 36: 533. 1909.
slender wedgescale

Sphenopholis intermedia (Rydb.) Rydb. var. *pilosa* Dore
Sphenopholis obtusata (Michx.) Scribn. var. *major* (Torr.) Erdman

FNA24: "Sphenopholis intermedia grows at 0?2500 m in wet to damp sites, sites that dry out after the growing season, and sites with clay soils that retain moisture. Restricted to the Flora region, it is found in forests, meadows, and waste places throughout most of the region other than the high arctic. It differs from Koeleria macrantha, with which it is sometimes confused, in its more open panicles and in having spikelets that disarticulate below the glumes."

Sphenopholis obtusata (Michx.) Scribn. [FNA24, HC, HC2]
Rhodora 8(92): 144. 1906.
prairie wedgescale

Aira obtusata Michx.
Sphenopholis obtusata (Michx.) Scribn. var. *lobata* (Trin.) Scribn. ex B.L. Rob.
Sphenopholis obtusata (Michx.) Scribn. var. *pubescens* (Scribn. & Merr.) Scribn. ex B.L. Rob.

FNA24: "Sphenopholis obtusata grows in prairies, marshes, dunes, forests, and waste places, at 0?2500 m. Its range extends from British Columbia to New Brunswick, through most of the United States, to southern Mexico and the Caribbean. The distal lemmas of S. obtusata are occasionally somewhat scabrous. Such plants can be distinguished from S. nitida by their narrower lower glumes, from S. filiformis by their wider leaves, and from S. pensylvanica by their shorter, unawned spikelets. Hybrids with S. pensylvanica, called Sphenopholis ×pallens, have short (0.1?4 mm) awns on the distal lemmas."

Sporobolus [HC, HC2]
dropseed

Sporobolus airoides (Torr.) Torr. [FNA25, HC, HC2]
Pacif. Railr. Rep. Parke, Bot. 7(3/1): 21. 1856.
alkali sacaton

Agrostis airoides Torr.

rare in WA? FNA25: "Sporobolus airoides grows on dry, sandy to gravelly flats or slopes, at elevations from 50-2350 m. It is usually associated with alkaline soils. Its range extends into northern Mexico."

Sporobolus compositus (Poir.) Merr. [HC2]
composite dropseed, tall dropseed

Sporobolus asper (P. Beauv.) Kunth [HC]
Sporobolus asper (P. Beauv.) Kunth var. *asper*
Sporobolus asper (P. Beauv.) Kunth var. *hookeri* (Trin.) Vasey

var. *compositus* [FNA25, HC2]
Circ. Div. Agrostol. U.S.D.A. 35: 6. 1901.
rough dropseed

FNA25: "Sporobolus compositus grows along roadsides and railroad right of ways, on beaches, and in cedar glades, pine woods, live oak-pine forests, prairies, and other partially disturbed, semi-open sites at 0-1600 m. Its range lies entirely within the Flora region. The Sporobolus compositus complex is a difficult assemblage of forms, perhaps affected by their primarily autogamous breeding system (Riggins 1977). Asexual proliferation via rhizomes adds to the species ability to maintain local population structure and to perpetuate unique character combinations.

Sporobolus cryptandrus (Torr.) A. Gray [FNA25, HC, HC2]
Manual 576. 1848.
sand dropseed

Agrostis cryptandra Torr.
Sporobolus cryptandrus (Torr.) A. Gray ssp. *fuscicola* (Hook.) E.K. Jones & Fassett, orthographic variant
Sporobolus cryptandrus (Torr.) A. Gray var. *fuscicola* (Hook.) R.W. Pohl, orthographic variant
Sporobolus cryptandrus (Torr.) A. Gray var. *occidentalis* E.K. Jones & Fassett

FNA25: "Sporobolus cryptandrus is a widespread North American species, extending from Canada into Mexico. It grows in sandy soils and washes, on rocky slopes and calcareous ridges, and along roadsides in salt-desert scrub, pinyon-juniper woodlands, yellow pine forests, and desert grasslands. Its elevational range is 0-2900 m."

Sporobolus neglectus Nash [FNA25, HC, HC2]
Bull. Torrey Bot. Club 22(11): 464. 1895.
small dropseed

Sporobolus vaginiflorus (Torr. ex A. Gray) Alph. Wood var. *neglectus* (Nash) Scribn.

Treated in FNA as native, commonly in disturbed sites, rare in WA FNA25: "Sporobolus neglectus is native to the Flora region, and grows at 0-1300 m in sandy soils, on river shores, and in dry, open areas within many plant communities, often in disturbed sites. It appears to have been extirpated from Maine and Maryland and is considered endangered or of special concern in Connecticut, Massachusetts, New Hampshire, and New Jersey. Sporobolus vaginiflorus is very similar to S. neglectus, but it differs in having strigose lemmas, sheaths that are sparsely hairy towards the base and, usually, longer spikelets."

**Sporobolus vaginiflorus* (Torr. ex A. Gray) Alph. Wood [HC2]
Class-book Bot. (ed. 1861). 775. 1861.
poverty dropseed

First collected in WA in 2019 in Pend Oreille County.

var. *vaginiflorus* [HC2]
poverty dropseed

Collected in Pend Oreille County in 2019.

**Taeniatherum* [HC2]
medusahead

**Taeniatherum caput-medusae* (L.) Nevski [FNA24, HC2]
Trudy Sredne-Aziatsk. Gosud. Univ., Ser. 8b, Bot. 17: 38. 1934.
medusa-head

Elymus caput-medusae L. [HC]
Taeniatherum asperum (Simonk.) Nevski

FNA24: "Taeniatherum caput-medusae is native from Portugal and Morocco east to Kyrgyzstan. It usually grows on stony soils, and flowers from May?June (July). It is an aggressive invader of disturbed sites in the western United States, where it has become a serious problem on rangelands. It has been found as a rare introduction at several sites in the eastern United States, but may not persist there. It is listed as a noxious weed by the U.S. Department of Agriculture. Frederiksen (1986) recognized three subspecies within Taeniatherum caput-medusae, distinguishing among them on the basis of morphology and geography. Plants in the Flora region belong to Taeniatherum caput-medusae (L.) Nevski subsp. caput-medusae. It differs from the other two subspecies in its longer glumes and shorter lemmas."

**Thinopyrum* [HC2]
wheatgrass

**Thinopyrum intermedium* (Host) Barkworth & D.R. Dewey [HC2]
intermediate wheatgrass

Agropyron intermedium (Host) P. Beauv. [HC]
Elymus hispidus (Opiz) Melderis
Elymus hispidus (Opiz) Melderis var. *ruthenicus* (Griseb.) Dorn
Elytrigia intermedia (Host) Nevski

*ssp. *barbulatum* (Schur) Barkworth & D.R. Dewey [FNA24, HC2]
Amer. J. Bot. 72(5): 772. 1985.
pubescent wheatgrass

Agropyron intermedium (Host) P. Beauv. var. *trichophorum* (Link) Halácsy, orthographic variant
Agropyron trichophorum (Link) K. Richt.
Elymus hispidus (Opiz) Melderis ssp. *barbulatus* (Schur) Melderis
Elytrigia intermedia (Host) Nevski ssp. *barbulata* (Schur) Á. Löve
Elytrigia intermedia (Host) Nevski ssp. *trichophora* (Link) Tzvelev

FNA24: "Thinopyrum intermedium is native to Europe and western Asia. It has been widely introduced in western North America for erosion control, revegetation, forage, and hay. One of its advantages for erosion control and revegetation is that it establishes rapidly in many different habitats. In its native range, it grows in dry areas with sandy or stony soils. In Europe, it forms sterile hybrids with Elymus repens; no such hybrids are known from North America. Several subspecies have been recognized within Thinopyrum intermedium, usually based on differences in vestiture of the glumes and lemmas, presence or absence of lemma awns, and color of the plants. Assadi (1994) commented that there was little correlation between the different character states. He grew seeds from several wild plants and, even when most of the offspring resembled the parent plant, there was often segregation of other variants. Crossing experiments showed that hybrids between the morphological variants were fertile and usually had regular meiosis. He noted, however, that the plants with glabrous spikelets tended to grow in mesophytic habitats, those with hairy glumes and lemmas on dry slopes, and those with ciliate glumes and lemmas at the edges of fields and in wet places. This difference in habitat preference was reiterated by Ogle (2001). Because of this ecological distinction, they are formally recognized here as subspecies. Plants with hairs only on the outer edges of their lemmas are included under T. intemedium subsp. intermedium. They may be derived from crosses between the hairy and glabrous plants, a possibility that has not been experimentally evaluated. There seems to be little correlation between spikelet vestiture and that of the leaves and stems. There is no known difference in geographic distribution between subsp. intermedium and subsp. barbulatum. Ogle (2001) states that T. intermedium subsp. intermedium is adapted to areas with 12-13 inches of rainfall per year."

*ssp. *intermedium* [FNA24, HC2]
Amer. J. Bot. 72(5): 772. 1985.
intermediate wheatgrass

FNA24: "Thinopyrum intermedium is native to Europe and western Asia. It has been widely introduced in western North America for erosion control, revegetation, forage, and hay. One of its advantages for erosion control and revegetation is that it establishes rapidly in many different habitats. In its native range, it grows in dry areas with sandy or stony soils. In Europe, it forms sterile hybrids with Elymus repens; no such hybrids are known from North America. Several subspecies have been recognized

within Thinopyrum intermedium, usually based on differences in vestiture of the glumes and lemmas, presence or absence of lemma awns, and color of the plants. Assadi (1994) commented that there was little correlation between the different character states. He grew seeds from several wild plants and, even when most of the offspring resembled the parent plant, there was often segregation of other variants. Crossing experiments showed that hybrids between the morphological variants were fertile and usually had regular meiosis. He noted, however, that the plants with glabrous spikelets tended to grow in mesophytic habitats, those with hairy glumes and lemmas on dry slopes, and those with ciliate glumes and lemmas at the edges of fields and in wet places. This difference in habitat preference was reiterated by Ogle (2001). Because of this ecological distinction, they are formally recognized here as subspecies. Plants with hairs only on the outer edges of their lemmas are included under T. intemedium subsp. intermedium. They may be derived from crosses between the hairy and glabrous plants, a possibility that has not been experimentally evaluated. There seems to be little correlation between spikelet vestiture and that of the leaves and stems. There is no known difference in geographic distribution between subsp. intermedium and subsp. barbulatum. Ogle (2001) states that T. intermedium subsp. intermedium is adapted to areas with 12-13 inches of rainfall per year."

*_Thinopyrum ponticum_ (Podp.) Barkworth & D.R. Dewey [HC2]
Amer. J. Bot. 72(5): 772. 1985.
Eurasian wheatgrass

Agropyron varnense (Velen.) Hayek
Elymus elongatus (Host) Runemark var. _ponticus_ (Podp.) Dorn
Elymus varnensis (Velen.) Runemark
Elytrigia pontica (Podp.) Holub
Thinopyrum ponticum (Podp.) Z.-W. Liu & R.R.-C. Wang

FNA24: "Thinopyrum ponticum is native to southern Europe and western Asia. In the Flora region, it is planted along roadsides for soil stabilization and is spreading naturally, in cooler areas, because of its tolerance of the saline conditions caused by salting roads in winter. In its native range, Thinopyrum ponticum grows in dry and/or saline soils. It is sometimes treated as a subspecies of T. elongatum (Host) D.R. Dewey, a diploid species that grows in maritime regions of western Europe."

Torreyochloa [HC2]
false manna grass

Torreyochloa pallida (Torr.) G.L. Church [HC2]
pale false manna grass

var. *pauciflora* (J. Presl) J.I. Davis [HC2]
weak alkaligrass

Glyceria otisii Hitchc.
Glyceria pauciflora J. Presl
Puccinellia pauciflora (J. Presl) Munz [HC]
Puccinellia pauciflora (J. Presl) Munz var. _holmii_ (Beal) C.L. Hitchc. [HC]
Puccinellia pauciflora (J. Presl) Munz var. _microtheca_ (Buckley) C.L. Hitchc. [HC]
Puccinellia pauciflora (J. Presl) Munz var. _pauciflora_ [HC]
Torreyochloa pauciflora (J. Presl) G.L. Church
Torreyochloa pauciflora (J. Presl) G.L. Church var. _holmii_ (Beal) Roy L. Taylor & MacBryde
Torreyochloa pauciflora (J. Presl) G.L. Church var. _microtheca_ (Buckley) Roy L. Taylor & MacBryde

**Tripidium* [HC2]

**Tripidium ravennae* (L.) H. Scholz [HC2]
Willdenowia 36(2): 664. 2006.
ravennagrass

Saccharum ravennae (L.) L.

**Triplasis* [HC2]
sandgrass

**Triplasis purpurea* (Walter) Chapm. [HC2]

purple sandgrass

*var. *purpurea* [FNA25, HC2]
Fl. South. U.S. 560. 1860.
purple sandgrass

FNA25: "Triplasis purpurea grows in sandy soils throughout the eastern and central portion of the Flora region, extending southward through Mexico to Costa Rica. It is far more common in maritime dunes than T. americana. Plants in the Flora region belong to Triplasis purpurea (Walter) Chapm. var. purpurea." Not in H&C; recently collected as a weed on the silty shores of the lower Columbia River in Clark Co.

Trisetum [HC, HC2]
oatgrass, trisetum
(see also *Graphephorum*)

Trisetum canescens Buckley [FNA24, HC, HC2]
Proc. Acad. Nat. Sci. Philadelphia 14: 100. 1862.
tall false oat

Trisetum cernuum Trin. ssp. *canescens* (Buckley) Calder & Roy L. Taylor
Trisetum cernuum Trin. var. *canescens* (Buckley) Beal
Trisetum cernuum Trin. var. *projectum* (Louis-Marie) Beetle
Trisetum spicatum (L.) K. Richt. var. *projectum* (Louis-Marie) J.T. Howell

FNA24: "Trisetum canescens grows at or near stream banks, and in forest margins or interiors, in moist to dry areas in the western Flora region. It is especially abundant in ponderosa pine stands and spruce-fir forests. The vestiture of different parts varies throughout the range of the species. Plants from California with conspicuously interrupted panicles have been called Trisetum cernuum var. projectum (Louis-Marie) Beetle."

Trisetum cernuum Trin. [FNA24, HC, HC2]
Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 1(1): 61 1830.
nodding Trisetum

FNA24: "Trisetum cernuum grows in moist woods, stream banks, lake and pond shores, and floodplains of the western Flora region. The hairiness of the leaf sheaths varies, often within a plant."

**Trisetum flavescens* (L.) P. Beauv. [FNA24, HC, HC2]
Enum. Stirp. Transsilv. 3: 263. 1816.
yellow false oat

Avena flavescens L.

"This European species has been introduced in many areas of the U. S. and is reported for Wash." [H&C]. FNA24: "Trisetum flavescens grows in seeded pastures, roadsides, and as a weed in croplands. Native to Europe, west Asia, and north Africa, it was introduced into the Flora region because of its drought resistance, wide soil tolerance, and high palatability to domestic livestock. It is one of the few range plants known to contain calcinogenic glycosides, which can lead to vitamin D toxicity in grazing animals (Dixon 1995). This species seems not to have persisted in southern Ontario (Michael Oldham, pers. comm.). Several infraspecific taxa have been recognized; no attempt has been made to determine which are present in the Flora region."

Trisetum spicatum (L.) K. Richt. [FNA24, HC, HC2]
Pl. Eur. 1: 59. 1890.
narrow false oat, spike trisetum

Aira spicata L.
Trisetum montanum Vasey
Trisetum montanum Vasey var. *shearii* (Scribn.) Louis-Marie
Trisetum spicatum (L.) K. Richt. ssp. *alaskanum* (Nash) Hultén
Trisetum spicatum (L.) K. Richt. ssp. *congdonii* (Scribn. & Merr.) Hultén
Trisetum spicatum (L.) K. Richt. ssp. *majus* (Vasey ex Rydb.) Hultén
Trisetum spicatum (L.) K. Richt. ssp. *molle* (Kunth) Piper
Trisetum spicatum (L.) K. Richt. ssp. *montanum* (Vasey) W.A. Weber

Trisetum spicatum (L.) K. Richt. ssp. *pilosiglume* (Fernald) Hultén
Trisetum spicatum (L.) K. Richt. var. *alaskanum* (Nash) Malte ex Louis-Marie
Trisetum spicatum (L.) Richter var. *congdonii* (Scribn. & Merr.) A.S. Hitchc.
Trisetum spicatum (L.) K. Richt. var. *maidenii* (Gand.) Fernald
Trisetum spicatum (L.) K. Richt. var. *majus* (Rydb.) Farw.
Trisetum spicatum (L.) K. Richt. var. *molle* (Kunth) Beal
Trisetum spicatum (L.) K. Richt. var. *pilosiglume* Fernald
Trisetum spicatum (L.) K. Richt. var. *spicatiforme* Hultén
Trisetum spicatum (L.) K. Richt. var. *villosissimum* (Lange) Louis-Marie
Trisetum subspicatum (L.) P. Beauv.
Trisetum triflorum (Bigelow) Á. Löve & D. Löve
Trisetum triflorum (Bigelow) Á. Löve & D. Löve ssp. *molle* (Kunth) Á. Löve & D. Löve
Trisetum villosissimum (Lange) Louis-Marie

FNA24: "Many infraspecific taxa have been based on the variation in vestiture and openness of the panicle, but none appears to be justified (see Finot et al. 2004 for a different opinion). "

**Triticum* [HC, HC2]
wheat

**Triticum aestivum* L. [FNA24, HC, HC2]
Sp. Pl. 1: 85. 1753.
bread wheat

Triticum hybernum L.
Triticum macha Dekapr. & Menabde
Triticum sativum Lam.
Triticum sphaerococcum Percival
Triticum vulgare Vill.

FNA24: "Triticum aestivum is the most widely cultivated wheat. Both winter and spring types are grown in the Flora region. In addition to being grown for bread flour, T. aestivum cultivars are used for pastry-grade flour, Oriental-style soft noodles, and cereals. Club wheats, sometimes called Triticum compactum Host, are cultivated in the Pacific Northwest for export to Asian markets. They have short (3.5?6 cm), compressed spikes, with up to 25 spikelets having 2?6 florets. Their spike shape varies from oblong or oval with uniformly distributed spikelets to club-shaped with spikelets crowded towards the apex. No wild hexaploid progenitors of Triticum aestivum are known, but the two distinguishing characteristics of wild Tritcum species, fragile rachises breaking into wedge-shaped units and closely appressed glumes, are found in plants cultivated in Tibet and named T. aestivum subsp. tibetanum J.Z. Shao."

Vahlodea [HC2]
hairgrass, mountain hairgrass

Vahlodea atropurpurea (Wahlenb.) Fr. ex Hartm. [FNA24, HC2]
Handb. Skand. Fl. (ed. 4) 30. 1843.
arctic-hair grass

Aira atropurpurea Wahlenb.
Deschampsia atropurpurea (Wahlenb.) Scheele [HC]
Deschampsia atropurpurea (Wahlenb.) Scheele var. *latifolia* (Hook.) Scribn. ex Macoun [HC]
Deschampsia atropurpurea (Wahlenb.) Scheele var. *paramushirensis* Kudô
Deschampsia atropurpurea (Wahlenb.) Scheele var. *payettii* Lepage
Deschampsia pacifica Tatew. & Ohwi
Vahlodea atropurpurea (Wahlenb.) Fr. ex Hartm. ssp. *latifolia* (Hook.) A.E. Porsild
Vahlodea atropurpurea (Wahlenb.) Fr. ex Hartm. ssp. *paramushirensis* (Kudô) Hultén
Vahlodea flexuosa (Honda ex Nakai) Ohwi
Vahlodea latifolia (Hook.) Hultén

FNA24: "Vahlodea atropurpurea grows in moist to wet, open woods, forest edges, streamsides, snowbeds, and meadows, in montane to alpine and subarctic habitats. Plants from northwestern North America tend to have wider, more pubescent leaves and shorter lemma hairs than those elsewhere. They are sometimes treated as a distinct taxon, but the variation is continuous."

**Ventenata* [HC, HC2]
north Africa grass, ventenata

**Ventenata dubia* (Leers) Coss. [FNA24, HC, HC2]
Expl. Sci. Algérie 2: 104. 1855.
Ventenata

Avena dubia Leers
Ventenata avenacea Koel., superfluous renaming (illegitimate)

Europe. FNA24: "The first North American collection of Ventenata dubia was made in Washington in 1952. It is now established in crop and pasture lands of eastern Washington and western Idaho (Old and Callihan 1986) and has been found, but has not necessarily become established, at scattered locations elsewhere. Mature specimens can be confusing because the first, straight-awned floret remains after the distal, bisexual florets have disarticulated (Chambers 1985).'

Vulpia [HC2]
annual fescue

**Vulpia bromoides* (L.) Gray [FNA24, HC2]
Nat. Arr. Brit. Pl. 2: 124. 1821.
brome fescue

Bromus dertonensis All.
Festuca bromoides L. [HC]
Festuca dertonensis (All.) Asch. & Graebn.
Vulpia dertonensis (All.) Gola

Europe. FNA24: "Vulpia bromoides is a common European species that grows in wet to dry, open habitats. It is adventive and naturalized in North and South America. In North America, it is most common on the west coast, where it grows from British Columbia to northern Baja California; it occurs sparingly in other regions."

Vulpia microstachys (Nutt.) Munro [FNA24, HC2]
Pl. Hartw. 342. 1857.
small fescue

Festuca arida Elmer
Festuca microstachys Nutt. [HC]
Vulpia arida (Elmer) Henrard

See H&C p 580-581 for table of names applied to this species complex, which is not considered divisible into races. FNA24: "FNA24: "Vulpia microstachys is native to western North America, growing from British Columbia south through the western United States into Baja California. Four varieties are recognized here on the basis of spikelet indumentum, but they frequently occur together, and intergrading forms are known. No difference in their geographic or ecological distribution is known." In light of the lack of distinction among varieties, we are recognizing only the species level taxon."

**Vulpia myuros* (L.) C.C. Gmel. [FNA24, HC2]
Fl. Bad. 1: 8. 1805.
rattail fescue, rattail six-weeks grass

Festuca megalura Nutt. [HC]
Festuca megalura Nutt. var. *hirsuta* (Hack.) Aschers. & Graebn.
Festuca myuros L. [HC]
Vulpia megalura (Nutt.) Rydb.
Vulpia myuros (L.) C.C. Gmel. var. *hirsuta* Hack.

FNA24: "Vulpia myuros grows in well-drained, sandy soils and disturbed sites. It is native to Europe and North Africa. Vulpia myuros f. megalura (Nutt.) Stace & R. Cotton differs from Vulpia myuros (L.) C.C. Gmel. f. myuros in having ciliate lemma margins. It was once thought to be native to North America, but it occurs throughout the European and North African range of f. myuros, even in undisturbed areas."

Vulpia octoflora (Walter) Rydb. [HC2]
six?weeks fescue

Festuca octoflora Walter [HC]
Festuca octoflora Walter var. *aristulata* Torr. ex L.H. Dewey

var. *hirtella* (Piper) Henrard [FNA24, HC2]
Blumea 2: 320. 1937.
six-weeks fescue

Festuca octoflora Walter ssp. *hirtella* Piper
Festuca octoflora Walter var. *hirtella* (Piper) Hitchc. [HC]

FNA24: "Vulpia octoflora, a widespread native species, tends to be displaced by the introduced Bromus tectorum in the Pacific Northwest. It grows in grasslands, sagebrush, and open woodlands, as well as in disturbed habitats and areas of secondary succession, such as old fields, roadsides, and ditches. Three varieties are recognized here, but their characterization is not completely satisfactory, e.g., plants of the southwestern United States with spikelets in the size range of var. glauca often have densely pubescent lemmas, the distinguishing characteristic of var. hirtella. Vulpia octoflora var. hirtella is most frequent from British Columbia south through the western United States and into Mexico. It is the most common variey of V. octoflora in the southwest.

var. *octoflora* [FNA24, HC2]
Bull. Torrey Bot. Club 36: 538. 1909.
six-weeks fescue

Festuca octoflora Walter var. *octoflora* [HC]

FNA24: "Vulpia octoflora, a widespread native species, tends to be displaced by the introduced Bromus tectorum in the Pacific Northwest. It grows in grasslands, sagebrush, and open woodlands, as well as in disturbed habitats and areas of secondary succession, such as old fields, roadsides, and ditches. Three varieties are recognized here, but their characterization is not completely satisfactory, e.g., plants of the southwestern United States with spikelets in the size range of var. glauca often have densely pubescent lemmas, the distinguishing characteristic of var. hirtella. Vulpia octoflora var. octoflora is widespread throughout southern Canada, the United States, and Mexico, and has been introduced into temperate regions of South America, Europe, and Asia. It is most common from northern Oklahoma to Virginia, south to the Texas Gulf prairie and Florida."

**Zea* [HC2]

**Zea mays* L. [HC2]
corn

*ssp. *mays* [FNA24, HC2]
Sp. Pl. 2: 971-972. 1753.
corn, Indian corn, maize

All records are waifs where grain or birdseed was spilled.

Zizania [HC, HC2]
Indian rice, wild rice

**Zizania palustris* L. [HC2]
northern wild rice

*var. *palustris* [FNA24, HC2]
Mant. Pl. 295. 1771.
northern wild rice

Zizania aquatica L. ssp. *angustifolia* (Hitchc.) Tzvelev
Zizania aquatica L. var. *angustifolia* Hitchc.

Introduced throughout western North America for waterfowl food. FNA24: "Zizania palustris var. palustris grows in the shallow water of lakes and streams, often forming extensive stands in northern lakes. It has been introduced to British Columbia, Nova Scotia, Idaho, Arizona, and West Virginia for waterfowl food; some of the stands in the Canadian prairies may also have resulted from planting (Aiken et al. 1988)."

Pontederiaceae [FNA26, HC, HC2] Pickerelweed Family

**Eichhornia* [FNA26, HC2]
Eichhornia. 3. 1842.
[name conserved]

**Eichhornia crassipes* (Mart.) Solms [FNA26, HC2]
Monogr. Phan. 4: 527. 1883.
water hyacinth

reported from Cowlitz Co. in 1996 by Richard Old (KZ99)

Heteranthera [FNA26, HC, HC2]
Fl. Peruv. Prodr. 9, plate 2. 1794.
[name conserved]

Heteranthera dubia (Jacq.) MacMill. [FNA26, HC, HC2]
Metasp. Minnesota Valley. 138. 1892.
grassleaf mud-plantain, water stargrass, yellow stargrass

Zosterella dubia (Jacq.) Small [ILBC7]

**Pontederia* [FNA26, HC2]
Sp. Pl. 1: 288. 1753; Gen. Pl. ed. 5, 140. 1754.

**Pontederia cordata* L. [FNA26, HC2]
Sp. Pl. 1: 208. 1753.
pickerel-weed

Specimen collected by WA Dept. of Ecology in Snohomish County but not deposited in a herbarium.

Potamogetonaceae [FNA22, HC, HC2] Pondweed Family

Synonyms:
Zannichelliaceae [FNA22, HC] (Horned-Pondweed Family)

FNA22: "The family has historically been considered to consist of two genera, Potamogeton and Groenlandia. Recent molecular evidence (D. H. Les, unpublished), combined with existing morphologic evidence, indicates that Potamogeton in the broad sense actually represents two separate lineages. We recognize those lineages at the generic level, Potamogeton in the strict sense and Stuckenia. Consequently, we accept three genera in the family, Potamogeton, Stuckenia, and Groenlandia. Reproductive features are most important in separating species of Potamogeton (R. R. Haynes 1978), and we include the entire family here. The keys may not always utilize reproductive features, but they are based on fruiting individuals. We strongly recommend that no one collect specimens of Potamogetonaceae that are lacking reproductive structures. Leaves of Potamogetonaceae are stipulate. The stipules form a tubular sheath (stipular sheath) around the stem, free from or adnate to the base of the blade. In some species the leaf and sheath of submersed leaves are adnate for part of their length, and the leaf appears to have a sheathing base with an adaxial ligule at the junction of sheath and blade or petiole. Fruits of Potamogetonaceae are drupaceous. The fruits do have endocarps but do not have fleshy mesocarps. Mesocarps exist but never become fleshy. Consequently, the fruits are not true drupes, they are drupaceous. Many species of Potamogetonaceae undergo extensive vegetative reproduction either by turions or stem fragmentation. Turions are excellent modes of vegetative reproduction. The structures are produced at the stem tips and eventually fall to the substrate, either by a portion of the stem breaking off or by the stem itself falling to the substrate. The turions survive an unfavorable season, germinate, and grow into new plants during the next growing season. Because the unfavorable season is usually winter in North America, turions have been called "winter buds." At least one species, Potamogeton crispus, produces turions in early summer, and the turions survive the unfavorable season (summer, in this instance), germinating in the fall. The plant then survives the winter as a young individual, only a few centimeters long, even under ice, and begins growth as the water warms in the following spring. "Winter bud" is certainly not the correct term for P. crispus. The term "turions" designates all such structures, regardless of the

unfavorable season."

Potamogeton [FNA22, HC, HC2]
Sp. Pl. 1: 126. 1753; Gen. Pl. ed. 5; 61, 1754.
pondweed
(see also *Stuckenia*)

Potamogeton alpinus Balbis [FNA22, HC, HC2]
Misc. Bot. 13. 1804.
northern pondweed, reddish pondweed

Potamogeton alpinus Balbis ssp. *tenuifolius* (Raf.) Hultén [JPM]
Potamogeton alpinus Balbis var. *subellipticus* (Fernald) Ogden [IMF6]
Potamogeton alpinus Balbis var. *tenuifolius* (Raf.) Ogden [Peck]
Potamogeton tenuifolius Raf.
Potamogeton tenuifolius Raf. var. *subellipticus* Fernald

FNA22: "Plants of Potamogeton alpinus often are red whenever taken from the water, a feature that makes this species quite distinctive. Two varieties, Potamogeton alpinus var. tenuifolius and var. subellipticus, have been recognized in North America, based mainly on submersed leaf shape. Plants bearing both leaf types have been observed in the same population; hence the varieties are not recognized. Four hybrids, Potamogeton alpinus × P. nodosus (= P. ×subobtusus Hagström), P. alpinus × P. gramineus (= P. xnericius Hagström), P. alpinus × P. praelongus (= P. ×griffithii A. Bennett), and P. alpinus × P. perfoliatus (= P. ×prussicus Hagström), have been described."

Potamogeton amplifolius Tuck. [FNA22, HC, HC2]
American Journal of Science, and Arts. ser. 2, 6:225. 1848.
broad-leaved pondweed, large-leaved pondweed

FNA22: "Potamogeton amplifolius is common throughout much of North America. Its submersed leaves are larger than those of most other species of Potamogeton, are arcuate, and have more veins than do any other species. One hybrid, Potamogeton amplifolius Â´ P. illinoensis (= P. Â´ scoliophyllus Hagström), has been described."

Potamogeton berchtoldii Fieber [HC, HC2]
B.V.von Berchtold & P.M.Opiz, Oekon.-Techn. Fl. Böhm. 2(1): 277. 1838.
Berchtold's pondweed

Potamogeton berchtoldii Fieber var. *colpophilus* (Fernald) Fernald
Potamogeton berchtoldii Fieber var. *lacunatus* (Hagstr.) Fernald
Potamogeton berchtoldii Fieber var. *polyphyllus* (Morong) Fernald
Potamogeton berchtoldii Fieber var. *tenuissimus* (Mertens & W.D.J. Koch) Fernald
Potamogeton pusillus L. ssp. *tenuissimus* (Mertens & W.D.J. Koch) R.R. Haynes & Hellq. [FNA22]
Potamogeton pusillus L. var. *tenuissimus* Mertens & W.D.J. Koch [JPM]

FNA22: "Potamogeton pusillus subsp. tenuissimus is the most common linear-leaved subspecies of the family in temperate North America. Whenever one finds a linear-leaved pondweed with 1--5 rows of lacunae on each side of the midvein, chances are that it is subsp. tenuissimus. Only Potamogeton obtusifolius could be confused with the taxon, and it can be separated by having its cylindric inflorescence, whereas subsp. tenuissimus has a capitate inflorescence."

**Potamogeton crispus* L. [FNA22, HC, HC2]
Sp. Pl. 1: 126. (as crispum). 1753.
curly pondweed

FNA22: "Potamogeton crispus, an introduced species, has spread throughout much of North America. The expansion of this species\\\'s range from its original collection in North America, apparently about 1840, has been discussed (R. L. Stuckey 1979). This is the only species of pondweeds in North America with serrate leaves and consequently it is easily recognized. Life history of Potamogeton crispus is unusual as it flowers and fruits in late spring and early summer, at which time it also produces turions. The plants decay shortly after those structures develop, leaving only fruits and turions, which survive the summer. No one has observed any seed germination, but the turions (referred to as dormant apices) germinate in late

summer or fall, and the plants overwinter as small plants only a few cm centimeters in size, even under the ice in northern climates (R. L. Stuckey et al. 1978). Growth then continues as the water begins warming in the spring. One hybrid, Potamogeton crispus Â´ P. praelongus (= P. Â´ undulatus Wolfgang ex Schultes & Schultes f.), has been described."

Potamogeton epihydrus Raf. [FNA22, HC, HC2]
Medical Repository. 5: 354. 1808.
ribbon-leaved pondweed

Potamogeton epihydrus Raf. ssp. *nuttallii* (Cham. & Schltdl.) Calder & Roy L. Taylor [JPM]
Potamogeton epihydrus Raf. var. *nuttallii* (Cham. & Schltdl.) Fernald [VPPNW1]
Potamogeton epihydrus Raf. var. *ramosus* (Peck) House

Peck has authorship incorrect: "C. & B." FNA22: "Two varieties, Potamogeton epihydrus var. epihydrus and var. ramosus, have been recognized. These prove not to be distinct. Both varieties often grow in the same body of water in the same population. The wider-leaved plants often occur in more alkaline waters. Two hybrids, P. epihydrus var. nuttallii × P. gramineus and P. epihydrus × P. nodosus (= P. ×subsessilis Hagström), have been described. Potamogeton epihydrus is a common species of lakes and streams of northern United States and southern Canada. It extends southward in the eastern United States to Louisiana and Alabama. Potamogeton epihydrus is one of our more easily recognized species: it has floating leaves, linear submersed leaves, and fruits with an embryo with one full spiral or less. The only other North American pondweed with a similar set of characteristics is P. tennesseensis, which differs from P. epihydrus by the former having long tapering apices in the submersed leaves whereas the latter has blunt to acute apices."

Potamogeton fibrillosus Fernald [HC, HC2]
Mem. Amer. Acad. Arts, n. s. 17: 51, plate 28, figs. a?c, plate 32, plate 28, fig. 5, plate 32. 1932.
fibrous-stipuled pondweed

Potamogeton foliosus Raf. ssp. *fibrillosus* (Fernald) R.R. Haynes & Hellq. [FNA22]
Potamogeton foliosus Raf. var. *fibrillosus* (Fernald) R.R. Haynes & Reveal [JPM]

Known in WA from one collection in 1933 from Pierce Co. FNA22: "Potammogeton foliosus subsp. fibrillosus is known from the warm waters of the northwestern United States. It differs from subsp. foliosus by the stipular tissue between the veins decomposing, leaving only strands formed by the fibrous veins. In addition, nodal glands are quite common."

Potamogeton foliosus Raf. [FNA22, HC, HC2]
Medical Repository. hexade 2, 5:354. 1808.
leafy pondweed

Potamogeton curtissii Morong
Potamogeton foliosus Raf. ssp. *foliosus* [FNA22]
Potamogeton foliosus Raf. var. *foliosus* [HC, JPM]
Potamogeton foliosus Raf. var. *macellus* Fernald [HC]

FNA22: "Potamogeton foliosus subsp. foliosus is probably the most common linear-leaved species of the family in North America, and it is probably the easiest to determine. Any linear-leaved Potamogeton specimen with fruits having an undulating winglike abaxial keel most likely is this taxon."

Potamogeton friesii Rupr. [FNA22, HC, HC2]
Hist. Stirp. Fl. Petrop. 43. 1845.
flat-stalked pondweed

FNA22: "Potamogeton friesii is a fairly common linear-leaved species, especially of calcareous waters of lakes and streams of the upper Midwest. Whenever turions are present, the species is easily identified, as it is the only one with the outer leaves of the turions having corrugate bases and the inner leaves turned at right angles to the outer leaves. Two hybrids, Potamogeton friesii x P. pusillus (= P. x pusilliformis Fischer [P. Â´ intermedius Fischer]) and P. friesii x P. obtusifolius (= P. x semifructus A. Bennett ex Ascherson & Graebner), have been described."

Potamogeton gramineus L. [FNA22, HC, HC2]
Sp. Pl. 1: 127. (as gramineum). 1753.
grassy pondweed, variable pondweed

Potamogeton gramineus L. var. *maximus* Morong [VPPNW1]

Potamogeton gramineus L. var. *myriophyllus* J.W. Robbins [IMF6]
Potamogeton heterophyllus Schreb.

FNA22: "Seven hybrids, Potamogeton gramineus Â´ P. nodosus (= P. Â´ argutulus Hagström), P. gramineus Â´ P. richardsonii (= P. hagstroemii A. Bennett [as hagstromii]), P. alpinus Â´ P. gramineus (= P. Â´ nericius Hagström), P. gramineus Â´ P. perfoliatus (= P. Â´ nitens Weber [P. Â´ subnitens Hagström]), P. gramineus Â´ P. natans (= P. Â´ sparganiifolius Laestadius ex Fries), P. gramineus Â´ P. illinoensis [= P. Â´ spathuliformis (J. W. Robbins) Morong)], and P. gramineus Â´ P. praelongus (= P. Â´ vilnensis Galinis), have been described. Three varieties were recognized (E. C. Ogden 19435) and treated (M. L. Fernald 1950). These varieties, Potamogeton gramineus var. gramineus, deletion}P. gramineus var. myriophyllus, and P. gramineus var. maximus, were said to be separated by the shape and size of the submersed leaves. We have studied many populations of this species in the field and have observed on several occasions that a single population has leaf morphology variable enough to include all three varieties. We have, , therefore , chosen not to recognize any infraspecific categories for this species." KZ99 mistakently places German P. heterophyllus as a synonym of New World P. illinoensis

Potamogeton illinoensis Morong [FNA22, HC, HC2]
Botanical Gazette. 5: 50. 1880.
illinois pondweed

Potamogeton lucens L., misapplied

FNA22: "Potamogeton illinoensis and P. gramineus are often difficult to separate. Certainly, in the extreme of each they are easily separated, but they continually grade into each other. Features to look for are the acute-mucronate apex of the submersed leaves of P. illinoensis and the acuminate apex for P. gramineus. Also, the number of veins seems to work as well. Three hybrids, Potamogeton illinoensis x P. nodosus (= P. x faxonii Morong), P. amplifolius x P. illinoensis (= P. x scoliophyllus Hagström), and P. gramineus x P. illinoensis [= P. x spathuliformis (J. W. Robbins) Morong], have been described."

Potamogeton natans L. [FNA22, HC, HC2]
Sp. Pl. 1: 126. 1753.
floating pondweed, floating-leaved pondweed

FNA22: "Potamogeton natans is the common floating-leaved pondweed of the north temperate ure areas. It is essentially circumboreal and can easily be identified by floating leaves that are almost always cordate at the base of the blade, the petiole with a short band of light tissue at its apex, and the submersed phyllodial leaves. Also, the apex of the petiole usually is bent so that the blade appears oriented in the opposite direction from which the petiole appears to be oriented. One hybrid, Potamogeton natans x P. nodosus (= P. x schreberi Fischer [P. x perplexus A. Bennett]), has been described."

Potamogeton nodosus Poir. [FNA22, HC, HC2]
Encyclopedie Methodique. Botanique ... Supplement. 4(2): 5354. 1816.
loddon's pondweed, long-leaved pondweed

Potamogeton americanus Cham. & Schltdl. [Abrams]

FNA22: "Six hybrids, Potamogeton gramineus x P. nodosus (= P. x argutulus Hagström), P. illinoensis x P. nodosus (= P. x faxonii Morong), P. nodosus x P. richardsonii (= P. x rectifolius A. Bennett), P. natans x P. nodosus (= P. x schreberi Fischer [P. x perplexus A. Bennett]), P. alpinus x P. nodosus (= P. x subotusus Hagström), and P. epihydrus x P. nodosus (= P. x subsessilis Hagström), have been described. Potamogeton nodosus is a common floating-leaved species throughout much of the United States and southern Canada. When both submersed and floating leaves are present, it is very easily recognized by the petioles of the submersed leaves being longer than 5 cm." Stem anatomy is useful to distinguish P. nodosus from the hybrid P. gramineus × natans (BCIL7)

Potamogeton obtusifolius Mertens & W.D.J. Koch [FNA22, HC, HC2]
Deutschl. Fl., ed. 3. 1: 855. 1823.
blunt-leaved pondweed

Often mistaken for P. friesii. FNA22: "Potamogeton obtusifolius is a distinctive linear-leaved species with the leaf blades round at the apex, especially when fruiting inflorescences 5--7 mm wide are present. This is unusually wide for one of the linear-leaved species. Two hybrids, Potamogeton obtusifolius x P. pusillus (= P. x saxonicus Hagström) and P. friesii x obtusifolius (= P. x semifructus A. Bennett ex Ascherson & Graebner), have been described."

Potamogeton praelongus Wulfen [FNA22, HC, HC2]
Arch. Bot. (Leipzig). 3: 331. 1805.
white-stalked pondweed, whitestem pondweed

FNA22: "Potamogeton praelongus is one of the easiest pondweeds to identify with its submersed leaves only clasping the more or less zigzagged stem. The persistent, hugelarge, white stipules provide another clue to this species. Four hybrids, Potamogeton perfoliatus x P. praelongus (= P. x cognatus Ascherson & Graebner), P. alpinus x P. praelongus (= P. x griffithii A. Bennett), P. crispus x P. praelongus (= P. x undulatus Wolfgang ex Schultes & Schultes f.), and P. gramineus Â´ P. praelongus (= P. x vilnensis Galinus), have been described." BCIL7 incorrectly gives author as: "Wolfg."

Potamogeton pusillus L. [FNA22, HC, HC2]
Sp. Pl. 1: 127. 1753 (as pusillum).
small pondweed

Potamogeton panormitanus Biv.
Potamogeton pusillus L. ssp. *pusillus* [FNA22]
Potamogeton pusillus L. var. *minor* (Biv.) Fernald & B.G. Schubert
Potamogeton pusillus L. var. *pusillus* [JPM]

FNA22: "Potamogeton pusillus subsp. pusillus is nearly worldwide. When it is in fruit, the inflorescence is interrupted. That character combined with its narrow, linear, 1--3-veined leaves makes this taxon easily recognized. The nodal glands are green, essentially the color of the stems. Often appearing only as bumps on the stem at the nodes, they are difficult to see. Also, because the glands frequently occur at only a few nodes per plant, one can easily overlook them."

Potamogeton richardsonii (A. Benn.) Rydb. [FNA22, HC, HC2]
Bulletin of the Torrey Botanical Club. 32: 599. 1905.
clasping-leaved pondweed, Richardson's pondweed

Potamogeton perfoliatus L. ssp. *richardsonii* (A. Benn.) Hultén
Potamogeton perfoliatus L. var. *richardsonii* A. Benn.

FNA22: "Potamogeton richardsonii is quite similar to P. perfoliatus. Specific characteristics to separate the two species are the shape of the leaf blade apex, acute in P. richardsonii and obtuse in P. perfoliatus, and the condition of the stipules, disintegrating between the veins leaving fibrous strands in P. richardsonii , and the entire stipule, including the veins, disintegrating in P. perfoliatus. Two hybrids, Potamogeton gramineus x P. richardsonii (= P. x hagstroemii A. Bennett [as hagstromii]) and P. nodosus x P. richardsonii (= P. x rectifolius A. Bennett), have been described."

Potamogeton robbinsii Oakes [FNA22, HC, HC2]
Magazine of horticulture, botany and all useful discoveries and improvements in rural affairs. 7: 180. 1841.
fern pondweed, Robbin's pondweed

FNA22: "Potamogeton robbinsii is our most easily recognized species when it is fertile. It is the only species with branched inflorescences. The species, however, occurs in fairly deep water, forming large colonies that essentially cover the substrate. Only rarely do the plants flower. It also is the only species with truly auriculate leaves, the blades forming small lobes projecting past the stem on each side of the stem. Leaf blades of other Potamogeton species may have slightly rounded bases, but no others have lobes that actually protrude past the stem. The species has a fairly large disjunction; primarily known from the northern part of the flora, it also occurs in the Tensas River area, Baldwin County, Alabama. The Alabama population has been collected on at least two occasions over 40 years, once as recently as 1970. "

Potamogeton strictifolius A. Benn. [FNA22, HC2]
J. Bot. 40: 148. 1902.
narrowleaf pondweed

Potamogeton strictifolius A. Benn. var. *rutiloides* Fernald

First specimen for state collected in 2017 in Okanogan County.

Potamogeton zosteriformis Fernald [FNA22, HC, HC2]
Memoirs of the american academy of arts and science. n.s. 17:36. 1932.
eel-grass pondweed, flat-stem pondweed

Potamogeton compressus L., misapplied

FNA22: "One hybrid, Potamogeton zosteriformis x P. strictifolius, has been described and has been given the name P. ×haynesii Hellquist & G. E. Crow and is known from northern Michigan, Minnesota, Vermont, and southern Canada."

Stuckenia [FNA22, HC2]

Botanisch-systematische notizen., Abh. Naturwiss. Vereine Bremen. 21: 258. 1912.
pondweed

Stuckenia filiformis (Pers.) Börner [FNA22, HC2]

Flora fur das deutsche Volk. 713. 1912.
slender-leaved pondweed, western pondweed, threadleaf-pondweed

Potamogeton borealis Raf.
Potamogeton filiformis Pers. [HC]
Potamogeton filiformis Pers. var. *alpinus* (Blytt) Asch. & Graebn.
Potamogeton filiformis Pers. var. *borealis* (Raf.) H. St. John [VPPNW1]
Potamogeton filiformis Pers. var. *macounii* (Morong ex Macoun) Morong [VPPNW1]
Potamogeton filiformis Pers. var. *occidentalis* (J.W. Robbins) Morong
Potamogeton marinus L. f. *alpinus* Blytt
Potamogeton marinus L. var. *alpinus* (J.W. Robbins) Morong
Potamogeton marinus L. var. *macounii* Morong
Potamogeton marinus L. var. *occidentalis* J.W. Robbins
Stuckenia filiformis (Pers.) Börner ssp. *alpina* (Blytt) R. R. Haynes, Les & M. Král
Stuckenia filiformis (Pers.) Börner ssp. *filiformis* [FNA22]
Stuckenia filiformis (Pers.) Börner ssp. *occidentalis* (J. W. Robbins) R. R. Haynes, Les & M. Král [FNA22]

Stuckenia pectinata (L.) Borner [FNA22, HC2]

Flora fur das deutsche Volk. 713. 1912.
fennel-leaved pondweed, sago pondweed, sago-pondweed

Potamogeton pectinatus L. [HC]

FNA22: "The sago-pondweed is among the most important species as food for waterfowl (E. Moore 1913). The species reproduces vegetatively by underground tubers and is spread by various duck species, especially canvas backs. In a study of food for ducks, a population of canvas backs was observed feeding in aquatic vegetation comprised of several genera, including sago-pondweed. When the stomach contents were examined, they were found to contain essentially 100% tubers of sago-pondweed (E. Moore 1913). Two hybrids with this species as a putative parent have been described under the genus Potamogeton. These are P. pectinatus x P. vaginatus (= P. x bottnicus Hagström) and P. filiformis x P. pectinatus (= P. x suecicus K. Richter)."

Zannichellia [FNA22, HC, HC2]

Sp. Pl. 2: 969. 1753; Gen. Pl. ed. 5; 416, 1754.
horned pondweed

Zannichellia palustris L. [FNA22, HC, HC2]

Sp. Pl. 2: 969. 1753.
horned pondweed

Zannichellia palustris L. var. *stenophylla* Asch. & Graebn. [Peck]

FNA22: "Outside of Europe most Zannichellia are considered to be Z. palustris (W. Van Vierssen 1982). In Europe three species have been recognized based on stamen length, fruit length, podogyne length, and the rostrum to fruit length ratio. For Z. palustris in Europe the mean rostrum length is 0.78 Â± 0.20deletion} mm, the mean podogyne length is 0.4 Â± 0.19 mm, and the rostrum to fruit ratio is less than 0.5 (W. Van Wierssen Vierssen 1982). North American Zannichellia does not match any of these figures exactly. In North America Zannichellia has been considered historically to comprise only one species, which has been called Z. palustris. Until further research determines the range of Zannichellia and species delimitations, we are continuing to consider all North American material to be monospecific and am are applying the name Z. palustris to our that material."

Ruppiaceae [FNA22, HC, HC2] Ditch-Grass Family

Ruppia [FNA22, HC, HC2]
Sp. Pl. 1: 127. 1753;, Gen. Pl. ed. 5; 61, 1754.
ditch-grass

Ruppia maritima L. [FNA22, HC, HC2]
Sp. Pl. 1: 127. 1753.
beaked ditch-grass, spiral ditch-grass, western ditch-grass

Ruppia cirrhosa (Petagna) Grande [FNA22]
Ruppia maritima L. var. *obliqua* (Schur) Asch. & Graebn. [Peck]
Ruppia maritima L. var. *rostrata* Agardh [Peck]
Ruppia occidentalis S. Watson [Abrams]

Recent phylogenetic study (Ito et al., 2010) suggests recognition of R. cirrhosa renders R. maritima paraphyletic. Moreover, the primary character used to separate these species is the number of coils in the peduncle, which likely is a plastic trait.

Scheuchzeriaceae [FNA22, HC, HC2] Rannoch-rush Family, Scheuchzeria Family

Scheuchzeria [FNA22, HC, HC2]
Sp. Pl. 1: 338. 1753; Gen. Pl. ed. 5; 157, 1754.
scheuchzeria

Scheuchzeria palustris L. [FNA22, HC, HC2]
Sp. Pl. 1: 338. 1753.
scheuchzeria

Scheuchzeria americana (Fernald) G.N. Jones
Scheuchzeria palustris L. ssp. *americana* (Fernald) Hultén [JPM]
Scheuchzeria palustris L. var. *americana* Fernald [HC]

FNA22: "North American representatives of this species have been regarded as being varietally distinct from Eurasian plants on the basis of follicle and stigma characters (M. L. Fernald 1923). Variability in those characters, in specimens from both hemispheres, vitiates their worth for varietal distinction."

Sparganiaceae: see Typhaceae

Tofieldiaceae [HC2] False-Asphodel Family
Taxonomy follows APG III (http://www.mobot.org/mobot/research/apweb/welcome.html).

Triantha [FNA26, HC2]
J. Linn. Soc., Bot. 17: 490. 1879.
false-asphodel, tofieldia

Triantha occidentalis (S. Watson) R.R. Gates [FNA26, HC2]
J. Linn. Soc., Bot. 44: 137. 1918.

western asphodel, western tofieldia

Triantha occidentalis has been shown to be carnivorous.

ssp. *brevistyla* (C.L. Hitchc.) Packer [FNA26, HC2]
Novon. 3: 279. 1993.
sticky asphodel, sticky tofieldia

Tofieldia glutinosa (Michx.) Pers. ssp. *absona* C.L. Hitchc.
Tofieldia glutinosa (Michx.) Pers. ssp. *brevistyla* C.L. Hitchc.
Tofieldia glutinosa (Michx.) Pers. var. *absona* (C.L. Hitchc.) R.J. Davis [HC]
Tofieldia glutinosa (Michx.) Pers. var. *brevistyla* (C.L. Hitchc.) C.L. Hitchc. [HC]
Tofieldia glutinosa (Michx.) Pers. var. *intermedia* (Rydb.) B. Boivin

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Typhaceae [FNA22, HC, HC2] Cat-Tail Family

Synonyms:
Sparganiaceae [FNA22, HC] (Burr-Reed Family)

Sparganium [FNA22, HC, HC2]
Sp. Pl. 2: 971. 1753; Gen. Pl. ed. 5; 418, 1754.
bur-reed

Sparganium angustifolium Michx. [FNA22, HC, HC2]
Flora Boreali-Americana. 2: 189. 1803.
floating bur-reed, narrow-leaved bur-reed

Sparganium angustifolium Michx. var. *multipedunculatum* (Morong) Brayshaw
Sparganium emersum Rehmann var. *multipedunculatum* (Morong) Reveal [HC]
Sparganium multipedunculatum (Morong) Rydb.
Sparganium simplex Huds. var. *multipedunculatum* Morong [VPPNW1]

Sparganium emersum Rehmann [FNA22, HC, HC2]
Verhandlungen des Naturforschenden Vereins in Brunn. 10: 80. 1872.
simplestem bur-reed
(see also *Sparganium angustifolium*)

Sparganium angustifolium Michx. ssp. *emersum* (Rehmann) Brayshaw
Sparganium emersum Rehmann var. *emersum* [HC]
Sparganium simplex Huds. var. *simplex*

Sparganium eurycarpum Engelm. [FNA22, HC, HC2]
Manual of Botany of the Northern United States (ed. 2). 430. 1856.
broadfruited bur-reed

Sparganium californicum Greene [Abrams]
Sparganium erectum L. ssp. *stoloniferum* (Buch.-Ham. ex Graebn.) C.D.K. Cook & M.S. Nicholls [JPM], homonym (illegitimate)
Sparganium eurycarpum Engelm. ssp. *eurycarpum* [JPM]
Sparganium greenei Morong [Peck]

We follow Abrams, FNA, and Kew Index, treating the author as Engelm. in A. Gray, and not Engelm. ex A. Gray, as in KZ99; perhaps not distinct from the European S. erectum L. H. Hara published this combination in 1976; Cook & Nichols combination in 1987 is superfluous

Sparganium fluctuans (Morong) B.L. Rob. [FNA22, HC, HC2]
Rhodora. 7: 60. 1905.
floating bur-reed, water bur-reed

Sparganium androcladum (Engelm.) Morong var. *fluctuans* Engelm. ex Morong

Sparganium natans L. [FNA22, HC2]

Sp. Pl. 2: 971. 1753.
arctic bur-reed, small bur-reed

Sparganium minimum Wallr. [HC]
Sparganium minimum (L.) Fr., homonym (illegitimate)

Typha [FNA22, HC, HC2]
Sp. Pl. 2: 971. 1753; Gen. Pl. ed. 5; 418, 1754.
cat-tail, reedmace

**Typha angustifolia* L. [FNA22, HC, HC2]
Sp. Pl. 2: 971. 1753.
narrow-leaf cat-tail

FNA22:"Prior to N. Hotchkiss and H. L. Dozier (1949), Typha domingensis was generally included within T. angustifolia in North America. Because of many misidentified specimens, range expansion in recent years, and undercollecting, the distribution on the margins of the main range is somewhat uncertain. Many literature reports are based on misidentified specimens. Some workers suggested T. angustifolia was early introduced from Europe into Atlantic Coastal North America and migrated westward (R. L. Stuckey and D. P. Salamon 1987). In recent decades it has expanded its range in many regions and become much more abundant, especially in roadside ditches and other highly disturbed habitats. For example, although it was known only from one Wisconsin station in 1929 (N. C. Fassett 1930) and was very local in Iowa in 1939 (A. Hayden 1939), it is now common and widespread in both states. As it often out-competes many native marsh species to produce very dense, pure stands, and hybridizes with T. latifolia to form the probably even more competitive T. ?glauca, T. angustifolia and T. ?glauca should perhaps be classified as noxious weeds in parts of North America. Beyond the main range of T. angustifolia, there are specimens of T. ?glauca from north-central Montana (Phillips County.), west-central Manitoba (La Pas), and Anticosti Island, Quebec. There are m Many erroneous reports have come from outside of Europe and North America. For hybrids see also genus and key."

**Typha domingensis* Pers. [FNA22, HC2]
Syn. Pl. 2: 532. 1807.
southern cat-tail

Historically in our area this species has not been known north of California and Nevada. In addition to the WA specimens, it has recently (2017) been collected along the Columbia River in Oregon. Whether these populations should be considered range expansions of a native species or dispersal events of an introduced species can't be clearly resolved with the information currently available. FNA22: "Typha domingensis probably should be treated as a highly variable pantropic and warm temperate species, occurring to 40º E north and south latitude worldwide, and needing study to determine infraspecific taxa and delimitation from related species (B. G. Briggs and L. A. S. Johnson and B. G. Briggs 1968; S. G. Smith 1987)."

**Typha ×glauca* Godr. [FNA22, HC2]
Fl. Lorraine 3: 20. 1844.

Not in HC

Typha latifolia L. [FNA22, HC, HC2]
Sp. Pl. 2: 971. 1753.
broad-leaf cat-tail, common cattail

FNA22: "The erect shoots of Typha latifolia are more fanlike when young than in other North American species because the proximal leaves (dying by mid season) spread more widely. Undoubtedly native throughout its North American range, where it is often a codominant or minor component of marshes, wet meadows, fens, and other communities. In many places it is apparently being replaced by T. angustifolia and T. angustifolia  T. latifolia (T. glauca) at least partly due to human disturbance of habitats. There is a specimen of T. xglauca from Anticosti Island, Quebec. Locally in California and perhaps elsewhere where hybrids are common, the pollen grains of some T. latifolia plants separate slightly and may be shed partly as mixtures of triads, dyads, and monads, perhaps due to introgression ([S. G. Smith, unpublisheddeletion.). Ph.D. thesis]. See also hybrids in key and genus."

Vallisneriaceae: see Hydrocharitaceae

Zannichelliaceae: see Potamogetonaceae

Zosteraceae [FNA22, HC, HC2] Eel-Grass Family

**Nanozostera* [HC2]
dwarf eel-grass

**Nanozostera japonica* (Asch. & Graebn.) Toml. & Posl. [HC2]
Taxon 50: 432. 2001.
dwarf eelgrass, narrow-bladed eelgrass

Zostera americana Hartog
Zostera japonica Asch. & Graebn. [FNA22]

FNA22: "The name Zostera americana was proposed for some of the collections by Neil Hotchkiss from Pacific County, Washington (C. den Hartog 1970). Because Z. americana resembled a previously published species, it was suggested the name should be placed in synonymy, at least until further study could be undertaken of at least the ecology and genetics of the complex (R. C. Phillips and R. F. Shaw 1976; P. G. Harrison 1976). A proposal that Z. americana was synonymous with Z. noltii was based upon the identical or overlapping ranges of most characteristics (R. C. Phillips and R. F. Shaw 1976). Zostera noltii is native to the Atlantic coasts of Europe and Africa and to the Mediterranean Sea area. Therefore, the suggestion implies that Z. noltii has been introduced into North America. No mode of introduction was discussed, however. Similarly P. G. Harrison (1976) suggested an introduction of an exotic species, but he suggested Zostera japonica instead. A study of populations of Z. americana from Boundary Bay, south of Vancouver, British Columbia revealed no obvious differences between those plants and individuals of Z. japonica and Z. noltii. A comparison of the British Columbia specimens with illustrations by C. den Hartog (1970) of both Z. japonica and Z. noltii indicated the British Columbia plants resembled more the illustrations of Z. japonica than those of Z. noltii. A discussion of possible modes of introduction noted that a brown alga, Sargassum muticum, was introduced into the North American Pacific coast area with seed oysters. Zostera japonica occurs in areas where the oysters were obtained in Japan, and oysters were packed in Zostera species during shipment. Such shipments were possibly the means by which the species was introduced into North America. Harrison\\'s explanation is quite plausible, and I am accepting it until further research solves the problem."

Phyllospadix [FNA22, HC, HC2]
Flora Boreali-Americana. 2: 171. 1838.
surf-grass

Phyllospadix scouleri Hook. [FNA22, HC, HC2]
Flora Boreali-Americana. 2: 171. 1838.
Scouler's surf-grass

Phyllospadix serrulatus Rupr. ex Asch. [FNA22, HC2]
Linnaea. 35: 169. 1868.
toothed surf-grass

Phyllospadix torreyi S. Watson [FNA22, HC, HC2]
Proceedings of the American Academy of Arts and Sciences. 14: 303. 1879.
Torrey's surf-grass

Zostera [FNA22, HC, HC2]
Sp. Pl. 2: 968. 1753; Gen. Pl. ed. 5; 415, 1754.
eel-grass

(see also *Nanozostera*)

Zostera marina L. [FNA22, HC, HC2]

Sp. Pl. 2: 968. 1753.

common eelgrass, seawrack

Zostera marina L. var. *stenophylla* Asch. & Graebn.

FNA22: "Zostera marina is adapted to the cold waters of the North Atlantic and North Pacific. It extends southward to North Carolina in the Atlantic and Baja California in the Pacific. At the southern limits of its range, active growth mostly is in the cooler months of autumn and spring, with flowering and fruiting mostly in the spring and the plants dying in the hotter summer months, the vegetation becoming dislodged from the substrate and floating to the water surface. The fruits apparently remain in the floating vegetation for a period of time, eventually falling from the shoots to the substrate. Movement in dislodged vegetative material is the only adaptation the fruits have for dispersal (C. den Hartog 1970). The species is found mostly in the sublittoral region, only rarely being exposed at low tide. It occurs in more or less sheltered areas on soft mud or firm sand. Plants of sandy substrates had narrower leaves than plants growing on muddy substrates (C. H. Ostenfeld 1905). Fruits fall from the floating vegetation to the substrate and settle on the substrate ripple marks, which run more or less perpendicular to the direction of current. Seedling establishment is parallel with the ripple marks, forming vegetated ridges separated by depressions, which gradually fill with sediments, and the plants then grow laterally into them, forming a meadow (C. den Hartog 1970). The vegetation lowers the velocity of current flow, causing some suspended particles to settle out and accumulate around the base of the plants, slowly building the substrate. As more particles accumulate, the substrate gets deeper over the rhizomes, since the rhizomes grow horizontally, not vertically. Eventually, the rhizomes are too deep, and the plants begin to die back, a phenomenon followed by erosion."