Washington Flora Checklist

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

Family: Ranunculaceae

106 terminal taxa (species, subspecies, and varieties).

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.

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 <u>APG IV</u> 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 <u>2nd Edition of the Flora of the Pacific Northwest</u> except where superceded by new information.

Accepted names are indicated with blue font; synonyms with black font. Native species and infraspecies are marked with **boldface** font.

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

Created from the Washington Flora Checklist Database on May 6th, 2024 at 1:04am PST. Available online at https://burkeherbarium.org/waflora/

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Suggested citation:

Weinmann, F., P.F. Zika, D.E. Giblin, B. Legler. 2002+. Checklist of the Vascular Plants of Washington State. University of Washington Herbarium. <u>https://burkeherbarium.org/waflora/</u>. Accessed 06 May 2024.

Dicots:

Ranunculaceae [FNA3, HC, HC2] Buttercup Family

Synonyms: (none)

References: (none)

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. Columbian monkshood

ssp. columbianum [FNA3, HC2]

Fl. N. Amer. 1: 34. 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 lowa 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. tall bugbane

Cimicifuga elata Nutt. [FNA3, HC]

var. elata [HC2] tall bugbane

Actaea laciniata (S. Watson) J. Compton [HC2, KZ99]

Taxon 47(3): 621. cut-leaved bugbane, Mt. Hood bugbane

Cimicifuga laciniata S. Watson [FNA3, HC]

Actaea rubra (Aiton) Willd. [FNA3, HC, HC2]

Enum. Pl. 1: 561. 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. 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. threeleaf anemone, Columbian windflower

Anemone drummondii S. Watson [FNA3, HC, HC2] Bot. California. 2: 424. Drummond's anemone, Drummond's windflower

var. drummondii [FNA3, HC, HC2]

Bot. California. 2: 424. Drummond's anemone, Drummond's windflower

Anemone cairnesiana Greene Anemone californica Eastw. Anemone drummondii S. Watson ssp. drummondii [KZ99]

Anemone Iyallii Britton [FNA3, HC, HC2]

Ann. New York Acad. Sci. 6: 227. little mountain anemone, Lyall's anemone, Lyall's windflower

Anemone oligantha Eastw. Anemone quinquefolia L. var. Iyallii (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. cliff anemone, Pacific anemone

var. multifida [FNA3, HC, HC2]

In J. Lamarck et al., Encycl. suppl. 1: 364. 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. 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. 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. Oregon anemone, Oregon windflower

var. felix (M. Peck) C.L. Hitchc. [FNA3, HC, HC2]

Vasc. Pl. Pacif. N.W. 2: 329. Oregon anemone, western wood anemone

Anemone felix M. Peck

var. oregana [FNA3, HC, HC2] Proc. Amer. Acad. Arts. 22: 308. 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. 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. pasqueflower, prairie-crocus

var. multifida Pritz. [FNA3, HC2]

Linnaea. 15: 581. cliff anemone

Anemone Iudoviciana 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. 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. yellow columbine

Aquilegia flavescens S. Watson var. flavescens [KZ99] 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 formosa Fisch. ex DC. [FNA3, HC, HC2, KZ99]

Prodr. 1: 50. red columbine, Sitka columbine

var. formosa [FNA3, HC2]

Prodr. 1: 50.

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 × miniana (J.F.Macbr. & Payson) Cronk

Phytokeys 220: 31-38. hybrid columbine

Aquilegia flavescens S. Watson var. miniana A. Nelson & J.F. Macbr. Aquilegia flavescens S. Watson × Aquilegia formosa Fisch. ex DC. var. formosa [HC2]

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. 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. 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. 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 marsh-marigold

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 ± 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. PI. [Besser] 70. 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. Douglas's clematis, leatherflower, sugarbowls, vaseflower

var. hirsutissima [FNA3, HC2]

Fl. Amer. Sept. 2: 385. 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. 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.

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. Oriental clematis, Oriental virgin's bower

Clematis vitalba L. [FNA3, HC, HC2]

Sp. Pl. 1: 544. 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. 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. Oregon goldthread

Coptis occidentalis (Nutt.) Torr. & A. Gray [FNA3, HC, HC2]

Fl. N. Amer. 1:28. Idaho goldthread, western goldthread

Chrysocoptis occidentalis Nutt.

Coptis trifolia (L.) Salisb. [FNA3, HC, HC2]

Trans. Linn. Soc. London, Bot. 8:305. 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. basaltic larkspur

FNA3: "Hybrids between Delphinium basalticum and D . trolliifolium are known."

Delphinium × burkei Greene [FNA3, HC, HC2]

Erythea 2: 183 Burke's larkspur

The name <i>Delphinium burkei</i> Greene is often incorrectly applied to plants of <i>D. distichum</i>, 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. 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 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. two-spike larkspur

Delphinium strictum A. Nelson var. distichiflorum (Hook.) H. St. John

Delphinium glareosum Greene [FNA3, HC, HC2]

Pittonia. 3: 257. 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. 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 . x 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 . x 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. 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 [WTU]

Univ. Colorado Stud., Ser. D, Phys. Sci. 2: 126. line-petaled larkspur

Delphinium nuttallianum Pritz. var. lineapetalum (Ewan) C.L. Hitchc.

Delphinium menziesii DC. [FNA3, HC, HC2]

Syst. Nat. 1: 355. 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. Kittitas larkspur

Delphinium cyanoreios Piper f. multiplex Ewan

Endemic to Washington. Hybridizes freely with <i>D. distichum</i> where the two taxa come into contact. FNA3: "<i>Delphinium multiplex</i> hybridizes with <i>D . glaucum</i> and <i>D . distichum</i>.".

Delphinium nuttallianum Pritz. [FNA3, HC, HC2]

Repert. Bot. Syst. 1: 744. 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. Nuttall's larkspur

Delphinium nuttallii A. Gray ssp. nuttallii [FNA3]

Delphinium occidentale (S. Watson) S. Watson [FNA3, HC, HC2]

Man. Bot. Rocky Mt. 11. western larkspur

<i>D. occidentale</i> is a hybrid between <i>D. glaucum<i></i> and <i>D. barbeyi</i>.

var. occidentale [HC2] western larkspur

Delphinium stachydeum (A. Gray) Tidestr. [FNA3, HC, HC2]

Proc. Biol. Soc. Wash. 27: 61. 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. Sutherland's larkspur

Delphinium trolliifolium A. Gray [FNA3, HC, HC2]

Proc. Amer. Acad. Arts. 8: 375. cow-poison, poison larkspur

FNA3: "Hybrids between Delphinium trolliifolium and D. decorum , D. menziesii subsp. pallidum (D. x 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. 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. 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. 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. 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. 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. 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. 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 \times 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.

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. 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. 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. 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: "<i>Nigella damascena</i> 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 <i>Nigella damascena</i> 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. meadow buttercup

Ranunculus acris L. var. latisectus Beck

FNA3: "<i>Ranunculus acris </i> 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 <i>R . acris</i> var. <i>frigidus</i> Regel or <i>R . grandis</i> Honda var. <i>austrokurilensis</i> (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]

PI. Hartw. 295. plantain-leaved buttercup

Ranunculus alismaefolius Geyer [HC], orthographic variant

var. alismellus A. Gray [FNA3, HC2]

Proc. Amer. Acad. Arts. 7: 327. dwarf plantain-leaved buttercup

Ranunculus alismaefolius Geyer var. alismellus A. Gray [HC], orthographic variant

var. *alismifolius* [FNA3, HC2]

Pl. Hartw. 295. plantain-leaved buttercup

Ranunculus alismaefolius Geyer var. alismaefolius [HC], orthographic variant

var. hartwegii (Greene) Jeps. [FNA3, HC2]

Fl. Calif. 1: 534. 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. white western buttercup, water crowfoot, white water crowfoot

var. aquatilis [FNA3, HC2]

Sp. Pl. 1: 556. 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. 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. field buttercup, hungerweed

Ranunculus arvensis L. var. tuberculatus DC.

Ranunculus bulbosus L. [FNA3, HC, HC2]

Sp. Pl. 1: 554. St. Anthony's-turnip, bulbous buttercup

Ranunculus bulbosus L. var. dissectus Babey Ranunculus bulbosus L. var. valdepubens (Jord.) Brig.

FNA3: "<i>Ranunculus bulbosus</i> 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. California buttercup

var. californicus [FNA3, HC2]

Pl. Hartw. 295. 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. 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: "<i>Ranunculus cardiophyllus</i> 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 characteristics are often separated as <i>R. cardiophyllus</i> var. <i>subsagittatus</i> The characteristics are poorly correlated, however, and taxonomic recognition is not warranted. Most specimens of <i>Ranunculus cardiophyllus</i> 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 <i>R. pedatifidus</i> in their morphology, and <i>R. cardiophyllus</i>

Ranunculus eschscholtzii Schltdl. [FNA3, HC, HC2]

Animadv. Bot. Ranunc. Cand. 2: 16. subalpine buttercup

var. eschscholtzii [FNA3, HC, HC2]

Animadv. Bot. Ranunc. Cand. 2: 16. 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. Suksdorf's buttercup

Ranunculus suksdorfii A. Gray [KZ99]

Ranunculus flabellaris Raf. [FNA3, HC, HC2]

Amer. Monthly Mag. & Crit. Rev. 2: 344. yellow water buttercup

Ranunculus delphiniifolius Torr. ex Eaton

Ranunculus flammula L. [FNA3, HC, HC2]

Sp. Pl. 1: 548. creeping buttercup, lesser spearwort

var. *flammula* [FNA3, HC2]

Sp. Pl. 1: 548. 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 x 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 x 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.

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. creeping spearwort

Ranunculus reptans L. Ranunculus reptans L. var. filiformis (Michx.) DC.

Ranunculus glaberrimus Hook. [FNA3, HC, HC2]

Fl. Bor.-Amer. 1: 12. sagebrush buttercup

var. ellipticus (Greene) Greene [FNA3, HC, HC2]

Fl. Francisc. 1: 298. 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. sagebrush buttercup

Ranunculus glaberrimus Hook. var. typicus L.D. Benson

Ranunculus gmelinii DC. [FNA3, HC, HC2]

Syst. Nat. 1: 303. 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: "<i>Ranunculus gmelinii</i> 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. 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. downy buttercup

Ranunculus inamoenus Greene [FNA3, HC, HC2]

Pittonia. 3: 91. graceful buttercup

var. inamoenus [FNA3, HC2]

Pittonia. 3: 91. 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. 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, <i>Ranunculus macounii</i> 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 <i>R. macounii</i> var. <i>oreganus</i>."

Ranunculus muricatus L. [FNA3, HC, HC2]

Sp. Pl. 1: 555. spiny-fruit buttercup

Ranunculus occidentalis Nutt. [FNA3, HC, HC2]

Fl. N. Amer. 1: 22. western buttercup

var. occidentalis [FNA3, HC, HC2]

Fl. N. Amer. 1(1): 22. 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. straight-beak buttercup

var. orthorhynchus [FNA3, HC, HC2]

Fl. Bor.-Amer. 1(1): 21, pl. 9. 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.

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. small-flower buttercup

Ranunculus pensylvanicus L. f. [FNA3, HC, HC2]

Suppl. Pl. 272. Pennsylvania buttercup

Ranunculus populago Greene [FNA3, HC, HC2] Erythea. 3: 19.

mountain buttercup

Ranunculus pygmaeus Wahlenb. [FNA3, HC, HC2]

Fl. Lapp. 157. dwarf buttercup

Ranunculus repens L. [FNA3, HC, HC2]

Sp. Pl. 1: 554. creeping buttercup

Ranunculus repens L. var. glabratus DC. Ranunculus repens L. var. pleniflorus Fernald [HC] Ranunculus repens L. var. repens [HC]

FNA3: "<i>Ranunculus repens</i> is widely naturalized in many parts of the world. Plants with sparse pubescence have been called <i>R . repens</i> var. <i>glabratus</i> . Horticultural forms with the outer stamens transformed into numerous extra petals occasionally become established and have been called <i>R . repens</i> var. <i>pleniflorus</i>. These variants have no taxonomic significance."

Ranunculus sardous Crantz [FNA3, HC, HC2]

Stirp. Austr. Fasc. 2: 84. hairy buttercup

Ranunculus parvulus L.

FNA3: "Native to Europe; Pacific Islands; Australia."

Ranunculus sceleratus L. [FNA3, HC, HC2]

Sp. Pl. 1: 551. 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. 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.

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 <i>Ranunculus triternatus</i> A. Gray to be an illegitemate homonym and used the illegitimate (superfluous) name <i>R . reconditus</i> A. Nelson & J. F. Macbride for this species. The name <i>Ranunculus triternatus</i> Poiret was not validly published (not accepted by Poiret) and does not invalidate <i>R . triternatus</i> A. Gray."

Ranunculus uncinatus D. Don [FNA3, HC, HC2]

Gen. Hist. 1: 35. 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 <i>Ranunculus uncinatus</i> var. <i>parviflorus</i>; these two characters are poorly correlated, however, and sometimes vary between plants in a single collection. <i>Ranunculus uncinatus</i> 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 <i>R . macounii</i>."

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. purple meadow-rue

Thalictrum hypoglaucum Rydb.

FNA3: "<i>Thalictrum dasycarpum </i>is a variable species similar to, and possibly intergrading with, <i>T. pubescens</i>. Glabrous variants of <i>T. dasycarpum</i> have been treated as <i>T. dasycarpum</i> var. <i>hypoglaucum</i>. Glabrous and glandular (stipitate and papillate) forms are found throughout the range of the species and occur together in some populations. Native Americans used <i>Thalictrum dasycarpum</i> 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. 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: "<i>Thalictrum occidentale</i> is similar to <i>T . confine</i> and <i>T . venulosum</i> ; thorough field studies are needed to determine whether or not they should be maintained as separate species. <i>Thalictrum occidentale</i> can usually be distinguished by its reflexed achenes. Plants of northern British Columbia, sometimes called <i>Thalictrum occidentale</i> var. <i>breitungii</i> (B. Boivin) Brayshaw, appear to be intermediate between <i>T. occidentale</i> and <i>T. venulosum</i> (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 <i>Thalictrum occidentale</i> 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. veiny-leaf meadow-rue

FNA3: "<i>Thalctrum venulosum</i> is similar to <i>T. confine</i> and <i>T. occidentale</i> . 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. false bugbane, wild bugbane

Trautvetteria caroliniensis (Walter) Vail var. occidentalis (A. Gray) C.L. Hitchc. [HC, KZ99]

FNA3: "Populations of <i>Trautvetteria caroliniensis</i> in western North America have been distinguished from the eastern typical material as <i>T. caroliniansis</i> var. <i>borealis</i> (Hara) T. Shimizu [synonym: <i>T. caroliniensis</i> var. <i>occidentalis</i> (A. Gray) C.L. Hitchcock]. Asian populations, long treated as the distinct species <i>T. japonica</i> Siebold & Zuccarini, were most recently regarded (T. Shimizu 1981; M. Tamura 1991) as conspecific with the North American populations [as <i>T. caroliniensis</i> var. j<i>aponica</i> (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. western globeflower

Trollius laxus Salisb. [FNA3, HC], misapplied *Trollius laxus* Salisb. var. *albiflorus* A. Gray [HC, KZ99]

FNA3: "The diploid <i>Trollius albiflorus</i> is isolated from the tetraploid <i>T. laxus</i> ecologically, geographically, and reproductively, although it often has been treated as a variety of the latter. Identities of specimens of <i>Trollius albiflorus</i> and the superficially similar <i>Anemone narcissiflora</i> subsp. <i>zephyra</i> 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 <i>Trollius