Toward a Flora of Texada



Terry Ludwar collecting a specimen of $Polystichum\ californicum\ (California\ sword\ fern)\ 2016$



John Dove with Woodwardia fimbriata (giant chain-fern) 2007

Toward a Flora of Texada:

Assembling a checklist of the vascular flora of Texada Island has been a process of increasing interest. Texada is one of the remnants of the coastal Douglas fir biogeoclimatic zone and its related variants. It includes a range of elevations in its small mountains, plateaus and coastal bluffs. It has numerous ponds, lakes and wetlands. Most of the island is composed of ancient basaltic lava flows that outcrop over about three-quarters of the area with the rest of the bedrock being massive limestone found mainly in the northern quarter. Sedimentary sands and gravels of glacial origin overlie the bedrock in many parts of the island and sometimes are as much as 50 metres in

thickness. The effects of logging, limestone quarries, and some mineral extraction have diminished various ecosystems. Texada luckily so far has not suffered excessive human development. After a number of years of exploring as a visitor and then residing here it has become more obvious Texada's Flora is of note from the point of view of biodiversity. With naturally limited boundaries as an island, the scope of observation, collection and photography appears within the grasp of professional botanists, citizen botanists and those interested in our plant diversity. The work done on Texada by professional botanists has of course been invaluable. It is hoped that documentation of non-vascular plants will be added in the future as well as annotations (including locations) to the existing list.

As of 2018, this checklist has been prepared by Terry Ludwar tludwar@yahoo.com), in alphabetical order by genus with the assistance of John Dove. John provided botanist Harvey Janszen's working list titled "Texada Island Collections" to me on 03/09/2007. These are primarily voucher specimens which were submitted to the University of British Columbia Herbarium and/or the Royal BC Museum Herbarium with some information also going to the BC Conservation Data Centre. In addition there are some earlier records of interest, for example by John M. Macoun (1913) and a colleague, George Mercer Dawson, (1885). On the basis of these earlier collections and observations both John Dove and Terry Ludwar have been expanding the lists with further field work and also help from members of the hiking group, the Texada Trekkers, led by John Dove. I am responsible for documenting changing nomenclature when required and further editing. A second list was provided to me in January of 2016 by Harvey Janszen titled "Texada Island Vascular Plants, Observed Only". These lists have been merged. Subsequently, I was provided with material from the Consortium of Pacific Northwest Herbaria which contains the holdings of both BC Herbaria related to Texada Island.

This online checklist is the listing of all vascular plants on Texada Island either collected by botanists for BC Herbaria (the UBC Herbarium, the RBC Museum Herbarium in Victoria and the BC Conservation Data Centre) or by Texada residents and others. Nowadays there seems to be increased interest in knowing much more about native plants and also to keep in touch with the arrival of introduced species (weeds, exotics, garden escapes or invasive species).

This checklist is assembled and prepared by "self-taught" citizen botanists on Texada Island and built upon a large number of records made by professional botanists. Ever since the internet arrived at the point of scanning books and other publications, the presence of online Floras and checklists has kept pace as a vehicle for easier and more frequent publication. This allows reasonably accessible information on British Columbia's wealth of plants and their ecosystems. It is now possible to publish a checklist for a particular location to use alongside such important websites as E-Flora BC with its photo gallery, line drawings and and descriptions. A major source has been the downloadable 8 volume *Illustrated Flora of British Columbia* (edited by George W. Douglas, Gerald B. Straley, Del Meidinger and Jim Pojar, first published in print form by the British Columbia government branch:-- Ministry of Environment, Lands and Parks

[at the time]) from 1998 - 2000s. E-Flora species pages also include distribution maps for known locations of each species included in its flora. All this allows users of our checklist to simultaneously consult E-Flora using its enhanced presentation.

Here is a verbatim statement made in BEN (Botanical Electronic News) 402 January 26, 2009 by Adolph Ceska (editor) regarding plant research on Texada in an article titled *Polystichum californicum* (Dryopteridaceae) found again on Texada Island, British Columbia:

"Texada Island is the largest of the Gulf Islands between Vancouver Island and the British Columbia Mainland. Because of its size and limited accessibility, Texada Island is still poorly known botanically, although good collecting efforts have been made lately by John Dove and Terry Ludwar. Harvey and Pamela Janszen with Marie Fontaine and Patrick Williston made three visits to Texada Island (with Marie Fontaine in June 1997, another in July 1997, and one trip with Patrick Williston in 1999) and collected several species of *Botrychium* and found several new locations for *Ophioglossum pusillum* Raf. Their effort was aimed at pteridophytes and the highland plateau of Texada Island as the possible habitats of moonworts (Janszen 1999)." (Used with permission and thanks).

It must be further noted that Harvey Janszen's considerable botanical knowledge has made it possible to list much of the flora of Texada including grasses, sedges, rushes, ferns, and fern allies. He has provided occurrence information used on E-Flora BC's distribution maps including red- and blue-listed species.

Harvey Janszen has also compiled two lists on nearby Gulf Islands. One list covers vascular plants found on Saltspring Island, near Vancouver Island, north of San Juan Island, completed in April 1999 with 625 species. The other list, again of vascular plants, covers plants found on the outer Gulf Islands, near but not including Saltspring Island, all north of the San Juan Islands. Included are Saturna, Mayne, Galiano, North and South Pender and Prevost Islands, and the smaller islands near these. The list is based on collections of Harvey Janszen and others from 1973 to 1998 with 727 species.

Note:

JD = John Dove

HJ = Harvey Janszen with Pam Janszen and Marie Fontaine (Harvey Janszen spelled out in full indicates a single collector.)

TL = Terry Ludwar

JPM = John Pinder-Moss with C. Marchand and P. Hamlyn

An asterisk (*) denotes plants observed only without a collection for an Herbarium. Dates are provided by years where known.

B.C. List Status (from the BC Conservation Data Centre)*

Species are assigned to provincial lists depending on their Provincial Conservation Status (see table below). The lists are as follows:

Extinct: Species that no longer exist. This status is only assigned if the Global Conservation Status rank is GX.

Red: Includes any indigenous species or subspecies that have, or are candidates for, Extirpated, Endangered, or Threatened status in British Columbia. Extirpated taxa no longer exist in the wild in British Columbia, but do occur elsewhere. Endangered taxa are facing imminent extirpation or extinction. Threatened taxa are likely to become endangered if limiting factors are not reversed. Not all Red-listed taxa will necessarily become formally designated. Placing taxa on these lists flags them as being at risk and requiring investigation.

Blue: Includes any indigenous species or subspecies considered to be of Special Concern (formerly Vulnerable) in British Columbia. Taxa of Special Concern have characteristics that make them particularly sensitive or vulnerable to human activities or natural events. Blue-listed taxa are at risk, but are not Extirpated, Endangered or Threatened.

Yellow: Includes species that are apparently secure and not at risk of extinction. Yellow-listed species may have red- or blue-listed subspecies.

Exotic: Species that have been moved beyond their natural range as a result of human activity. Exotic species are also known as alien species, foreign species, introduced species, non-indigenous species and non-native species. Exotic species are excluded from the Red, Blue and Yellow Lists as a Provincial Conservation Status Rank is not applicable (i.e. SNA)

Accidental: Species occurring infrequently and unpredictably, outside their usual range. Accidental species are excluded from the Red, Blue and Yellow Lists as a Provincial Conservation Status Rank is not applicable (i.e., SNA)

Unknown: Includes species or subspecies for which the Provincial Conservation Status is unknown due to extreme uncertainty (e.g., S1S4). It will also be 'Unknown' if it is uncertain whether the entity is native (Red, Blue or Yellow), introduced (Exotic) or accidental in B.C. This designation highlights species where more inventory and/or data gathering is needed.

No Status: Includes species that have not been ranked (i.e., Provincial Conservation Status Rank is SNR). No Status is also assigned to an animal when all subspecies or populations of a species are assigned to either the Red List or the Blue List. For example, there are two populations of Western Painted Turtle in B.C.; one population is on the Red List, the other is on the Blue List. The species record for Western Painted Turtle is therefore not assigned to a list.

Conservation Status & B.C. List

	Red List	Blue List	Yellow List
Animals* (Regularly Occurring)	SX, SH, S1, S1S2, S1S3, S2,	S2S3, S2S4, S3, S3?, S3S4,	S4, S4?, S4S5, S5

	S2?	S3S5	
Plants	SX, SH, S1, S1S2, S1S3, S2, S2?	S2S3, S2S4, S3, S3?	S3S4, S3S5, S4, S4S5, S5

B.C. Conservation Data Centre

The B.C. Conservation Data Centre (CDC) assists in the conservation of our province's biodiversity by collecting and sharing scientific data and information about wildlife and ecosystems in B.C.

The CDC is a member of NatureServe, a global network of more than 80 Conservation Data Centres and equivalent programs, covering all states and provinces, and many Latin American and Caribbean countries. The programs share common methodologies for collecting and managing information, which allows them to pool data for conservation assessment and planning across geopolitical boundaries.

The primary functions of the CDC are to:

- Compile a list of species and ecosystems that occur in B.C.: The list is based on current literature and expert advice <u>look up groups that have been compiled</u>.
- Assess conservation status ranks: Based on collaboration with scientists and experts across the country, the CDC assigns status ranks for B.C.'s species and ecosystems according to their level of risk of being lost.
- Map known locations (element occurrences): Maps include information about the locations of species or ecosystems that are at risk of being lost and compiles information on these occurrences.
- Make data and information available: The CDC disseminates data and information about species and ecosystems in B.C. in easily accessible formats to serve its wide-ranging client base.

The British Columbia Conservation Data Centre is a centralized data source: Data or information is collected and assembled from provincial government data systems, other levels of government, museums, herbaria, universities, non-government organizations, published and unpublished reports, theses, scientists, natural history groups, and the ongoing work of CDC staff and contractors. Information is stored and managed in a data system common to all conservation data centres across North America and much of Latin America. The BC CDC is easily available online: B.C. Conservation Data Centre. www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk/conservation-data-centre Web. (date accessed).

Note: All occurrences listed below that are not listed as red- or blue- are considered yellow-listed. (See above.)

This section is to acknowledge the use of information employed throughout the checklist of vascular plants on Texada. As mentioned above, the website E-Flora BC is invaluable for a host of reasons. It has been a reference and a standard for such things as botanical names, common names, species occurrences recorded on its distribution maps and the most current subtaxa of species listed. E-Flora BC photo galleries have been useful for questions of identification. Rather than noting each species searched with a separate citation here is a single one as a matter of economy:

In Klinkenberg, Brian. (Editor) 2017. E-Flora BC: Electronic Atlas of the Plants of British Columbia [eflora.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver. [Accessed: 2008 – 2018]

E-Flora BC also provides links to other sites which have been frequently accessed such as the Consortium of Pacific Northwest Herbaria and Flora of North America among others. I have also made use of the database of the UBC Herbarium.

For the benefit of non-specialist users or those with a more limited botanical background, I am including a couple of definitions to assist understanding of what is the first stage of what is referred to as a "Flora". Here is a definition provided by Wikipedia: "The flora of a particular area or time period can be documented in a publication also known as a "flora" (often capitalized as "Flora" to distinguish the two meanings when they might be confused). Floras may require specialist botanical knowledge to use with any effectiveness. Traditionally they are books, but some are now published on CD-ROM or websites." "The word "flora" comes from the Latin name of Flora, the goddess of plants, flowers, and fertility in Roman mythology."

The term "vascular" plants has been defined by The Free Dictionary as: Any of numerous plants, including the seed plants and the ferns, having well-developed vascular tissues consisting of phloem to transport sucrose and other organic nutrients and xylem to transport water and minerals. Also from Wikipedia: Vascular plants (from Latin vasculum: duct), also known as tracheophytes (from the equivalent Greek term trachea) and also higher plants, form a large group of plants (c. 308,312 accepted known species [5]) that are defined as those land plants that have lignified tissues (the xylem) for conducting water and minerals throughout the plant. They also have a specialized non-lignified tissue (the phloem) to conduct products of photosynthesis. (i.e. sugars) Vascular plants include the clubmosses, horsetails, ferns, gymnosperms (including conifers) and angiosperms (flowering plants).

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The following material explains the usage of word/words placed in [] square brackets, at the end of some species entries indicating invasive plants, etc. taken from E-Flora BC.

E-FLORA BC INVASIVE, NOXIOUS AND PROBLEM PLANTS OF BRITISH COLUMBIA March 2012 update

A small number of vascular plants in British Columbia are considered invasive, noxious or problem weeds. These are alien species, usually ones that significantly impact rangelands, affect forestry and forest regeneration, or impact on our wetlands. Some are highly invasive and alter natural ecosystems. Some of these plants are legislated as noxious under the BC Weed Control Act (either province—wide or regionally), or are designated by provincial agencies or invasive plant councils as nuisance, noxious or invasive species and targeted for control. The following list provides a summary of 163 weed taxa that fall into these categories. The list is based upon an original list prepared by Tanya Perzoff and also includes additional taxa that have been recently identified as invasive by BC botanists and species added to the BC Weed Control Act in 2011. (See relevant section on E-Flora BC.)

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^{*}Abies grandis grand fir HJ

^{*}Acer glabrum var. douglasii Douglas maple; Rocky Mountain maple HJ, JD 2015

^{*}Acer macrophyllum big-leaf maple; Oregon maple TL 2015

Achillea millefolium yarrow; common yarrow M. Ridewood 1958

**Achlys triphylla* vanilla leaf; deer foot; sweet-after-death HJ

Adenocaulon bicolor pathfinder; American trailplant John M. Macoun 1885, *HJ

Adiantum aleuticum northern maidenhair fern; Aleutian maidenhair JPM 1974

Agoseris grandiflora large-flowered agoseris; bigflower agoseris HJ 1997

Agoseris heterophylla spp. heterophylla annual agoseris; annual false dandelion HJ 1997

Agrostis capillaris colonial bentgrass Leon E. Pavlick 1985 (introduced from Europe)

Agrostis exarata spike bentgrass Leon E. Pavlick 1985, HJ 1997, Frank Lomer 2012

**Agrostis gigantea* redtop HJ 1997 (introduced from Europe)

Agrostis scabra hair bentgrass; rough bentgrass; winter bentgrass Geological Survey of Canada 1915, HJ *1996, 1997

Agrostis stolonifera creeping bentgrass Leon E. Pavlick 1985 (introduced from Europe)

Aira praecox early hairgrass; yellow hairgrass JPM 1974 (introduced from Europe)

**Aira caryophyllea* silver hairgrass HJ 1997 (introduced from Europe)

Allium acuminatum Hooker's onion; tapertip onion HJ 1997

Allium amplectens slimleaf onion; narrowleaf onion HJ 1997, 1998; Frank Lomer 2012 (blue-listed)

Allium cernuum var. cernuum nodding onion JPM 1974, Randy Bouchard 1976

Allium geyeri Geyer's onion Frank Lomer 2012 [subtaxa in BC: *Allium geyeri* var. *tenerum*] (blue-listed)

*Allotropa virgata candystick; sugarstick JD 2011

Alnus rubra red alder TL 2017

Alopecurus aequalis little meadow-foxtail; short awn foxtail HJ 1997

*Alopecurus geniculatus water meadow-foxtail; water foxtail HJ 1999 (introduced from Eurasia)

Ambrosia chamissonis silver burweed; silver burr ragweed John M. Macoun 1885, *HJ

**Amelanchier alnifolia* saskatoon; Saskatoon serviceberry TL 2015 [subtaxa in BC: *A. alnifolia* var. *semiintegrifolia*]

Amsinckia spectabilis seaside fiddleneck; woolly breeches John M. Macoun 1915, specimen collected by Dan Stewart, held by TL 2015, *TL 2017

Anagallis minima (Synonym: Centunculus minimus) chaffweed HJ 1997 (blue-listed)

*Anaphalis margaritacea pearly everlasting; western pearly everlasting HJ, TL 2015

*Anemone lyallii Lyall's anemone HJ

Anemone multifida cut-leaved anemone; Pacific anemone; Little Mountain thimbleweed HJ 1997

Anisocarpus madioides (Synonym: Madia madioides) woodland tarweed; woodland madia HJ 1997, *TL 2016

Antennaria umbrinella umber pussytoes HJ 1997 (cultivated at home, but no voucher specimen for UBC Herbarium or Royal BC Museum Herbarium)

**Anthemis cotula* stinking chamomile; mayweed HJ (introduced from Europe)

**Anthoxanthum odoratum* sweet vernalgrass HJ, Frank Lomer 2012 (introduced from Eurasia)

*Anthriscus sylvestris wild chervil TL 2014 (rare in SW and SE BC, noxious weedy species introduced from Europe)

*Aphanes arvensis field parsley-piert TL 2015 (introduced from Eurasia)

Aphanes australis (Synonym: *Aphanes microcarpa*) small-fruited parsley-piert; slender parsley-piert Frank Lomer 2002 (introduced from Europe)

Apocynum androsaemifolium spreading dogbane HJ 1997 (2 subtaxa occur in BC: A. androsaemifolium var. androsaemifolium and A. androsaemifolium var. pumilum)

Apocynum cannabinum hemp; common dogbane; Indian hemp HJ 1997

Aquilegia formosa Sitka columbine; red columbine; western columbine HJ 1997 (subtaxa in BC: *A. formosa* ssp. *formosa*)

Arabis eschscholtziana (Synonym: Arabis hirsuta subsp. eschscholtziana) Eschscholz's rockcress; Eschscholtz's hairy rockcress HJ 1997 ("Often included in A. hirsuta, as the coastal form of that species.") [Source: The Illustrated Flora of BC]

Arabis glabra (See Turritis glabra)

Arabis hirsuta hairy rockcress HJ 1997

Arbutus menziesii arbutus; madrone; Pacific madrone JPM 1974

Arceuthobium campylopodum western dwarf mistletoe H. Rawlins 1932, HJ 1997

*Arctium minus common burdock; lesser burdock TL 2015 (introduced from Eurasia) [weed]

Arctostaphylos columbiana hairy manzanita HJ 1997

Arenaria serpyllifolia thyme-leaved sandwort HJ 1997 (introduced from Eurasia)

Artemisia suksdorfii Suksdorf's mugwort; coastal mugwort; coastal wormwood HJ 1997

*Asarum caudatum wild-ginger JD 2003, Micheline Macauley 2015

Aspidotis densa Indian's dream fern HJ 1997

Asplenium trichomanes maidenhair spleenwort; limestone maidenhair spleenwort JPM 1974, HJ 1997 (circumpolar) Notes: A variable species. Two chromosome races (diploid ssp. trichomanes and tetraploid ssp. quadrivalens D.E. Meyer) were reported from North America (Moran 1982, Wagner et al. 1993), but their distribution in British Columbia is poorly known and requires further study. (Source: *The Illustrated Flora of BC*)

Asplenium trichomanes ssp. *quadrivalens* limestone maidenhair spleenwort (2n = 144) JPM 1974, Frank Lomer 2012

Aster subspicata (See Symphyotrichum subspicatum)

*Athyrium filix-femina lady fern HJ 1999, TL 2015

Athyrium filix-femina var. cyclosorum lady fern JPM 1974

*Atriplex dioica (Synonym: Atriplex subspicata) saline orache; thinleaf orache HJ 1997, Frank Lomer 2012, TL 2015

*Aubrieta deltoidea lilacbush; purple rock cress TL 2017 (likely horticultural escape [exotic] mostly found on limestone and endemic to the Balkan peninsula, the Aegean and southwest Europe)

*Bellis perennis English daisy; lawn daisy HJ (introduced from Europe)

Berberis aquifolium (See Mahonia aquifolium)

Berberis nervosum (See Mahonia nervosa)

Betula papyrifera paper birch; canoe birch; white birch JD 2017

Notes: Numerous apparent hybrids between *Betula papyrifera* and *B. neoalaskana* or *B. occidentalis* (e.g., *B.* x utahensis and *B. subcordata* Rydb.) have been formally named (see Brayshaw 1996b, Scoggan 1979).

Two varieties occur in BC.

- 1. Mature bark white; fruiting bracts with ascending lateral lobes...... var. papyrifera
- 1. Mature bark white, yellowish- to reddish-brown or dark grey; fruiting bracts with lateral lobes diverging at right angles...... var. *commutata* (Regel) Fern. (Source: *The Illustrated Flora of BC*)

Blechnum spicant (Synonym: Struthiopteris spicant) deer fern JPM 1974

Bolboschoenus maritimus ssp. paludosus seacoast bulrush HJ 1997

Boschniakia hookeri (Synonym: Kopsiopsis hookeri) Vancouver groundcone; poque HJ 1997

Botrychyium ascendens upswept moonwort; trianglelobe moonwort HJ 1997, Harvey Janszen with Patrick Williston 1999 (blue-listed)

Botrychium lanceolatum triangle moonwort HJ 1997, Harvey Janszen with Patrick Williston 1999 (subtaxa present in BC: *B. lanceolatum* ssp. *lanceolatum*) [infrequent throughout BC] (Source: *The Illustrated Flora of BC*)

Botrychium multifidum (Synonym: Sceptridium multifidum) leathery grape fern HJ 1997, Harvey Janszen with Patrick Williston 1999

Botrychium pinnatum northwestern moonwort; northern moonwort Harvey Janszen with Patrick Williston 1999 (infrequent throughout BC) [Source: *The Illustrated Flora of BC*]

Botrychium simplex var. *compositum* least moonwort; little grape fern HJ 1997, Harvey Janszen with Patrick Williston 1999, Frank Lomer 2002 (blue-listed) (subtaxa present in BC: *B. simplex* var. *compositum*)

Botrychium virginianum (Synonym: Botrypus virginianus) rattlesnake fern Adolf Ceska 1981, HJ 1996, 1997

*Brasenia schreberi water shield; water target; watershield HJ, JD 2014

Brodiaea coronaria crown brodiaea; harvest brodiaea Maud Allen 1953, HJ 1997, *TL 2016 (subtaxa present in BC: B. coronaria ssp. coronaria)

Bromus carinatus (Synonym: Bromus carinatus var. marginatus) California brome HJ 1997

Notes: this is an extremely variable species consisting of numerous phases with mainly sympatric ranges. Two phases, var. *linearis* (with copiously soft-hairy sheaths and blades) and *B. marginatus* (with shorter awns), are sometimes given formal recognition. Hitchcock (1969) recognizes var. *linearis* and Hitchcock and Chase (1951) and Pavlick (1995) recognize *B. marginatus*, but there is no compelling evidence that they are taxonomically different. I have followed the treatments by Hitchcock (1969), Welsh (1974), Holmgren and Holmgren (1977) and Wilken and Painter (1993), which submerge *B. marginatus* within *B. carinatus*. (Source: *The Illustrated Flora of BC*)

Bromus commutatus meadow brome Leon E. Pavlick 1985, Frank Lomer 2002 (introduced from Europe)

*Bromus hordeaceus soft brome; soft chess HJ (introduced from Europe) (subtaxa present in BC: *B. hordeaceus* ssp. hordeaceus, *B. hordeaceus* ssp. thominei)

Bromus inermis smooth brome HJ 1997 (introduced from Eurasia) [moderate upland invasive]

Bromus racemosus (Synonym: *Bromus commutatus*) bald brome; smooth brome Leon E. Pavlick 1985, Frank Lomer 2002 (introduced from Eurasia)

*Bromus rigidus rip-gut brome; rip-gut Frank Lomer 2002 (introduced from Europe)

Bromus sitchensis Alaska brome Leon E. Pavlick 1985

Bromus tectorum cheat grass; downy brome HJ 1997, *Frank Lomer 2002 (native to Europe and southwestern Asia) [invasive, abundant]

Bromus vulgaris Columbia brome Leon E. Pavlick 1985, HJ 1997

*Buddleja davidii butterfly-bush; orange eye butterfly-bush TL 2015 (introduced from northwestern China) [invasive, spreading quickly]

*Buddleja davidii forma alba white butterfly-bush TL 2015

Calamagrostis canadensis var. langsdorfii bluejoint reedgrass; bluejoint Harvey Janszen 1996 (2 subtaxa present in BC: var. canadensis and var. langsdorfii) [var. canadensis - common throughout BC east of the Coast-Cascade Mountains, rare in coastal BC; var. langsdorfii - common in N BC east of the Coast-Cascade Mountains, less frequent southward; circumboreal]

Callitriche heterophylla large water-starwort HJ 1997 (2 subtaxa present in BC: C. heterophylla ssp. bolanderi) diverse-leaved water-starwort, C. heterophylla ssp. heterophylla two-edged water-starwort; twoheaded water-starwort)

Calypso bulbosa fairy-slipper orchid M. Ridewood 1958 (2 subtaxa present in BC: var. americana and var. occidentalis) ["var. occidentalis common W of the Coast-Cascade mountains ... var. americana common E of the Coast-Cascade mountains ..."] (Source: The Illustrated Flora of BC)

Camassia quamash common camas; small camas JPM 1974, *JD 1975

*Campanula medium Canterbury bells HJ (rare garden escape in coastal SW BC; introduced from Europe)

Campanula rotundifolia common harebell; bluebell bellflower; bluebells-of-Scotland HJ 1997

Campanula scouleri Scouler's harebell; pale bellflower Frank Lomer 2012, *JD 2017, *TL 2017

Cardamine hirsuta hairy bitter-cress M. Ridewood 1958 (introduced from Eurasia)

Cardamine oligosperma little western bitter-cress; alpine bitter-cress; Siberian bitter-cress M. Ridewood 1958

Carex arcta northern clustered sedge Maud Allen s.n. 1954

Carex aurea golden sedge HJ 1999

Carex bebbii Bebb's sedge M.A. Allen 1954, HJ 1997

Carex bolanderi Bolander's sedge Frank Lomer 2002

Carex brunnescens brownish sedge HJ 1997

Carex buxbaumii Buxbaum's sedge; club sedge UBC CAN (not confirmed on BC E-flora species map)

Carex canescens silvery sedge; Columbia sedge; grey sedge; white sedge HJ 1996, 1999 (2 subtaxa present in BC: *C. canescens* ssp. *canescens*, *C. canescens* ssp. *disjuncta*)

Carex cusickii Cusick's sedge Oldriska Ceska s.n. 1978, *HJ

*Carex deweyana Dewey's sedge HJ

*Carex disperma soft-leaved sedge; softleaf sedge HJ 1999 (rare in coastal BC)

*Carex echinata star sedge HJ 1997 (2 subtaxa present in BC: *C. echinata* ssp. echinata, *C. echinata* ssp. phyllomanica)

Carex exsiccata inflated sedge; western inflated sedge M.A. Allen 1954 (UBC Herbarium)

Carex feta green-sheathed sedge HJ 1997 (blue-listed) [rare in SW BC]

Carex garberi Garber's sedge; elk sedge Frank Lomer 2002 (2 subtaxa present in BC: *C. garberi* ssp. *bifaria*, *C. garberi* ssp. *garberi*)

*Carex hendersonii Henderson's sedge HJ

*Carex inops long-stoloned sedge; long-stolon sedge HJ 1997 (2 subtaxa present in BC: C. inops ssp. heliophila, C. inops ssp. inops)

*Carex interior inland sedge HJ 1999

Carex kelloggii (See Carex lenticularis)

*Carex lasiocarpa slender sedge; woolly fruit sedge HJ (subtaxa present in BC: C. lasiocarpa ssp. americana)

Carex lenticularis (Synonym: Carex kelloggii) lakeshore sedge HJ 1996 (blue-listed)

Carex leptalea bristle-stalked sedge; bristlystalked sedge Oldriska Ceska s.n. 1978, HJ 1996, HJ 1999 (2 subtaxa present in BC: C. leptalea ssp. leptalea, C. leptalea ssp. pacifica) [C. leptalea ssp. leptalea east of Coast-Cascade mountains, C. leptalea ssp. pacifica west of Coast-Cascade mountains)

Carex limosa shore sedge; bog sedge; mud sedge HJ 1997

Carex lyngbyei Lyngbye's sedge; inland sedge Christopher J. Marchant 1974, HJ 1997 (subtaxa present in BC: *Carex lyngbyei* ssp. *cryptocarpa*)

*Carex obnupta slough sedge HJ 1997

Carex ovalis (Synonym: Carex tracyi) hare sedge HJ 1997

Carex pachystachya thick-headed sedge; chamisso sedge Adolf Ceska 1981, HJ 1997, *Frank Lomer 2002

*Carex rostrata swollen-beaked sedge HJ 1997 (previously blue-listed)
Because Carex rostrata is rare (blue-listed) in British Columbia, it is important to be able to distinguish it from the common *C. utriculata*. With a few tips this can easily be done in the field and herbarium. The foliage of *C. rostrata* has a whitish-green to grayish blue-green appearance, and *C. utriculata* tends to be pale-green to green. These species often co-occur with *C. rostrata* preferring the wetter parts of a wetland and *C. utriculata* preferring the drier parts.

The whitish-green to grayish blue-green colour of *C. rostrata* seems to be caused by many tiny, tightly packed pimples (papillae) on the top (adaxial) side of the leaves. These papilla can only be seen with the aid of magnification strong enough (about 20-30X) to clearly see the tissue between the veins of the leaves (Fig. 2). The adaxial leaf surface of *C. utriculata* is usually smooth and green but may have some bumps (scabrous), however they do not affect the leaf morphology enough to alter the colour.

In the absence of magnification these two species can still be discerned based on macromorphological leaf characters. The leaves of *C. rostrata* are narrow (rarely up to 4.5 mm wide), broadly U-shaped in cross section; the margins are rolled up back toward the centre of the adaxial surface (involute); and the bottom (abaxial) side lacks a thin, short ridge running down its centre. The leaves of *C. utriculata* are broad (>4.5 mm wise), broadly gull-winged to flat in cross section, do not have involute margins, and the abaxial surface has a thin short ridge running down its centre. The *Flora of North America* has a very nice plate (Ball & Reznicek 2002, p. 505) that illustrates the leaf cross-section profile of *C. utriculata* and the papilla of *C. rostrata* very well. However, this plate does not show the involute margins of *C. rostrata* (Ball & Reznicek 2002, p. 505).

Note Author: Chris Sears, Vegetation Biologist

Carex sitchensis (Synonym: Carex aquatilis var. dives) Sitka sedge Leon E. Pavlick 1985, HJ 1997

Carex stipata awl-fruited sedge; owlfruit sedge; sawbeak sedge HJ 1997 (subtaxa present in BC: Carex stipata var. stipata)

Carex tracyi (See Carex ovalis)

Carex unilateralis one-sided sedge; lateral sedge Frank Lomer 2002

Carex viridula greenish sedge; green sedge; little green sedge Leon E. Pavlick 1985, HJ 1996 (subtaxa present in BC: Carex viridula ssp. viridula) Frank Lomer 2002

Catabrosa aquatica water whorl grass; brookgrass; water whorlgrass HJ 1999 [rare in SW BC, Texada Island where probably introduced] (red-listed) (subtaxa present in BC: *C. aquatica* var. *aquatica*)

Centaurea diffusa diffuse knapweed HJ 1997 (introduced from the eastern Mediterranean region) [invasive, noxious]

Centaurea nigrescens (Synonyms: *Centaurea debeauxii* subsp. *thuillieri*, *Centaurea pratensis* Thuill., nom. illeg., non Salisb.) short-fringed knapweed; Tyrol knapweed HJ 1997, Dave Opko s.n. 2004 (introduced from Europe) [invasive]

Centaurea x moncktonii meadow knapweed Frank Lomer 2012 (introduced from Eurasia) [invasive]

*Centaurium erythraea common centaury; European centaury JD 2014 (introduced from Europe)

*Cerastium arvense field chickweed TL 2015

Cerastium fontanum ssp. *triviale* common mouse-ear chickweed; mouse-ear chickweed M. Ridewood 1958 (introduced from Eurasia)

*Cerastium glomeratum sticky chickweed HJ 1999 (introduced from Eurasia)

*Cerastium tomentosum snow-in-summer TL 2007 (introduced from Europe)

*Chenopodium rubrum red goosefoot TL 2007 (2 subtaxa present in BC: *C. rubrum* var. humile, *C. rubrum* var. rubrum)

Chimaphila menziesii Menzies' pipsissewa HJ 1997, *TL 2017

Chimaphila umbellata prince's pine; strawberry blite M. Ridewood 1958, JPM 1974, HJ 1997

*Cichorium intybus chicory; common chicory HJ 1997 (introduced from Europe) [nuisance, disturbed sites]

Circaea alpina enchanter's-nightshade; small enchanter's nightshade Adolf Ceska 1981 (2 subtaxa present in BC: *C. alpina* ssp. *alpina*, *C. alpina* ssp. *pacifica* HJ 1997)

*Cirsium arvense Canada thistle HJ (introduced from Eurasia) [noxious, abundant]

*Cirsium brevistylum short-styled thistle; clustered thistle HJ

*Cirsium vulgare bull thistle HJ 1997 (introduced from Eurasia) [noxious, abundant]

Claytonia parviflora streambank spring beauty HJ 1997, *TL 2016 (subtaxa present in BC: *C. parviflora* ssp. *parviflora*)

*Claytonia perfoliata miner's lettuce TL 2011 (subtaxa present in BC: *C. perfoliata* ssp. *perfoliata*).

Claytonia rubra redstem spring beauty *TL 2016 (2 subtaxa present in BC: *C. rubra* ssp. *depressa*, Frank Lomer 2002; *C. rubra* ssp. *rubra* Frank Lomer 2002) Moist to dry sand dunes, meadows, open forests and rock outcrops in the lowland, steppe and montane zones; rare on SE Vancouver Island, the Gulf Islands and the lower mainland (ssp. *depressa*), frequent in SC BC (ssp. *rubra*); S to SD, CO and CA) [Source: *The Illustrated Flora of BC*]

Claytonia sibirica Siberian miner's lettuce; Siberian spring beauty Adolf Ceska 1981, *HJ

Clinopodium douglasii yerba buena M. Ridewood 1958

Collinsia grandiflora large-flowered blue-eyed Mary; giant blue-eyed Mary M. Ridewood 1958, Ian Cumming 2008

Collinsia parviflora small-flowered blue-eyed Mary; maiden blue-eyed Mary JPM 1974

Collomia heterophylla vari-leaved collomia; variable-leaf collomia) HJ 1997, *TL 2017

*Comarum palustre (Synonym: Potentilla palustris) marsh cinquefoil; purple marshlocks HJ

*Conioselinum gmelinii (Synonym: Conioselinum pacificum) Pacific hemlock-parsley HJ

*Convolvulus arvensis field bindweed; European bindweed; field morning glory; morning glory; small-flowered morning glory TL 2016 [nuisance, abundant]

*Conyza canadensis horseweed; Canadian fleabane; Canadian horseweed HJ (introduced, native range uncertain)

Corallorhiza maculata summer coralroot HJ 1997, *TL 2015 (3 subtaxa present in BC: C. maculata var. maculata [spotted coralroot], C. maculata var. occidentalis [western spotted coralroot], C. maculata var. ozettensis [Ozette coralroot])

Corallorhiza mertensiana western coralroot; Pacific coralroot Harvey Janszen 1999

Coreopsis lanceolata garden coreopsis; lanceleaf tickseed Frank Lomer 2002 (possibly introduced through "wildflower" seeding after gas line installation, John Dove pers.

communication) [appears to have naturalized] (alternatively: introduced from eastern North America)

Cornus canadensis bunchberry; Canadian bunchberry; bunchberry dogwood HJ 1997

*Cornus nuttallii western flowering dogwood; Pacific dogwood JD 1981

*Cornus stolonifera red-oisier dogwood HJ, TL 2015

Cotoneaster dammeri bearberry cotoneaster Frank Lomer 2012 (introduced from Asia)

Cotoneaster horizontalis rock cotoneaster; rockspray cotoneaster Randy Bouchard with Dorothy Kennedy 1976 [from herbarium of Nancy J. Turner], *HJ, *Frank Lomer 2002, *TL 2015 (introduced from Europe)

Crepis capillaris smooth hawksbeard Adolf Ceska 1976 (introduced from Europe)

Cryptogramma acrostichoides parsley fern; American rockbrake HJ 1997

*Cuscuta pacifica (Synonym: Cuscuta salina) salt marsh dodder; alkali dodder HJ, TL 2007 (Sturt Bay parasitizing Sarcocornia pacifica) (subtaxa present in BC: Cuscuta pacifica var. pacifica)

Parasitic on plants of the Amaranthaceae and Asteraceae on saline sites in the lowland zone; locally frequent in SW BC, known from S Vancouver Island, the Gulf Islands and the lower Fraser Valley; S to UT, AZ, CA and MX. (Source: *The Illustrated Flora of BC*)

Cymbalaria muralis ivy-leaved toadflax; Kenilworth ivy M. Ridewood 1958 (introduced from Eurasia)

*Cystopteris fragilis fragile fern; brittle bladderfern HJ, TL 2015

*Cytisus scoparius Scotch broom; common broom; Scot's broom; Scottish broom HJ, TL 2015 (introduced from Europe) [highly invasive]

*Dactylis glomerata orchard grass HJ, Frank Lomer 2012 (introduced from Eurasia)

Danthonia californica California oatgrass HJ 1997

Danthonia spicata poverty oatgrass Leon E. Pavlick 1985, HJ 1997, *1999

Daphne laureola spurge laurel TL 2017 (introduced from Eurasia) [agriculture/urban weed]

Daphne mezereum February daphne Frank Lomer 2012 (introduced from Eurasia)

*Daucus carota wild carrot; Queen Anne's lace TL 2007 (introduced from Eurasia) [invasive]

Daucus pusillus American wild carrot HJ 1997, *TL 2015

Deschampsia elongata slender hairgrass Leon E. Pavlick 1985, *HJ

Dicentra formosa Pacific bleeding heart HJ 1997

Dichanthelium acuminatum ssp. fasciculatum western witchgrass; tapered rosette grass HJ 1997 (subtaxa present in BC: D. acuminatum ssp. fasciculatum)

Dichanthelium oligosanthes ssp. scribnerianum (Synonym: Panicum oligosanthes) Scribner's witchgrass; Heller's rosette grass HJ 1997 (subtaxa present in BC: D. oligosanthes ssp. scribnerianum)

*Digitalis purpurea foxglove HJ, TL 2015

Foxglove is an introduced (European) garden flower in North America that has escaped and is now found throughout the northeastern and western United States and several Canadian provinces. (Source: *The Illustrated Flora of BC*) [abundant]

Diphasiastrum alpinum (Synonym: Lycopodium alpinum) alpine club-moss HJ 1997

Diphasiastrum complanatum (Synonym: Lycopodium complanatum) ground-cedar HJ 1997

Diphasiastrum sitchense (Synonym: Lycopodium sitchense) Alaska club-moss HJ 1997

Distichlis spicata seashore saltgrass HJ 1997 (2 subtaxa present in BC: *D. spicata* var. *spicata* saltgrass; seashore saltgrass, *D. spicata* var. *stricta* alkali saltgrass)

*Dodecatheon hendersonii (Synonym: *Primula hendersonii*) Henderson's shooting star; broad-leaved shooting star JD 2016 (subtaxa present in BC: *D. hendersonii* var. hendersonii)

This species, with its flattened rosettes of broadly ovate leaves and rice-like bulblets at the base of the plant, is easily identified within its very limited provincial distribution. It commonly occurs within the forest understory in dry or mesic upland habitats, which is unlike other co-occurring species of *Dodecatheon* (other species are largely restricted to meadows, estuaries, and other open, moist habitats). *D. hendersonii* var. *hendersonii* is a major component of the spectacular early spring wildflower bloom within its range, blooming in abundance alongside species such as *Lomatium utriculatum*, *Erythronium oregonum* ssp. *oregonum*, and a variety of *Claytonia* species. Where the two species occur together on southern Vancouver Island and the Gulf Islands, *D. hendersonii* typically

blooms several weeks earlier than *D. pulchellum* var. *macrocarpum*. [The Vascular Flora of British Columbia, draft 2014, author Jamie Fenneman]

*Dodecatheon pulchellum (Synonym: *Primula pulchellum*) few-flowered shooting star HJ, TL 2008 (3 subtaxa are present in BC: *D. pulchellum* [1] *cusickii*, [2] *macrocarpum*, [3] *pulchellum*)

*Draba verna common draba; common whitlow grass; spring draba Frank Lomer 2002 (introduced from Eurasia)

Drosera anglica great sundew; English sundew HJ 1997

Drosera rotundifolia round-leaved sundew; Carolina draba; roundleaf sundew JPM 1974 (subtaxa present in BC: D. rotundifolia var. rotundifolia)

Dryopteris carthusiana toothed wood fern; spinulose woodfern Miss M. Allen 1954

Dryopteris expansa spiny wood fern; spreading wood fern HJ 1997

Dryopteris filix-mas male fern Frank Lomer 2002, *TL 2017 (subtaxa present in BC: *D. filix-mas* ssp. *filix-mas*)

*Dulichium arundinaceum three-way sedge HJ 1997, 1999

Eleocharis macrostachya creeping spike-rush; pale spike-rush HJ 1996

Eleocharis palustris common spike-rush; creeping spike-rush HJ 1996

Elymus glaucus ssp. *glaucus* blue wildrye Leon E. Pavlick 1985, Fank Lomer 2012 (2 subtaxa present in BC: *E. glaucus* ssp. *glaucus*, *E. glaucus* ssp. *virescens*)

Elymus repens quackgrass; creeping wildrye Frank Lomer 2012 (introduced from Eurasia) [abundant in disturbed sites]

Epilobium anagallidifolium alpine willowherb; pimpernel willowherb JPM 1974

*Epilobium angustifolium fireweed HJ (2 subtaxa present in BC: E. angustifolium ssp. angustifolium, E. angustifolium ssp. circumvagum)

Epilobium brachycarpum tall annual willowherb HJ 1997

Epilobium ciliatum ssp. ciliatum purple-leaved willowherb; fringed willowherb HJ 1997 (3 subtaxa present in BC: E. ciliatum ssp. ciliatum, E. ciliatum ssp. glandulosum, E. ciliatum ssp. watsonii)

Epilobium foliosum foliose willowherb; California willowherb HJ 1997

Epilobium hornemanni Hornemann's willow herb HJ 1997 (2 subtaxa present in BC: *E. hornemanni* ssp. *behringianum*, *E. hornemanni* ssp. *hornemannii*) [Habitat/Range: Wet to moist rocky cliffs, meadows, thickets, and river banks in the montane zone; frequent throughout BC, especially along coast (ssp. *hornemannii*) to rare (ssp. *behringianum*), found only on Haida Gwaii; circumboreal ...] (Source: *The Illustrated Flora of BC*)

Epilobium minutum small-flowered willowherb; chaparral willowherb JPM 1974, HJ 1997, *Adolf Ceska 2008

*Equisetum arvense common horsetail; field horsetail HJ 1999

*Equisetum hyemale tall scouring rush; scouring rush horsetail; scouringrush horsetail HJ (subtaxa present in BC: *E. hyemale* ssp. *affine*)

Equisetum variegatum northern scouring-rush; variegated scouring rush Leon E. Pavlick 1985 (2 subtaxa present in BC: *E. variegatum* ssp. *alaskanum*, *E. variegatum* ssp. *variegatum*)

*Erigeron annuus annual fleabane; annual daisy; eastern daisy fleabane JD, TL 2007 (native status uncertain)

Erigeron flagellaris trailing fleabane; trailing daisy HJ 1997, *Dan Stewart 2017

Erigeron philadelphicus Philadelphia fleabane; Philadelphia daisy HJ 1997, *TL 2016 (2 subtaxa present in BC: *E. philadelphicus* var. *glaber*, *E. philadelphicus* var. *philadelphicus*)

*Eriophorum chamissonis Chamisso's cotton-grass HJ, *JD 2017, *TL 2017 (2 subtaxa present in BC: *E. chamissonis* var. *albidum*, *E. chamissonis* var. *philadelphicus*)

Eriophyllum lanatum var. *leucophyllum* common woolly sunflower; woolly eriophyllum HJ 1997 (subtaxa present in BC: *E. lanatum* var. *leucophyllum*)

Erodium cicutarium common stork's-bill; green mushroom pimple; orange mushroom pimple; redstem stork's bill HJ 1997 [subtaxa present in BC: *Erodium cicutarium* ssp. *cicutarium*] (introduced from Eurasia) [noxious]

Erythranthe alsinoides chickweed monkey-flower; wingstem monkey-flower JPM 1974

Erythranthe guttata yellow monkey-flower Harvey Janszen 1996, *TL 2015

Erythranthe moschata musk-flower S. Boys 1931, *TL 2016

Erythranthe tilingii mountain monkey-flower; Tiling's monkey-flower HJ 1996, 1997 (blue-listed)

*Eschscholtzia californica California poppy TL 2016 (introduced from western U.S.)

*Euphorbia cyparissias cypress spurge HJ, TL 2015 (introduced from Eurasia) [agriculture/urban weed]

Euphrasia nemerosa eastern eyebright HJ 1997 (introduced from Europe)

Festuca occidentalis western fescue Leon E. Pavlick 1985, HJ 1997

Festuca rubra red fescue G.M. Dawson 1885, HJ 1997, Frank Lomer 2012 (subtaxa present in BC: F. rubra ssp. rubra Leon E. Pavlick 1985)

Festuca subulata bearded fescue Leon E. Pavlick 1985, HJ 1997

Festuca subuliflora crinkle-awned fescue HJ 1997, Frank Lomer 2002

*Foeniculum vulgare sweet fennel TL 2017 (introduced from Europe)

*Fragaria vesca wood strawberry; woodland strawberry HJ 1999 (2 subtaxa present in BC: F. vesca var. americana, F. vesca var. bracteata)

Fragaria virginiana wild strawberry; Virginia strawberry Adolf Ceska 1981, *HJ

*Fritillaria affinis var. affinis chocolate lily; checker lily JD 1974, TL 2015

*Gaillardia aristata brown-eyed Susan; blanket flower; common gaillardia TL 2007 (possibly introduced through "wildflower" seeding after gas line installation, John Dove pers. communication)

Galeopsis tetrahit hemp-nettle; brittlestem hemp-nettle HJ 1997 (introduced from Eurasia)

*Galium aparine cleavers; sticky willy HJ

There is debate as to the origin status of this species. While some consider it native to North America, some feel it is introduced. It is possible it is native but that it has also been introduced from Europe (Gucker 2005).

References Gucker, Corey L. 2005. *Galium aparine*. In: *Fire Effects Information System*, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available Online. (Source: E-Flora BC) [noxious]

*Galium mollugo white bedstraw; false baby's breath HJ (introduced from Eurasia) [minor upland invasive]

Galium trifidum small bedstraw; threepetal bedstraw HJ 1997 (3 subtaxa present in BC: G. trifidum ssp. columbianum, G. trifidum ssp. subbiflorum HJ 1997, G. trifidum ssp. trifidum)

**Galium triflorum* sweet-scented bedstraw; fragrant bedstraw HJ (circumpolar)

Gamochaeta ustulata (Synonym: Gnaphalium purpureum var. purpureum) purple cudweed HJ 1997

Gaultheria humifusa alpine-wintergreen; alpine spicy wintergreen HJ1997

Gaultheria ovatifolia western tea-berry; Oregon wintergreen JPM 1974

Gaultheria shallon salal M. Ridewood 1958

*Gentiana sceptrum king gentian; king's scepter gentian HJ, JD 2011, TL 2011

Geranium carolinianum Carolina geranium; Carolina crane's-bill HJ 1997

Geranium dissectum cut-leaved geranium; cut-leaved crane's-bill HJ 1997 (introduced from Europe)

*Geranium molle dovefoot geranium; dovefoot crane's-bill HJ, TL 2015 (introduced from Eurasia)

Geranium pusillum small-flowered geranium; small-flowered crane's-bill; small geranium TL 2016 (introduced from Eurasia)

*Geranium robertianum Robert's geranium; herb-Robert; Robert geranium HJ, TL 2015 (introduced from Eurasia)

*Geum macrophyllum large-leaved avens; largeleaf avens HJ, TL 2015 (2 subtaxa present in BC: G. macrophyllum ssp. macrophyllum, G. macrophyllum ssp. perincisum)

Glaux maritima (Synonym: Lysimachia maritima) sea milkwort HJ 1997 (2 subtaxa present in BC: G. maritima ssp. maritima, G. maritima ssp. obtusifolia)

Glyceria borealis northern mannagrass; small floating mannagrass HJ 1996, 1997, 1999

Glyceria elata (Synonym: Glyceria striata) tall mannagrass Leon E. Pavlick 1985, HJ 1996

*Glyceria grandis reed mannagrass; American mannagrass HJ (subtaxa present in BC: *G. grandis* var. *grandis*)

Glyceria striata (Synonym: Glyceria elata) fowl mannagrass HJ 1997, 1999

*Gnaphalium palustre lowland cudweed; western marsh cudweed TL 2016 (introduced from Europe)

Gnaphalium purpureum var. purpureum (See Gamochaeta ustulata)

Gnaphalium stramineum (See Pseudognaphalium stramineum)

*Gnaphalium uliginosum marsh cudweed HJ, TL 2016 (introduced from Europe)

Goodyera oblongifolia rattlesnake plantain; large-leaved rattlesnake orchid; western rattlesnake plantain M. Ridewood 1958

Gratiola ebracteata bractless hedge-hyssop HJ 1997, *TL 2008

*Grindelia stricta (Synonym: Grindelia integrifolia) Oregon gumweed; entire-leaved gumweed; Puget Sound gumweed HJ 1997, 1998, Frank Lomer 2002, 2012, TL 2016

Gymnocarpium disjunctum western oak fern; Pacific oak fern HJ 1997

*Gymnocarpium dryopteris oak fern; western oak fern TL 2016

*Hedera helix English ivy TL 2017 (introduced from Eurasia) [invasive, primarily urban]

*Helleborus foetidus stinking hellebore TL 2018 (garden escape, appears to be naturalizing in several locations)

Hemitomes congestum gnome plant; cone plant ID 2007

*Heracleum mantegazzianum giant hogweed; giant cow parsnip; hogweed TL 2016 (native to the Caucasus region and is introduced and invasive in Europe and North America (Krinke et al. 2005) [noxious, nuisance]

*Heuchera glabra smooth alumroot; alpine heuchera TL 2015 (grown from seed for garden)

Heuchera micrantha var. diversifolia small-flowered alumroot; crevice alumroot JPM 1974, *TL 2016

*Hieracium albiflorum white hawkweed HJ, TL 2016

*Holcus lanatus common velvet-grass, Yorkshire fog HJ 1997 (introduced from Eurasia)

*Holodiscus discolor ocean spray; creambush HJ

Honckenya peploides ssp. major seabeach sandwort; seaside sandplant HJ 1997

Hordeum brachyantherum meadow barley HJ 1997, *Frank Lomer 2012 (subtaxa present in BC: *H. brachyantherum* ssp. brachyantherum)

Huperzia haleakalae alpine fir-moss; Pacific clubmoss Harvey Janszen 1996 *HJ 1997

Huperzia occidentalis western fir clubmoss; western clubmoss; western fir-moss Harvey Janszen 1996

*Hypericum anagalloides bog St. John's-wort; tinker's penny HJ, TL 2010

*Hypericum perforatum common St. John's-wort TL 2016 (introduced from Eurasia) [nuisance]

Hypericum scouleri ssp. nortoniae western St. John's-wort; Scouler's St. John's-wort HJ 1996, 1997 (2 subtaxa in BC: Hypericum scouleri ssp. nortoniae, Hypericum scouleri ssp. scouleri)

*Hypochaeris radicata hairy cat's ear HJ, TL 2015 (introduced from Europe) [agriculture/urban weed]

Iberis umbellata candytuft; globe candytuft Frank Lomer 2012 (introduced from Europe)

**Ilex aquifolium* English holly HJ ("... introduced shrub or small tree species in North America that is native to western and southern Europe, northwest Africa and southwest Asia." Source: E-Flora BC) [invasive, urban forests]

**Iris pseudacorus* yellow iris; pale yellow iris TL 2016 (frequent garden escape in southern BC; introduced from Europe) [noxious, invasive]

Isoetes maritima coastal quillwort; maritime quillwort Patrick Williston with Harvey Janszen, Pam Janszen 1999

Isoetes nuttallii Nuttall's quillwort HJ 1997 (blue-listed)

Isoetes tenella (Synonym: *Isoetes echinospora*) spiny-spore quillwort; bristle-like quillwort Patrick Williston with Harvey Janszen, Pam Janszen 1999

Jaumea carnosa fleshy jaumea; marsh jaumea; salty susan HJ 1997 (blue-listed)

Juncus articulatus jointed rush; jointleaf rush Leon E. Pavlick 1985, HJ 1996

Juncus covillei Coville's rush HJ 1997

*Juncus effusus common rush Leon E. Pavlick 1985, HJ (3 subtaxa present in BC: Juncus effusus ssp. effusus European rush (introduced from Eurasia), Juncus effusus ssp. pacificus Pacific soft rush (native), Juncus effusus ssp. solutus soft rush (introduced from Eurasia)

Juncus ensifolius dagger-leaf rush; swordleaf rush HJ 1997 (2 subtaxa present in BC: *J. ensifolius* var. *ensifolius*, *J. ensifolius* var. *montanus*)

Juncus falcatus sickle-leaved rush; falcate rush HJ 1996, 1997

*Juncus gerardii Gerard's rush; soft meadow rush HJ 1997 (considered non-native to BC)

*Juncus laccatus (Synonym: Juncus effusus var. gracilis) common rush; shiny rush HJ

Juncus supiniformus spreading rush; hairy leaf rush HJ 1997

Juncus tenuis slender rush; poverty rush HJ 1997

Juniperis communis common juniper; ground juniper HJ 1997

Juniperus maritima (new species) seaside juniper; maritime juniper (formerly *Juniperus scopulorum* Rocky Mountain juniper) JPM 1974, Kendrick L. Marr, *JD, *TL 2008 *Notes:* The species, previously included in *Juniperus scopulorum*, is characterized by having seed cones that mature in one year (14-16 months), seeds usually exserted from the cone, obtuse scale leaf tips; scale leaves overlap less than 1/5 the length, and branchlets smooth and reddish-brown.

Sources: Adams, R.P. 2007. *Juniperus maritima*, the seaside juniper, a new species from Puget Sound, North America. *Phytologia* 89(3): 263-283.

Adams, R.P. 2008. *Junipers of the world: The genus Juniperus*. Trafford Publishing Co., Vancouver, BC. Account Author: Adolf Ceska.

Kalmia microphylla ssp. occidentalis western bog-laurel; swamp laurel; alpine laurel JPM 1974 (2 subtaxa present in BC: K. microphylla ssp. microphylla, K. microphylla ssp. occidentalis)

Koeleria macrantha june grass; prairie junegrass HJ 1997

^{*}Juncus balticus Baltic rush HJ 1997

^{*}Juncus bufonius toad rush HJ 1997, Frank Lomer 2012

Note: A general consensus has yet to be reached regarding which name is best for this species. For a discussion of the problems involved see Hitchcock et al. (1969:609) and Holmgren and Holmgren (1977:254). [Source: *The Illustrated Flora of BC*]

*Krigia virginica Virginia dwarf dandelion JD 2016 (introduced from the eastern US)

*Lathyrus japonicus beach pea; sea pea; sea vetchling HJ (subtaxa in BC: *L. japonicus* var. *maritimus*)

*Lathyrus latifolius broad-leaved peavine; perennial pea TL 2014 (introduced from Europe)

Lathyrus nevadensis purple peavine; Sierra pea Adolf Ceska 1981 (subtaxa present in BC: *L. nevadensis* var. *pilosellus*)

Lavandula angustifolia lavender Frank Lomer 2012 (Given the proximity of human habitation, it is the likely source of this plant.)

Ledum groenlandicum (See Rhododendron groenlandicum)

Legousia perfoliata (See Triodanis perfoliata)

*Lemna minor common duckweed; water lentil HJ

Lepidium virginicum tall pepper-grass; Virginia pepperweed HJ 1997 (subtaxa present in BC: Lepidium virginicum var. menziesii)

Leucanthemum x superbum Shasta daisy Frank Lomer 2012 (most likely a garden escape)

*Leucanthemum vulgare oxeye daisy HJ (highly abundant introduced European species) [noxious]

Note: Whereas oxeye daisy is ubiquitous now on Texada, John Dove remembers upon his arrival on Texada in 1966, it was not (pers. communication).

*Leymus mollis Sea Lyme Grass; American dunegrass; dune wildrye HJ, Frank Lomer 2012, TL 2015 (subtaxa present in BC: L. mollis ssp. mollis)

*Lilium columbianum tiger lily; Columbia lily Candi Little 2017

Linaria canadensis var. *texana* (See Nuttallanthus texanus)

^{*}Lactuca muralis (See Mycelis muralis)

^{*}Lapsana communis nipplewort; common nipplewort HJ (introduced from Eurasia)

Linaria vulgaris butter-and-eggs; common toadflax HJ 1997, TL 2017 (introduced from Eurasia) [noxious]

*Linnaea borealis twinflower HJ, TL 2015 (2 subtaxa present in BC: L. borealis ssp. borealis [twinflower], L. borealis ssp. longiflora [longtube twinflower])

Listera caurina (Synonym: Neottia banksiana) northwestern twayblade HJ 1997, *TL 2016

Listera convallarioides (Synonym: *Neottia convallarioides*) broad-leaved twayblade; broadlipped twayblade HJ 1997, *JD 2011 (infrequent)

Listera cordata (Synonym: Neottia cordata) heart-leaved twayblade; heartleaf twayblade JPM 1974

*Lithophragma parviflorum small-flowered woodland star; small-flowered fringecup Candi Little 2017, TL 2018 (subtaxa present in BC: *L. parviflorum* var. *parviflorum*)

Lolium perenne perennial ryegrass; English ryegrass Leon E. Pavlick 1985 (introduced from Eurasia)

Lonicera ciliosa western trumpet; orange honeysuckle JPM 1974

*Lonicera hispidula hairy honeysuckle; pink honeysuckle HJ, TL 2015

*Lonicera involucrata black twinberry, bearberry honeysuckle; twinberry honeysuckle HJ

*Lupinus polyphyllus large-leaved lupine; bigleaf lupine; big-leaved lupine HJ (subtaxa present in BC: *L. polyphyllus* ssp. *polyphyllus*)

Luzula comosa var. *laxa* (Synonym: *Luzula multiflora* ssp. *comosa*) Pacific wood-rush JPM 1974 (2 subtaxa present in BC: *L. comosa* var. *comosa*, *L. comosa* var. *laxa*)

Luzula parviflora small-flowered wood-rush HJ 1997

Luzula subsessilis short-stalked wood-rush Leon E. Pavlick 1985

Lychnis coronaria rose campion TL 2017 (introduced from Europe)

Lycopodium alpinum (See Diphasiastrum alpinum)

Lycopodium annotinum stiff club-moss HJ 1997

Lycopodium clavatum running club-moss HJ 1997, *JD 2007 (2 subtaxa present in BC: *L. clavatum* var. *clavatum*, *L. clavatum* var. *integerrimum*)

Lycopodium complanatum (See Diphasiastrum complanatum)

Lycopodium dendroideum ground-pine; tree groundpine HJ 1997

Lycopodium sitchense (See *Diphasiastrum sitchense*)

Lycopus americanus cut-leaved water horehound; American water horehound Adolf Ceska 1981, HJ 1997

*Lycopus uniflorus northern water horehound HJ 1997

*Lysichiton americanum skunk cabbage; American skunk cabbage; swamp lantern; western skunk cabbage; yellow skunk cabbage HJ, TL 2015

Lysimachia thyrsiflora tufted loosestrife Adolf Ceska with Patrick D. Warrington 1978, *HJ 1996, *TL 2007

Madia exigua little tarweed; small tarweed JPM 1974, HJ 1997

Madia glomerata clustered tarweed; mountain tarweed HJ 1997 [noxious]

Madia gracilis slender tarweed; grassy tarweed JPM 1974, HJ 1997

Madia madioides (See Anisocarpus madioides)

Mahonia aquifolium (Synonym: Berberis aquifolium) tall Oregon grape; holly-leaved barberry M. Ridewood 1958

Mahonia nervosa (Synonym: Berberis nervosa) dull Oregon grape; Cascade barberry M. Ridewood 1958

Maianthemum stellatum (Synonym: Smilacina stellata) star-flowered Solomon's- seal; starry false lily-of-the-valley Adolf Ceska 1981

Malaxis brachypoda (Synonym: Malaxis monophyllos var. brachypoda) white adder's-mouth orchid; one-leaved malaxis HJ 1997, *JD 2007 (blue-listed)

Malus fusca Pacific crab apple; Oregon crabapple JPM 1974

*Matricaria discoidea pineapple weed; disc mayweed HJ, TL 2015 (probably introduced from elsewhere in North America) [abundant in disturbed sites]

Medicago lupulina black medic; black medick Adolf Ceska 1981; HJ 1997, *TL 2015 (introduced from Eurasia)

Medicago sativa alfalfa; lucerne HJ 1997 (2 subtaxa present in BC: M. sativa ssp. falcata [sickle medic, yellow alfalfa], M. sativa ssp. sativa [alfalfa])

Note: Mesic to dry cultivated fields, roadsides and ditches (ssp. *sativa*), and roadsides and dry slopes (ssp. *falcata*) in the steppe zone; ssp. *sativa* – common agricultural escape in southern BC west of the Coast-Cascade Mountains, infrequent in southwest BC, ssp. *falcata* – rare, known from scattered locations in southern BC; introduced from Eurasia. [Source: *The Illustrated Flora of BC*]

*Melica subulata Alaska oniongrass HJ, Frank Lomer 2002

*Melissa officinalis lemon balm; common balm TL 2017 (rare in SW and SC BC; introduced from Europe)

*Melilotus alba white sweet-clover HJ (introduced from Eurasia)

*Mentha arvensis field mint; wild mint HJ (circumboreal)

*Mentha x gracilis red mint TL 2014 exotic (introduced)

Menyanthes trifoliata buckbean JPM 1974, *HJ, *TL 2017

Microsteris gracilis pink twink; pink microsteris HJ 1997 (2 subtaxa present in BC: *M. gracilis* var. *gracilis*, *M. gracilis* var. *humilior*)

Mimulus alsinoides (See Erythranthe alsinoides)

*Mimulus guttatus (See Erythranthe guttata)

Mimulus moschatus (See Erythranthe moschata)

Mimulus tilingii (See Erythranthe tilingii)

Minuartia tenella slender sandwort; slender stitchwort HJ 1997

*Moehringia lateriflora blunt-leaved sandwort; bluntleaf sandwort TL 2017

*Moehringia macrophylla big-leaved sandwort; largeleaf sandwort HJ

Monotropa hypopithys pinesap HJ 1997, *JD 2017

*Monotropa uniflora Indian pipe HJ, TL 2015

*Montia fontana blinks; annual water miner's lettuce; water chickweed TL 2016

Montia parvifolia small-leaved montia; little leaf miner's lettuce JPM 1974, *TL 2018 (2 subtaxa present in BC: *M. parvifolia* var. *flagellaris*, *M. parvifolia* var. *parvifolia*)

*Mycelis muralis (Synonym: Lactuca muralis) wall lettuce HJ, TL 2015 (introduced from Europe)

Myosotis discolor common forget-me-not; changing forget-me-not Adolf Ceska 1981 (introduced from Europe)

Myosotis laxa small-flowered forget-me-not; bay forget-me-not HJ 1997

Myosurus minimus tiny mousetail; least mousetail HJ 1997

*Myrica gale sweet gale HJ 1997

*Myriophyllum verticillatum verticillate water-milfoil; whorl-leaf water-milfoil HJ

Najas flexilis wavy water nymph; nodding water nymph HJ 1997

Nanozostera japonica Japanese eel-grass HJ 1997 (introduced from East Asia)

**Nasturtium officinale* common watercress TL 2016 (introduced from Europe)

*Navarretia squarrosa skunkweed; skunkbush HJ, JD 2016

*Nemophila parviflora small-flowered nemophila TL 2008 (common on SE Vancouver Island and the Gulf Islands, rare on the lower mainland) [Source: *The Illustrated Flora of BC*] (subtaxa present in BC: *N. parviflora* var. *parviflora*)

Nuphar polysepala (Synonym: Nuphar polysepalum) yellow pond-lily; Rocky Mountain pond-lily; spatterdock JPM 1974, *HJ 1997

Nuttallanthus texanus (Synonym: Linaria canadensis var. texana) blue toadflax; Texas toadflax HJ 1997 (red-listed)

*Oenanthe sarmentosa Pacific water-parsley; water parsley HJ, TL 2015

*Oenothera biennis common evening-primrose TL 2017 (introduced from eastern North America)

Ophioglossum pusillum northern adder's tongue (fern ally) HJ 1996, 1997 (blue-listed)

*Oplopanax horridus devil's club HJ 1997, JD 2015

Opuntia fragilis brittle prickly-pear cactus; brittle prickly pear JPM 1974

Orobanche californica (Synonym: Aphyllon californicum) California broomrape; winged rib HJ 1997, *TL 2014; *Candi Little 2016 (subtaxa present in BC:

O. californica ssp. californica) [Parasitic on *Grindelia stricta* and *Ambrosia chamissonis* on sandy beaches in the lowland zone; locally frequent on southern Vancouver Island and the Gulf Islands, rare on adjacent mainland; S to CO and CA.] (Source: *The Illustrated Flora of BC*)

Osmorhiza berteroi (Synonym: Osmorhiza chilensis) mountain sweet-cicely *HJ, Frank Lomer 2002, *TL 2015

Packera indecora (Synonym: Senecio indecorus) rayless mountain butterweed HJ 1996, 1997

Packera macounii (Synonym: Senecio macounii) Macoun's groundsel G.M. Dawson (colleague, associate of John M. Macoun) 1885, HJ 1997, Frank Lomer 2012 (rare on southern Vancouver Island, Texada Island and adjacent mainland ...) (Source: *The Illustrated Flora of BC*) (blue-listed)

Packera paupercula (Synonym: Senecio pauperculus) Canadian butterweed HJ 1996

Panicum occidentalis (See Dichanthelium acuminatum)

Penstemon davidsonii Davidson's penstemon HJ 1997 (2 subtaxa present in BC: P. davidsonii var. davidsonii, P. davidsonii var. menziesii)

Pentagramma triangularis ssp. triangularis goldenback fern JPM 1974

*Perideridia gairdneri Gairdner's yampah HJ

*Persicaria amphibia (Synonym: Polygonum amphibium) water smartweed HJ (2 subtaxa present in BC: *P. amphibia* var. *emersa*, *P. amphibia* var. *stipulacea*)

Persicaria amphibia is a highly polymorphic aquatic species with two recognized but intergrading varieties in North America: var. *emersa* and var. *stipulacea* (Flora North America 2010). Both are widespread in the US and Canada, with a few exceptions in the northwest and southeast (USDA 2010). Plants which bloom in water, or are sometimes stranded on land during draw down periods, are recognized as var. *stipulacea*, while plants that bloom on moist soil are recognized as var. *emersa* (Flora of North America 2010). Aside from habitat, characters that separate the two varieties include habit (erect or prostrate) and inflorescence shape.

*Persicaria hydropiper marsh pepper smartweed TL 2016 introduced from Europe)

*Persicaria hydropiperoides (Synonym: Polygonum hydropiperoides) water pepper HJ

Petasites frigidus var. *palmatus* sweet coltsfoot; arctic sweet coltsfoot M. Ridewood 1958, Roy L. Taylor 1971, *HJ 1997, *Judy A. Jamison 1997, *Frank Lomer 2012 (4 subtaxa are present in BC: *P. frigidus* var. *frigidus*, *P. frigidus* var. *nivalis*, *P. frigidus* var. *palmatus*, and *P. frigidus* var. *sagittatus*

*Phalaris arundinacea reed canarygrass HJ, Frank Lomer 2012 [invasive]

Phegopteris connectilis narrow beech fern; long beech fern Harvey Janszen 1999

Phleum pratense common timothy; timothy Leon E. Pavlick 1985, *HJ (introduced from Eurasia)

*Physocarpus capitatus Pacific ninebark TL 2015, 2016

*Picea sitchensis Sitka spruce HJ, JD 2017, TL 2018

**Pinus contorta* var. *contorta* shore pine; beach pine HJ, TL 2015 (2 subtaxa are present in BC: *P. contorta* var. *contorta* and *P. contorta* var. *latifolia* lodgepole pine *TL 2018)

*Pinus monticola western white pine HJ, TL 2015

*Pinus ponderosa Ponderosa pine; yellow pine JD 1975 (introduced by Ministry of Forestry ca. 1966, grew on for a number of years but are presently slowly dying and disintegrating, JD pers. communication)

Piperia elegans (Synonym: *Platanthera elegans*) elegant rein orchid; elegant piperia; seaside rein orchid Maud Allen s.n. 1953, *HJ

**Piperia elongata* (Synonym: *Platanthera elongata*) tall rein orchid; denseflower rein orchid TL 2015

*Piperia transversa (Synonym: Platanthera transversa) royal rein orchid TL 2015

*Piperia unalascensis (Synonym: Platanthera unalascensis) Alaska rein orchid; slender-spire orchid TL 2017

Plantago elongata (Synonym: Plantago bigelovii) slender plantain HJ 1997, Adolf Ceska 2008

*Plantago lanceolata ribwort plantain, English plantain; narrowleaf plantain HJ (introduced from Eurasia) [nuisance]

*Plantago major common plantain HJ Bassett (1973), in his monograph *The Plantains of Canada* indicated that the origin of this species had not been established and it was not known if it was native to North America or introduced. However, since that publication, many sources list it as an introduced species native to Eurasia (e.g. USDA 2010).

References: Bassett, I. John. 1973. *The Plantains of Canada*. Monograph No. 7. Research Branch, Canada Department of Agriculture, Ottawa. USDA. 2010. *Plantago major*. United States Department of Agriculture Plants Database. (available online] [nuisance]

Plantago maritima seaside plantain; Alaska plantain; common plantain; goose tongue; sea plantain HJ 1997, *TL 2015 (subtaxa present in BC: *P. maritima* ssp. *juncoides*)

*Platanthera aquilonis (formerly Platanthera hypoborea) northern green rein orchid; northern green rein bog orchid; northern green orchid HJ 1999
Platanthera aquilonis is a North American diploid species long confused with the tetraploid Icelandic P. hyperborea (Linnaeus) Lindley. Flowers of both species autopollinate, although the details of the mechanisms may differ. The two species differ in column structure and lip and viscidium shape. True P. hyperborea is similar to P. huronensis, and the relationship of these two species needs further study. (Source: Flora of North America, Vol. 26, page 560.)

Platanthera dilatata var. dilatata fragrant white rein orchid; fragrant white bog orchid; scentbottle HJ 1997, *TL 2008 (3 varietals occur in BC: P. dilatata var. albiflora, P. dilatata var. leucostachys)

Plectritis congesta sea blush; rosy plectritus; short spur seablush Roy L. Taylor 1971, JPM 1974

Plectritis macrocera long-spurred plectritus; longhorn plectritus JPM 1974, HJ 1997

*Poa compressa Canada bluegrass HJ, Frank Lomer 2012

*Poa marcida weeping bluegrass; withered bluegrass Adolf Ceska 2009

Poa pratensis Kentucky bluegrass Leon E. Pavlick 1985, *HJ (subtaxa present in BC: P. pratensis ssp. agassizensis, P. pratensis ssp. alpigena, P. pratensis ssp. angustifolia, P. pratensis ssp. colpodea, P. pratensis ssp. irrigata, P. pratensis ssp. pratensis) [Habitat/Range: Moist to dry meadows, shrublands, open forests and disturbed sites in all vegetation zones; infrequent to common throughout BC; introduced from Eurasia as a lawn and pasture grass (ssp. pratensis, ssp. irrigata and ssp. angustifolia) or native in Canada and the western US (ssp. agassizensis, ssp. alpigena, and ssp. colpodea)] (Source: The Illustrated Flora of BC)

Poa trivialis rough bluegrass Leon E. Pavlick 1985, *HJ (introduced from Eurasia)

Polygala vulgaris milkwort; common milkwort Harvey Janszen with Patrick Williston 1999 (for which there is no entry in *The Illustrated Flora of BC*) [introduced from Europe]

Polygala serpyllifolia heath milkwort Harvey Janszen with Patrick Williston 1999 (for which there is no entry in *The Illustrated Flora of BC*) [introduced from Europe]

Polygonum achoreum Blake's knotweed; leathery knotweed Frank Lomer 2012

*Polygonum aviculare common knotweed; prostrate knotweed HJ

Polygonum spergulariiforme (Synonym: Polygonum douglasii ssp. sperguliiforme) spurry knotweed HJ 1997

Polypodium glycyrrhiza licorice fern Miss M. Allen 1954 *HJ, *TL 2015

*Polypodium hesperium western polypody JD 2007 (Note: This is an allotetraploid species that originated from a hybrid of *P. amorphum* and *P. glycyrrhiza*) [Source: *The Illustrated Flora of BC*])

**Polypogon monspeliensis* rabbitfoot polypogon; annual rabbitsfoot grass HJ (introduced from Europe)

Polystichum californicum California sword fern W.B. Anderson 1898, *TL 2007, Adolf Ceska with Oldriska Ceska, John Dove, Terry Ludwar, James Mack 2008, Adolf Ceska 2009 (red-listed)

Polystichum munitum sword fern; western sword fern JPM 1974

*Populus balsamifera black cottonwood HJ

Potamogeton amplifolius large-leaved pondweed HJ 1996

**Potamogeton epihydrus* ribbon-leaf pondweed HJ

Potamogeton gramineus grass-leaved pondweed; variable-leaf pondweed HJ 1996

*Potamogeton natans floating pondweed; floating-leaved pondweed HJ

Potamogeton praelongus long-stalked pondweed; whitestem pondweed HJ 1997

Potamogeton pusillus small pondweed HJ 1996 (2 subtaxa present in BC: *P. pusillus ssp. pusillus, P. pusillus ssp. tenuissimus*)

*Potamogeton robbinsii Robbin's pondweed HJ

*Potentilla egedii coast silverweed TL 2015

*Potentilla palustris (See Comarum palustre)

Potentilla recta sulphur cinquefoil HJ 1997 (introduced from Eurasia) [noxious]

**Prunella vulgaris* self-heal John M. Macoun 1885, TL 2015 (*P. vulgaris* ssp. *lanceolata*: lance selfheal, native; *P. vulgaris* ssp. *vulgaris*: common selfheal, introduced from Eurasia)

*Prunus emarginata bitter cherry HJ, TL 2016

Pseudognaphalium stramineum cotton-batting cudweed HJ 1997, Frank Lomer 2012

*Pseudognaphalium thermale slender cudweed TL 2016

*Pseudotsuga menziesii var. menziesii coastal variety of Douglas-fir HJ, TL 2007 (2 subtaxa present in BC: P. menziesii var. glauca, P. menziesii var. menziesii)

Pteridium aquilinum bracken fern; western bracken fern M.A. Allen 1954, *HJ, *TL 2015 (2 subtaxa present in BC: *P. aquilinum* ssp. *lanuginosum*, *P. aquilinum* ssp. *latiusculum*)

*Pterospora andromedea pinedrops; woodland pinedrops HJ, JD 2011

Puccinellia nutkaensis Pacific alkali grass; Nootka alkali grass; Alaska alkali grass HJ 1997

*Puccinellia nuttalliana Nuttall's alkali grass HJ

Pyracantha coccinea (Synonym: *Cotoneaster pyracantha*) scarlet firethorn Frank Lomer 2002, *TL 2016 (garden escape, introduced from Europe)

**Pyrola aphylla* leafless wintergreen JD 2015, TL 2015 (blue-listed)

*Pyrola asariflora pink pyrola; pink wintergreen; common pink wintergreen; large wintergreen; liverleaf wintergreen JD 2008 (subtaxa present in BC: *P. asarifolia* ssp. asarifolia)

*Pyrola minor lesser wintergreen; snowline wintergreen TL 2016

Pyrola picta white-veined wintergreen; Nootka wintergreen HJ 1997

**Ranunculus acris* meadow buttercup; tall buttercup HJ (introduced from Eurasia)

*Ranunculus aquitilis white water-buttercup; white water crowfoot HJ, TL 2015, 2016 (2 subtaxa present in BC: *R. aquitilis* var. *aquitilis*, *R. aquitilis* var. *diffusus*)

Ranunculus flammula lesser spearwort; creeping spearwort; greater creeping spearwort HJ 1997, *Daniel Stewart 2015, *TL 2016 (2 subtaxa present in BC: R. flammula var. ovalis, R. flammula var. reptans)

*Ranunculus occidentalis western buttercup HJ (3 subtaxa present in BC: R. occidentalis var. brevistylis [western buttercup], R. occidentalis var. hexasepalus [Haida buttercup], R. occidentalis var. occidentalis [western buttercup])

*Ranunculus repens creeping buttercup HJ (introduced from Eurasia) [noxious, disturbed sites]

*Ranunculus uncinatus little buttercup; woodland buttercup HJ

*Rhamnus purshiana cascara JD 1996

Rhododendron groenlandicum (Synonym: Ledum groenlandicum) Labrador tea; bog Labrador tea JPM 1974, *HJ 1996, 1997

*Rhynchospora alba white beak rush; white beaksedge HJ

Ribes divaricatum straggly gooseberry; coastal black gooseberry; currant; spreading gooseberry; wild black gooseberry HJ 1997 (subtaxa present in BC: *R. divaricatum* ssp. *divaricatum*)

Ribes lacustre black gooseberry; black swamp gooseberry; prickly currant JPM 1974, Adolf Ceska 1981, HJ 1997

Ribes sanguineum red-flowering currant; winter currant; red currant M. Ridewood 1958, Wilfred B. Schofield s.n. 1962 (subtaxa present in BC: *R. sanguineum* var. *sanguineum*)

*Rosa gymnocarpa baldhip rose; dwarf rose HJ, TL 2015

*Rosa nutkana Nootka rose HJ, TL 2015 (2 subtaxa present in BC: R. nutkana var. hispida [bristly Nootka rose], R. nutkana var. nutkana)

*Rubus armeniacus (Synonym: Rubus discolor) Himalayan blackberry HJ, TL 20015 (an introduced invasive species of Rubus that originates in Armenia) [Source: The Illustrated Flora of BC]

*Rubus laciniatus cutleaf evergreen blackberry; cutleaf blackberry; evergreen blackberry HJ, TL 2016 (introduced from Europe)

*Rubus leucodermis black raspberry; dwarf bramble; whitebark raspberry HJ

**Rubus parviflorus* thimbleberry; snow bramble HJ, TL 2015 (subtaxa present in BC: *R. parviflorus* var. *parviflorus*)

Rubus phoenicolasius Japanese wineberry; wine raspberry M. Rittenhouse 1937 (introduced from China, Japan or Korea)

*Rubus spectabilis salmonberry HJ, TL 2015

Rubus ursinus California blackberry; dwarf red raspberry; Pacific trailing blackberry; salmonberry; trailing blackberry Adolf Ceska 1981, *HJ, *TL 2015 (subtaxa present in BC: *R. ursinus* ssp. *macropetalus*)

*Rumex acetosella sheep sorrel; common sheep sorrel TL 2015 (introduced from Eurasia) [nuisance, disturbed sites]

*Rumex crispus curled dock; curly dock TL 2015 (introduced from Eurasia) [nuisance, disturbed sites]

Sagina apetala (Synonym: Sagina apetala var. barbata) common pearlwort; annual pearlwort Frank Lomer 2002 (introduced from Eurasia)

Sagina decumbens ssp. occidentalis small-flowered pearlwort; trailing pearlwort; western pearlwort HJ 1997 (rare in SW BC ...) [Source: The Illustrated Flora of BC]

Sagina maxima ssp. crassicaulis coastal pearlwort; stickystem pearlwort HJ 1997 (2 subtaxa present in BC: *S. maxima* ssp. crassicaulis, *S. maxima* ssp. maxima)

*Sagina procumbens bird's-eye pearlwort; birdeye pearlwort HJ (introduced)

Salicornia pacifica (See Sarcocornia pacifica)

*Salix barclayi Barclay's willow TL 2015

*Salix lucida shining willow HJ (2 subtaxa present in BC: *S. lucida* ssp. caudata [whiplash willow], *S. lucida* ssp. lasiandra [Pacific willow])

*Salix scouleriana Scouler's willow; mountain willow HJ

*Salix sitchensis Sitka willow HJ

*Sambucus racemosa var. arborescens coastal red elderberry HJ (3 subtaxa in BC: S. racemosa var. arborescens coastal red elderberry, S. racemosa var. leucocarpa eastern red elderberry, S. racemosa var. melanocarpa black elderberry)

*Sanicula crassicaulis Pacific sanicle; Pacific black snakeroot HJ, TL 2015

(2 subtaxa present in BC: *S. crassicaulis* var. *crassicaulis*, *S. crassicaulis* var. *tripartita*)

*Sarcocornia pacifica (Synonym: Salicornia pacifica) American glasswort; perennial saltwort HJ, TL 2007

Saxifraga ferruginea (Synonym: Micranthes ferruginea) Alaska saxifrage; russet hair saxifrage HJ 1997, *TL 2017

Saxifraga integrifolia (Synonym: Micranthes integrifolia) grassland saxifrage; wholeleaf saxifrage Roy L. Taylor 1971, *JD 2016, *TL 2016

Saxifraga rufidula (Synonym: Micranthes rufidula) rusty-haired saxifrage; rustyhair saxifrage HJ 1997

Saxifraga tridactylites rue-leaved saxifrage Frank Lomer 2002, *TL 2008 (introduced from Europe)

Schedonorus arundinaceus (Synonym: *Lolium arundinaceum*) tall fescue HJ 1997, *Frank Lomer 2002 (introduced from Eurasia)

Schoenoplectus acutus (Synonym: Scirpus acutus) hard-stemmed bulrush; hardstem bulrush Leon E. Pavlick 1985, *HJ, *Frank Lomer 2012

Schoenoplectus pungens American bulrush three-square bulrush HJ 1997 (subtaxa present in BC: *S. pungens* var. *longispicatus*)

Schoenoplectus subterminalis (Synonym: Scirpus subterminalis) water clubrush; swaying bulrush HJ 1996

Scirpus microcarpus small-flowered bulrush; panicled bulrush Leon E. Pavlick 1985, *HJ

Scutellaria galericulata marsh skullcap HJ 1997, *TL 2015

Scutellaria lateriflora blue skullcap HJ 1997

*Sedum acre goldmoss stonecrop HJ, Frank Lomer 2002, TL 2017 (introduced from Eurasia) [increasingly abundant]

*Sedum divergens spreading stonecrop; Pacific stonecrop TL 2017

Sedum lanceolatum var. nesioticum lance-leaved stonecrop; spearleaf stonecrop HJ 1997, *TL 2018 (2 subtaxa present in BC: S. lanceolatum var. lanceolatum, S. lanceolatum var. nesioticum)

Sedum oreganum Oregon stonecrop HJ 1997 (2 subtaxa present in BC:

S. oreganum ssp. *oreganum*, *S. oreganum* ssp. *tenue*) [Source: BC Conservation Data Centre. 2018. BC Species and Ecosystems Explorer. BC Minist. of Environ. Victoria BC]

*Selaginella wallacei Wallace's selaginella; Wallace's spikemoss Frank Lomer 2012, TL 2015

*Senecio jacobea tansy ragwort; stinking willie HJ, TL 2016 (invasive species introduced from Europe) [Source: E -Flora BC] (noxious)

Senecio macounii (See Packera macounii)

Senecio sylvaticus wood groundsel; woodland ragwort JPM 1974, *TL 2015 (introduced from Europe)

Senecio pauperculus (See Packera paupercula)

*Sequoiadendron giganteum giant sequoia JD 2017 (introduced by a logging company)

*Sequoia sempervirens California redwood JD 2016 (introduced by a logging company; appear to be growing vigourously John Dove pers. communication)

Silene antirrhina sleepy catchfly HJ 1997, Oldriska Ceska 1978

Sisyrinchium californicum golden-eyed-grass; golden blue-eyed grass HJ 1996, 1997, Frank Lomer 2012

Sisyrinchium idahoense var. macounii Idaho blue-eyed-grass HJ 1997 (4 subtaxa present in BC: S. idahoense var. idahoense, S. idahoense var. macounii, S. idahoense var. occidentale, S. idahoense var. segetum) [Source: BC Conservation Data Centre. 2018. BC Species and Ecosystems Explorer. BC Minist. of Environ. Victoria BC] [var. macounii rare on S Vancouver Island and the Gulf Islands] (Source: The Illustrated Flora of BC)

*Sium suave hemlock water parsnip HJ 1997

Smilacina stellata (See Maianthemum stellatum)

*Solanum nigrum ssp. schultesii black nightshade Frank Lomer 2012 (2 subtaxa present in BC: *S. nigrum* ssp. nigrum, *S. nigrum* ssp. schultesii) (introduced from Europe)

*Sonchus arvensis perennial sow-thistle; field sow-thistle HJ (2 subtaxa present in BC: *S. arvensis* ssp. *arvensis* ssp. *uliginosus*) (common introduced weed species in southern BC that originates in Europe) (Source: E-Flora BC) [noxious]

*Sonchus asper prickly sow-thistle; spiny sow-thistle HJ (introduced from Europe) [nuisance]

Sparganium emersum emersed bur-reed; European bur-reed M.A. Allen 1954, Patrick Warrington with Oldriska Ceska 1978, Harvey Janszen 1996

Sparganium natans small bur-reed Harvey Janszen 1996, HJ 1997

Spergularia macrotheca var. macrotheca beach sandspurry Frank Lomer 2012 (rare in SW BC, known only on SE Vancouver Island and adjacent Gulf Islands ...) (Source: *The Illustrated Flora of BC*) [subtaxa present in BC: *S. macrotheca* var. macrotheca]

*Spergularia rubra red sandspurry Frank Lomer 2002 (introduced from Europe)

Spergularia salina var. salina salt marsh sandspurry HJ 1997 (introduced from Eurasia) [subtaxa present in BC: S. salina var. salina]

*Spiraea douglasii hardhack; pink spirea; rose spirea HJ, TL 2005 (subtaxa present in BC: *S. douglasii* ssp. *douglasii* [Douglas' spirea], *S. douglasii* ssp. *menziesii* Menzies' spirea])

*Spiranthes romanzoffiana hooded ladies' tresses orchid JD 1994, HJ

*Stachys chamissonis var. cooleyae coastal hedge-nettle; Cooley's hedge-nettle; lamb's-ear HJ

Stellaria calycantha northern starwort Adolf Ceska 1981, *HJ 1999

*Stellaria crispa crisp starwort; crisp sandwort; curled starwort HJ

*Stellaria media common chickweed; common starwort HJ, TL 2015 (introduced from Eurasia)

*Stellaria nitens shining starwort; shiny chickweed *HJ, *Frank Lomer 2002

*Symphoricarpos albus common snowberry HJ, TL 2007 (2 subtaxa present in BC: S. albus var. albus, S. albus var. laevigatus)

Symphyotrichum subspicatum Douglas' aster HJ 1997

*Tanacetum vulgare common tansy HJ (introduced from Europe) [noxious]

*Taraxacum laevigatum red-seeded dandelion; rock dandelion HJ (introduced from Europe)

**Taraxacum officinale* common dandelion HJ (introduced from Europe)

*Taxus brevifolia western yew; Pacific yew HJ, TL 2015

*Tellima grandiflora fringecup; bigflower tellima TL 2015, 2016

*Thuja plicata western red cedar HJ, TL 2015

Tiarella trifoliata var. laciniata cut-leaved foamflower M.A. Allen 1954, JPM 1974, *TL 2017 (3 subtaxa present in BC: *T. trifoliata* var. laciniata [cut-leaved foamflower], *T. trifoliata* var. trifoliata [three-leaved foamflower, threeleaf foamflower], *T. trifoliata* var. unifoliata [one-leaved foamflower])

*Tiarella trifoliata var. trifoliata three-leaved foamflower; threeleaf foamflower TL 2015

Torilis arvensis hedge-parsley; spreading hedge-parsley HJ 1997 (introduced from Eurasia)

Torilis japonica upright hedge-parsley; erect hedge-parsley HJ 1997, Frank Lomer 2002, 2012 (introduced from Japan) [nuisance]

*Torreyochloa pauciflora weak false-manna; weak alkali-grass HJ

Toxicodendron diversilobum poison oak; Pacific poison oak W. Herod 1941, W. Planta 1946, W. Schofield 1962, HJ 1997 native (blue-listed)

*Tragopogon dubius yellow salsify HJ, JD 2016 (introduced from Europe) [nuisance]

*Tragopogon pratensis meadow salsify JD 2016 (... rare in coastal BC; introduced from Europe) [Source: *The Illustrated Flora of BC*]

*Triantha glutinosa (Synonym: Tofieldia glutinosa) sticky false asphodel; sticky tofieldia HJ, TL 2008

Trientalis europaea ssp. *arctica* Arctic starflower; northern starflower HJ 1997 (subtaxa present in BC: *T. europaea* ssp. *arctica*)

Trientalis latifolia northern starflower; broad-leaved starflower; starflower; western starflower Adolf Ceska 1981, *HJ

Trifolium campestre low hop-clover; field clover HJ 1997 (introduced from Eurasia)

*Trifolium dubium small hop-clover; suckling clover HJ (introduced from Europe)

Trifolium microcephalum small-headed clover; smallhead clover HJ 1997

Trifolium microdon thimble clover HJ 1997

Trifolium oliganthum few-flowered clover; fewflower clover HJ 1997

*Trifolium pratense red clover HJ (introduced from Eurasia)

*Trifolium repens white clover HJ (introduced from Eurasia)

Trifolium tridentatum (See *Trifolium willdenovii*)

Trifolium variegatum white-tipped clover; whitetip clover HJ 1997 (subtaxa present in BC: *T. variegatum* var. *variegatum*) [blue-listed]

Trifolium willdenovii (Synonym: *Trifolium tridentatum*) tomcat clover; sand clover HJ 1997

Trifolium wormskioldii springbank clover; cows clover HJ 1999

Triglochin maritima seaside arrow-grass; seaside arrowgrass HJ 1997

Triglochin palustris marsh arrow-grass HJ 1999

Triodanis perfoliata (Synonym: *Legousia perfoliata*) Venus' looking glass; clasping Venus' looking-glass; dwarf trillium HJ 1997 (subtaxa present in BC: *T. perfoliata* var. *perfoliata*)

*Triphysaria pusilla dwarf owl-clover; dwarf owl's clover TL 2008

Trisetum canescens tall trisetum; nodding trisetum Leon E. Pavlick 1985, HJ 1997

Trisetum flavescens yellow oatgrass Leon E. Pavlick 1985 (introduced from Europe)

Triteleia hyacinthina white triteleia; white brodiaea HJ 1997, *TL 2016

*Tsuga heterophylla western hemlock HJ, TL 2015

*Tsuga mertensiana mountain hemlock HJ

Turritis glabra (Synonym: Arabis glabra) tower mustard Adolf Ceska 1981, HJ 1997 (native status uncertain, also occurs in Eurasia) (Source: The Illustrated Flora of BC)

*Typha latifolia common cattail; broadleaf cattail; common bulrush HJ, TL 2015

Urtica dioica stinging nettle JPM 1974 (subtaxa present in BC: *U. dioica* ssp. *dioica*, *U. dioica* ssp. *gracilis* [California nettle])

Utricularia gibba humped bladderwort Patrick D. Warrington with Oldriska Ceska 1978, HJ 1997

Utricularia macrorhiza (Synonyms: *Utricularia vulgaris, Utricularia vulgaris* ssp. *macrorhiza*) greater bladderwort; common bladderwort JPM 1974, HJ 1996, 1997, Patrick Williston with Harvey Janszen, Pam Janszen 1999

Utricularia minor lesser bladderwort Harvey Janszen 1996

Vaccinium ovatum evergreen huckleberry; California huckleberry Mr. Devine s.n. 1943, L. Sugden 1951, M. Ridewood 1958, Thomas M.C. Taylor 1963, Roy L. Taylor 1971, JPM 1974, HJ 1997 (ubiquitous on Texada)

*Vaccinium oxycoccus bog cranberry HJ 1999, TL 2015

*Vaccinium parvifolium red huckleberry HJ, TL 2015

*Verbascum thapsus great mullein; common mullein HJ, TL 2016 (introduced from Eurasia) [nuisance]

Veronica arvensis wall speedwell; corn speedwell JPM 1997, Frank Lomer 2002 (introduced from Europe)

Veronica beccabunga ssp. *americana* American speedwell; American brooklime; European speedwell HJ 1997 (subtaxa present in BC: *V. beccabunga* ssp. *americana*)

Veronica officinalis common speedwell; common gypsyweed HJ 1997 (introduced from Eurasia)

Veronica peregrina purslane speedwell; neckweed HJ 1997 (2 subtaxa present in BC: [var. *peregrina*], [var. *xalapensis*]) (probably introduced from eastern North America) Notes: Of the two varieties occurring in BC:

- 1. Plants smooth; rare on Vancouver Island and the lower Fraser Valley ... var. peregrina
- 2. Plants short stalked-glandular in the infloresences and on the capsules; the frequent variety ... var. *xalapensis*

(Source: *The Illustrated Flora of BC*)

^{*}Veronica peregrina var. xalapensis purslane speedwell Frank Lomer 2002

^{*}Veronica persica bird's eye speedwell TL 2018 (introduced from Eurasia)

^{*}Veronica scutellata marsh speedwell; skullcap speedwell HJ 1999

Veronica serpyllifolia thyme-leaved speedwell JPM 1974, *HJ (subtaxa present in BC: one native [*V. serpyllifolia* var. *humisifa*], the other introduced from Europe [*V. serpyllifolia* var. *serpyllifolia*])

Vicia americana American vetch JPM 1974, Frank Lomer 2002

Vicia hirsuta tiny vetch; hairy vetch HJ 1997 (introduced from Eurasia)

Vicia nigricans ssp. gigantea black vetch; giant vetch; Spring vetch; tiny vetch HJ 1997 (subtaxa present in BC: V. nigricans ssp. gigantea)

Vicia sativa var. angustifolia common vetch; garden vetch JPM 1974 (subtaxa present in BC: var. angustifolia and var. sativa) [introduced from Eurasia]

**Vinca major* large periwinkle; bigleaf periwinkle HJ (horticultural escape) [introduced from Europe]

*Vinca minor common periwinkle TL 2017 (introduced from Eurasia) [This species is listed as one of the twelve most problematic species in the Vancouver Region by the Greater Vancouver Invasive Plant Council.] (See their website)

Viola adunca early blue violet; sand violet; Cascades early blue violet; hooked spur violet JPM 1974, *HJ

Viola glabella stream violet; pioneer violet; yellow wood violet JPM 1974, Adolf Ceska 1981

Viola palustris alpine marsh violet; marsh violet JPM 1974, Harvey Janszen 1999, *TL 2014 (subtaxa present in BC: *V. palustris* var. *palustris*)

Viola sempervirens trailing yellow violet; evergreen violet HJ 1997, *TL 2017

Vulpia microstachys (Synonym: Vulpia microstachys var. pauciflora) small fescue HJ 1997 (2 subtaxa present in BC: V. microstachys var. microstachys (desert fescue) [redlisted], V. microstachys var. pauciflora (Pacific fescue) [yellow-listed])

Vulpia myuros rat-tail fescue HJ 1997, *Frank Lomer 2012 (introduced from Eurasia and North Africa)

Woodsia oregana western cliff fern; Oregon cliff fern HJ 1997 (subtaxa present in BC: W. oregana ssp. oregana)

Woodwardia fimbriata giant chain fern W.B. Anderson 1897, John M. Macoun 1913,

W.E. Molyneux 1929, Harry Barclay 1963, John Dove 1970, Shoulder 1975, Judy A. Jamison 1997, HJ 1997, Patrick Williston 1999, *TL 2007, Adolf Ceska 2008, Frank Lomer 2012 (blue-listed) locally abundant

Zigadenus elegans (Synonym: Anticlea elegans) mountain death-camas; elegant death-camas JPM 1974, *JD 1975, HJ 1997, *TL 2018

Zigadenus elegans var. elegans subtaxon of mountain death-camas Frank Lomer 2012

Zigadenus venenosus (Synonym: Toxicoscordion venenosum) meadow death-camus; grass-leaved death-camas John M. Macoun 1885, *JD 1975, Randy Bouchard, Dorothy Kennedy 1976, HJ 1997 (2 subtaxa present in BC: Z. venenosus var. gramineus grassy death-camas [more common in the interior], Z. venenosus var. venenosus [predominantly along the coast]) (Source: The Illustrated Flora of BC)

Zostera japonica (See Nanozostera japonica)

*Zostera marina common eel grass; seawrack HJ 1997, JD 1978