Washington Flora Checklist

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

Family: Ericaceae

63 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 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and synonymy at the rank of genus and below follows the 2nd Edition of the Flora of the Pacific Northwest except where superceded by new information.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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Available online at https://burkeherbarium.org/waflora-new/

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Dicots:

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."

var. *patula*
green-leaf manzanita

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.
common heather

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 moss-heather, 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, Merten's mountain-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-heath

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, possibly extirpated.

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]
Cycl. [A. Rees], (London ed.) 29: no. 7. 1814.
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

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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]

Fl. Bor.-Amer. (Michaux) 1: 234. 1803.
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 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

Monotropaceae: see Ericaceae

Pyrolaceae: see Ericaceae