

Appendix F

Botany



This appendix provides a list of federally listed and candidate plant species and actions and plans related to federally listed and BLM special status plant species. It also includes a list of special status plants and fungi by habitat group. The analysis of effects for special status plant and fungi species is based on using these habitat groups.

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Federally Listed and Candidate Plant Species

Following is a list of federally listed and candidate plant species found in the planning area.

TABLE F-1. FEDERALLY LISTED AND CANDIDATE PLANT SPECIES.

Federal Status	Species	Common Name	Critical Habitat Designation	Recovery Plan	Conservation Agreement
FTO	<i>Castilleja levisecta</i>	Golden paintbrush	Not Designated	August-00	
FTO	<i>Howellia aquatilis</i>	Water howellia	Not Designated	Draft 1996	
FTO	<i>Lupinus sulphureus</i> ssp. <i>kincaidii</i>	Kincaid's lupine	Designated		2006
FTO	<i>Sidalcea nelsoniana</i>	Nelson's checker-mallow	Not Designated	September-98	
FEO	<i>Arabis macdonaldiana</i>	MacDonald's rock-cress	Not Designated	1990	
FEO	<i>Astragalus applegate</i>	Applegate's milk-vetch	Not Designated	April-98	
FEO	<i>Erigeron decumbens</i> var. <i>decumbens</i>	Willamette Daisy	Designated		
FEO	<i>Fritillaria gentneri</i>	Gentner's fritillary	Not Designated	July-03	
FEO	<i>Lilium occidentale</i>	Western Lily	Not Designated	March-98	
FEO	<i>Limnanthes floccosa</i> ssp. <i>grandiflora</i>	Agate desert meadowfoam	Not Designated	Draft 2006	
FEO	<i>Lomatium bradshawii</i>	Bradshaw's desert parsley	Not Designated	August-93	
FEO	<i>Lomatium cookii</i>	Cook's lomatium	Not Designated	Draft 2006	2002
FEO	<i>Plagiobothrys hirtus</i>	Rough popcorn-flower	Not Designated	July-03	
FCO	<i>Calochortus persistens</i>	Siskiyou Mariposa lily	Not Designated		

FTO = Federally Threatened Oregon FEO = Federally Endangered Oregon FCO = Federal Candidate Oregon



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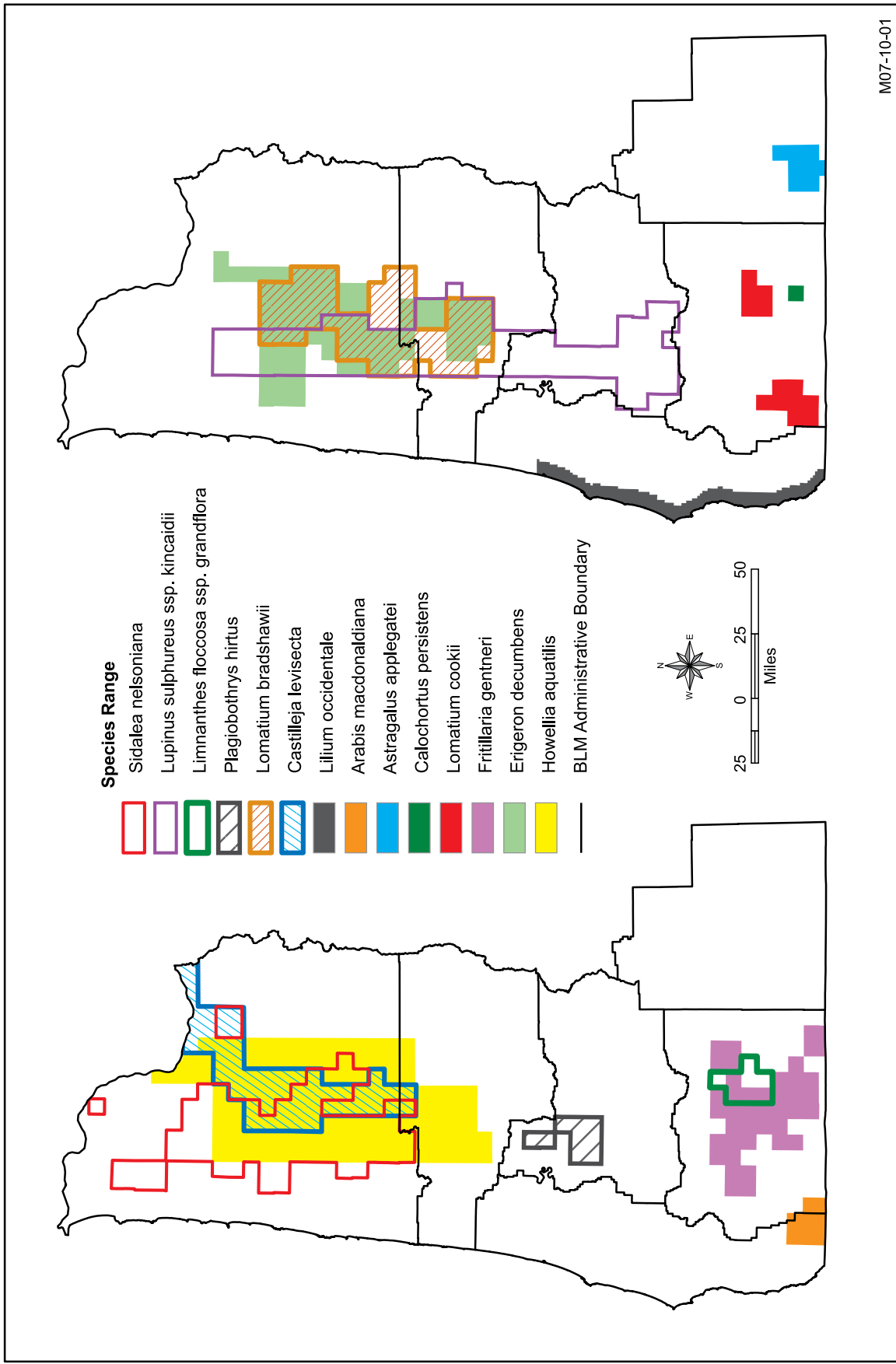


FIGURE F-1. FEDERALLY LISTED PLANTS



Digest of Actions for Federally Listed Plant Species Contained in Recovery Plans and Conservation Agreements

Recovery Plans and Recovery Actions

Recovery Plans for eight federally listed plant species have been completed and published by the U.S. Fish and Wildlife Service. The individual recovery plans are incorporated by reference and each stands on its own with a complete list of recovery actions. Conservation agreements were completed between the BLM and the U.S. Fish and Wildlife Service for Kincaid's lupine in 2006 for populations in Douglas County and Cook's lomatium in 2002 for populations in the Illinois Valley, Oregon.

The bulleted lists of conservation actions for each species are excerpts from each individual recovery plan and conservation agreement. The excerpts describe activities that would occur on the ground. The key elements vary by species and by recovery plan or agreement, and are not a comprehensive list of all actions. These recovery plans were written by numerous authors over a period of 20 years and vary in detail.

Nelson's checker-mallow (*Sidalcea nelsoniana*)

(U.S. Fish and Wildlife Service. 1998.)

- Preserve and establish total of 18 reserves to manage for the recovery of the species.
- Actively manage habitat within reserves to achieve natural recruitment, population size and age structure; within each habitat reduce succession, competition and anthropogenic threats.
- Augment populations, collect seed, and propagate seedlings.
- Conduct population genetics studies.
- Create an outreach program for private landowners.

Rough popcorn-flower (*Plagiobothrys hirtus*)

(U.S. Fish and Wildlife Service. 2003.)

- Conserve all existing populations and manage reserves within recovery areas for long-term viability of the species.
- Protect habitat within reserves including habitat for pollinators.
- Manage existing sites by reducing competition and impacts from native and nonnative species.
- Develop new populations in recovery units and augment existing populations by planting or seeding areas.
- Evaluate species genetic diversity.

Western lily (*Lilium occidentale*)

(U.S. Fish and Wildlife Service. 1998.)

- Search for additional sites and potential suitable habitat.
- Protect all known populations.
- Control insect herbivory and disease outbreaks.



- Manage sites to enhance the habitat so that existing populations will naturally increase. Remove over-topping vegetation.
- Establish, delineate and secure management areas that include all necessary habitat and plants to sustain a viable population.
- Determine genetic diversity and effective population sizes for all populations
- Maintain representative seed bank; reintroduce or augment populations as prudent.
- Allow grazing with minimal negative effects to the lily, or suspend during the flowering and fruiting season as prudent.
- Conduct a public outreach program.

Gentener's fritillary (*Fritillaria gentneri*)

(U.S. Fish and Wildlife Service. 2003.)

- Establish 8 management areas within 4 recovery units to provide for long-term maintenance or improvement of habitat.
- Develop protection strategies to reduce successional encroachment and shading, curtail new roads in habitat, control and prevention of invasive weed colonization, reduction of herbivory by deer and livestock, prevention of public bulb collection.
- Augment populations as needed to meet recovery criteria.
- Study genetic diversity and vegetative morphology of the species
- Collect and cultivate bulblets for augmentation within management areas, develop and establish germplasm bank.
- Survey for undiscovered populations in suitable habitat.
- Provide private landowners with assistance to manage *F. gentneri* habitat

Bradshaw's desert parsley (*Lomatium bradshawii*)

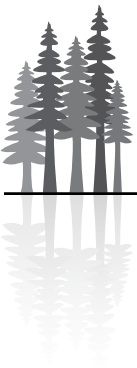
(U.S. Fish and Wildlife Service. 1993.)

- Secure and manage habitat within 4 recovery areas
- Establish 10 management areas, develop management plans, secure and protect the habitat supporting each population, and implement site specific plans.
- Enhance populations within management areas by reducing threats to the species. Manage secondary succession, habitat modification, competition from native and introduced species, removal of trees altering soil conditions, insect and fungal diseases, human impacts, herbicide impacts, and grazing impacts.
- Locate additional sites by identifying potential habitat and conducting searches for additional populations.
- Supplement existing seed bank and conduct life history, population, reproduction and genetics studies of the species.

McDonald's rock-cress (*Arabis mcdonaldiana*)

(U.S. Fish and Wildlife Service. 1990.)

- Protect and conserve all existing populations and habitat.
- Identify and protect essential habitat.
- Survey additional suitable habitat.



- Withdraw lands from mining, designate as “special areas”, and acquire suitable habitat where possible.
- Conduct reproduction biology studies.
- Create a public awareness program.

Golden paintbrush (*Castilleja levisecta*)

(U.S. Fish and Wildlife Service. 2000.)

- Maintain the current geographic distribution of the species by maintaining habitat integrity.
- Implement habitat management that includes: protection of sites with the best potential for providing long-term stable habitat, and maintenance of unoccupied, potential habitat in suitable condition.
- Establish new populations within the historic range of the species.
- Conduct inventory surveys for undiscovered populations in suitable habitat.
- Determine genetic variation, population dynamics and clarify reproductive biology aspects.
- Collect seed and reintroduce populations into unoccupied habitat in its former range.
- Promote conservation of existing habitat through collaboration with private landowners and public outreach program.

Applegate’s milk-vetch (*Astragalus applegate*)

(U.S. Fish and Wildlife Service. 1998.)

- Search for and inventory undiscovered populations.
- Collect seed, propagate plants to establish introduced populations and augment existing populations.
- Conserve natural and introduced populations.
- Establish 6 recovery areas and develop management strategies for long-term stability.
- Manage the habitat of each population to achieve the desired population size and age structure, to encourage natural population recruitment and to minimize adverse impacts to populations.
- Conduct ecological and demographic studies.
- Implement an outreach program.

Water howellia (*Howellia aquatilis*)

(U.S. Fish and Wildlife Service. Draft 1996.)

- Maintain the extant geographic range and habitat integrity to ensure functioning of meta-population dynamics.
- Habitat management should include the following key components: the maintenance of the natural vegetation, hydrologic, and geomorphologic conditions that determine the natural habitat succession rates and seasonal inundation and drying patterns of the habitat.
- Secure habitat through partnerships with private landowners and provide protection on federal lands through special management designations such as Research Natural Areas or other designations.
- Conduct inventories in suitable habitat throughout the range of the species
- Elucidate threats, as well as genetics and population biology characteristics.
- Develop and implement a reintroduction plan.



Conservation Agreements

Kincaid's lupine (*Lupinus sulphureus ssp. kincaidii*)

(Roseburg District BLM, U.S. Fish and Wildlife Service and USDA Forest Service Umpqua National Forest. 2006.)

- Maintain stable populations by protecting and restoring habitat of each population and by reducing threats.
- Conserve a minimum of two meta-populations within the recovery zone in Douglas Co.
- Conserve a minimum of 5,000 m² of occupied habitat.
- Survey suitable habitat for new populations and manage habitat to meet recovery goals.
- Create new reserve populations; protect and manage them to address threats and increase the meta-population size.
- Evaluate genetic variability; introduce and/or augment populations into suitable habitat.

Cook's desert parsley (*Lomatium cookii*)

(Medford District BLM, U.S. Fish and Wildlife Service. 2002.)

- Manage all Cook's lomatium populations and associated habitat within Illinois Valley, OR.
- Protect significant biological and ecological values of populations and habitats.
- Protect populations from human activity, recreation and mining activity.
- Manage occupied habitat to reduce increasing cover.
- Pursue mineral withdrawal within French Flat ACEC and other occupied sites.
- Collect seed from populations.
- Survey additional suitable habit to determine distribution.
- Collect population demographic data to determine population trends.

Digest of Conservation Plans for Special Status Plants

The lists below summarize the primary actions described in the agreements and strategies for Bureau sensitive species that would be applied on BLM managed lands. These lists are not intended to be complete and comprehensive. The conservation agreements and conservation strategies of each species are the documents that provide complete details and guide the management of the species.

Conservation Strategies

Gorman's Aster (*Aster gormanii* - new name: *Eucephalus gormanii*)

(1994 Interagency: Salem BLM; Willamette and Mt. Hood National Forest.)

- Maintain healthy reproductive populations at a variety of sites.
- Protect populations from immediate threats to their existence, such as: grazing by livestock or wildlife, habitat loss from timber harvest operations, road construction, quarrying and recreation.



- Ensure maintenance of suitable microclimate in timber-harvest sites by buffering *A. gormanii* populations.
- Inventory suitable habitat of the species and collect baseline data on habitat requirements and vegetation community characteristics.

Silvery Phacelia (*Phacelia argentea*)

(1995 Coos Bay District, BLM)

- Survey suitable habitat for new populations and update information of existing populations including threats and habitat.
- Monitor population demography and changes to the habitat.
- Improve occupied habitat and protect known populations from OHV use, European beachgrass infestation.
- Collect seed for long term conservation.

Green Gentian (*Frasera umpquaensis*)

(1993 Interagency: Eugene and Medford BLM; and Rogue River-Siskiyou, Willamette, and Umpqua National Forests)

- Ensure the continued viability of the species by designating all populations on BLM lands as critical to maintain viable, genetically stable populations.
- Monitor and collect demographic data of selected populations.
- Protect populations from timber harvest operations, encroachment of trees into meadows, and fire suppression.
- Conduct field reconnaissance and survey for *F. umpquaensis* populations in potential habitat.
- Research phenology, pollination, seed biology, and genetic variation of the species.

Columbia cress (*Rorippa columbiae*)

(1996 Interagency: Spokane, Burns, and Lakeview BLM; Winema, Shasta-Trinity, and Modoc National Forests; Klamath Basin National Wildlife Refuge; and California Department of Fish and Game)

- Employ one or more of the following actions to protect this species from livestock grazing and trampling: fence habitat and known populations, provide alternative water sources for cattle, alter grazing schedules to avoid the growing season of *R. columbiae* (April-October), and reduce or eliminate the number of livestock in the grazing unit.
- Allow higher water levels in early spring to reproduce the scouring effects of floods to help control the establishment of woody and weedy species.
- Provide populations with a 200-300 foot buffer near timber harvest sites.
- Install gates and signs to manage access by vehicles.
- Conduct inventory for potential habitat and undiscovered populations.
- Protect local hydrologic function by avoiding habitat changes when implementing erosion control, timber harvests and road construction projects.
- Control competing herbaceous vegetation and invading tree species.

Tall Bugbane (*Cimicifuga elata*)

(1996 Interagency: Eugene, Roseburg, Salem and Medford BLM; Rogue River-Siskiyou, Willamette, Mt. Hood and Umpqua National Forests; U.S. Army Corps of Engineers)



- Establish a system of Selected Populations representing a cross-section of sizes and habitats throughout the species' range and essential for its long-term viability.
- Manage and enhance habitat at the selected sites to maintain population viability:
- Mitigate direct and indirect impacts, including: alterations in hydrology, canopy closure, changes in habitat from timber harvest, and road building in order to create and maintain conditions favorable for the *C. elata*.
- Management for non-selected populations is discretionary;
- Improve the quality of existing habitat through broadcast burning and thinning to create and maintain forest gaps;
- Collect seeds and fruits for long term storage and potential future propagation;
- Install signs and protect populations within road right of ways. Restrict blading and ditching activities that would harm populations;
- Salvage plants for relocation when protection is not possible;
- Identify suitable habitat where reintroductions would benefit the species; and
- Monitor *C. elata* populations and inventory in suitable habitat.

Conservation Agreements

Wayside Aster (*Eucephalus vialis*; old name *Aster vialis*)

(2006 Interagency: Eugene, Roseburg and Medford BLM, Rogue River-Siskiyou National Forest; USFWS Roseburg Field Office)

- Elucidate taxonomy of *E. vialis* thorough morphology and genetics.
- Verify occurrences, conduct additional field surveys to describe habitat characteristics and population sizes.
- Survey for additional populations.
- Study response of *E. vialis* to disturbances.
- Enhance existing habitat of selected *E. vialis* populations.
- Share acquired data with interested agencies.
- If needed, outline additional actions through a Conservation Strategy.

Large-flowered rush lily (*Hastingsia bracteosa*), **Purple-flowered rush lily** (*Hastingsia atropurpurea*), **Mendocino gentian** (*Gentiana setigera*), **Oregon willow-herb** (*Epilobium oregonum*), and **Western bog violet** (*Viola primulifolia* ssp. *occidentalis*)

(2006 Interagency: Coos Bay and Medford BLM; Rogue River-Siskiyou and Six Rivers National Forests; Arcata and Roseburg USFWS)

- Provide conservation for five rare plant species and their serpentine wetland habitat, known as Darlingtonia californica fens.
- Inventory to identify new suitable and/or occupied habitat.
- Manage the Darlingtonia fens and protect their significant biological and ecological functions and values.
- Protect Darlingtonia fens from threats such as: mining activities, road construction and maintenance, up slope logging, OHV use, fire suppression activities, water siphoning, over utilization for commercial, recreational, scientific or educational purposes, and from several invasive and noxious weed species. Monitor known sites, conduct additional inventory and surveys for all five taxa.



- Reduce risk of Port-Orford-root rot disease on *Darlingtonia fens*.
- Research habitat restoration measures, including fire, on *Darlingtonia fens*.

Crinite Mariposa Lily (*Calochortus coxii*)

(2004 Interagency: Roseburg and Medford BLM; Umpqua National Forest; USFWS)

- Monitor selected populations to detect possible declines in habitat quality and / or demography.
- Limit mining activity within the habitat.
- Identify habitat fire frequency requirements.
- Restore *Calochortus coxii* meadow habitat with native bunchgrasses and/or prescribe burn on a frequency matching natural fire return level. Thin or girdle trees to produce gaps in forest habitat.
- Inventory and control invasive and noxious weeds using integrated pest management (mechanical, manual, biological, and chemical methods).
- Exclude livestock inside habitat of *C. coxii*.
- Collect seeds for long term conservation and propagation.

Umpqua Mariposa Lily (*Calochortus umpquaensis*)

(1995 Interagency: Roseburg BLM and USFWS)

- Acquire habitat on private lands to increase the amount of habitat in Federal ownership.
- Mitigate impacts from energy right of way and corridors.
- Manage livestock grazing and vehicle access inside habitat by installing gates and fences.
- Maintain and restore *Calochortus umpquaensis* meadow habitat with native bunchgrasses or other native species.
- Conduct prescribed burning and thinning to produce gaps in forest habitat.
- Conduct inventories of potential habitat.
- Monitor populations.

Habitat Groups

For the analysis of effects, special status plant species were categorized based on habitat relationships as shown in Table F-2. A species can occur in more than one habitat group. The national, state, agency rankings are shown in Table F-3.

Habitat Groups and Abbreviations are as follows:

MG=Meadows/Grassland, SC=Shrub Community, OHW=Oak/Hardwood Woodlands, CF=Conifer/Mixed Evergreen Forest, SW=Seasonal Wetland Fens/Vernal Pools, RI=Riparian and Aquatic, SE=Serpentine Areas, RK=Rocky Areas Outcrops/Scree, MZ=Maritime Zone

Federal, State, and Bureau Status and abbreviations are as follows:

FEO=Federally Endangered Oregon, FTO=Federally Threatened Oregon, FC=Federal Candidate, FSC - Federal Species of Concern, SEO= State Endangered Oregon, STO=State Threatened Oregon, SC - Species of Concern, BSO=Bureau Sensitive Oregon,



Taxon and abbreviations are as follows:

VA=Vascular, FU=Fungi, BR=Bryophyte, LI=Lichen

BLM district abbreviations:

**BLM District Codes CB=CoosBay District, EU=Eugene District, KF=Klamath Falls Resource Area,
MD=Medford District, RO=Roseburg District, SA=Salem District**

Species occurrences by BLM district:

D - Documented, S - Suspect



TABLE F-2. SPECIAL STATUS PLANT AND FUNGI SPECIES

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
BR	<i>Andreaea schrofieldiana</i>	Moss		CF, RK	Dry rock outcrops; moderate elevations, acidic rock, granite in conifer stands. ^a
BR	<i>Bryum calobryoides</i>	Moss	6-20 known populations	RI, RK	Forming sods or occurring as individuals among other mosses, on acid and basic rocks and soil in shaded to exposed; montane to alpine meadows, cliffs, outcrops and boulder fields; 915-2130 m. ^a
BR	<i>Calyptogeia sphagnicola</i>	Liverwort		SW, SE	Usually restricted to poor fens containing Sphagnum, acidic fen habitats, and in a fen on ultramafic soils. ^a
BR	<i>Campylopus schmidii</i>	Moss		CF, RI, SW, MZ	Nutrient-poor sandy substrates near the coast; forms sods in open stands of shore pine and <i>Cupressus goveniana</i> ssp. <i>pigmaea</i> ; grows on shaded to exposed sand around the edges of vernal pools; on exposed, seasonally-flooded sand on deflation plains. ^a
BR	<i>Chiloscyphus gemmiparus</i>	Liverwort		CF, RI	Forming small turfs or clumps on rocks in beds of cold montane streams, submerged or emergent in the splash zone, full shade to partial sun; 1525-2130 m. ^a
BR	<i>Codiophorus depressus</i> - name change from <i>Racomitrium depressum</i>	Moss		CF, RI, OHW	Forming mats on rocks in perennial or intermittent streams, and in the spray zone of waterfalls; habitats subject to scour at high water; conifer and hardwood forests; 120-3350 m. ^a
BR	<i>Cryptomitrium tenerum</i>	Liverwort		CF, RK, RI	Forming small to locally extensive mats on bare, usually shaded and humid soil on hillsides, rock outcrops, and streambanks; root balls and outbanks are favored habitat in forests; >1180 m. ^a
BR	<i>Diplophyllum plicatum</i>	Liverwort	Habitat associated with older conifer forests	CF, RI, RK	Cool, moist habitats, decayed wood, downed logs, trunks, soil and rocks, moist shaded cliffs, along rivers and stream banks; narrow environmental specificity-high humidity and perennially cool temperatures. ^b
BR	<i>Encalypta brevicollis</i> - variety no longer recognized (<i>E. brevicolla</i> var. <i>crumiana</i>)	Moss		RK	Grows on soil in shaded crevices in igneous rocks, along ridgetops subject to frequent fog penetration; single site in OR/WA. ^b
BR	<i>Encalypta brevipes</i>	Moss		RK	Grows on soil on ledges and in crevices on cliffs, usually on igneous or siliceous rocks; sites subject to frequent fog penetration. ^a
BR	<i>Entosthodon fascicularis</i>	Moss	< 6 known populations	RI, MG, OHW, SC, RK	Individual plants or forming small sods on seasonally wet, exposed soil in seeps or along intermittent streams. Habitats are grassland, oak savanna, grassy balds, and rock outcrops; < 915 m. ^a
BR	<i>Ephemerum crassinervium</i>	Moss	< 6 known populations	SW	Vernally moist soil, especially wet prairies. Willamette Valley and the edge of Fern Ridge Reservoir. ^c

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
BR	<i>Gymnomitrium concinnatum</i>	Liverwort		CF, RK	On peaty soil of cliffs and rock outcrops, full exposure or shaded; found in subalpine parkland areas in <i>Tsuga mertensiana</i> and <i>Abies lasiocarpa</i> associations; 100-1830 m. ^a
BR	<i>Helodium blandowii</i>	Moss		CF, SW, MG	Vernally moist, sparsely wooded areas, meadows and grasslands on rocky clay, generally ultramafic. ^a
BR	<i>Herbertus aduncus</i>	Liverwort		CF, RK	Exposed montane, windswept sites, in generally moist, protected microsites on rock outcrops, in crevices, and on ledges, wedged among stones or roots. ^b
BR	<i>Iwatsukiella leucoctricha</i>	Moss	Habitat associated with older conifer forests	CF, MZ	Restricted to forests along maritime fog or cloud interception areas with high relative humidity, coastal ridges that usually have older, true fir present. ^d
BR	<i>Kurzia makinoana</i> (*)	Liverwort	< 6 known populations. Habitat associated with older conifer forests	CF, RI	On well-shaded, rotten wood and humic soil at low elevations, especially on stream terraces, floodplains, wetlands, and other cool, moist forest locations; associated with old-growth forests near riparian areas. ^b
BR	<i>Limbella fryei</i>	Moss		CF, RI, MZ	Forming sods to 3 feet in diameter on wet rotten wood, leaf litter and lower trunks of tall shrubs, in dense coastal shrub swamps; < 60 m. ^a
BR	<i>Lophozia laxa</i>	Liverwort		MZ, SW	Restricted to well-developed hummocks of Sphagnum in fens and bogs in full sun to partial shade along the coast and in the Cascade Range; < 150 m. ^a
BR	<i>Meesia uliginosa</i>	Moss	< 6 known populations	MG, RI	Forming turfs in medium to rich montane fens on saturated ground, usually in full sunlight; 1525-1830 m. ^a
BR	<i>Metzgeria violacea</i>	Liverwort		CF, MZ	Forming mats or mixed with other bryophytes on trunks of trees and shrubs in coastal rainforest; rarely on rotting wood or igneous rocks; usually in cool, moist riparian areas or shaded north-facing talus slopes and outcrops; scarce to locally abundant; full shaded to partial sun; < 300 m. ^a
BR	<i>Orthodontium pellucens</i>	Moss	Habitat associated with older conifer forests	CF, MZ	Forming dense cushions or mats on stumps, rotten logs and bark of living redwood trees, confined to redwood groves near the Pacific Ocean. ^a
BR	<i>Polytrichum sphaerothercium</i>	Moss		CF, RK	Forms green to brown sods on igneous rocks in exposed or sheltered sites, subalpine parkland to alpine krummholz. ^a
BR	<i>Porella bolanderi</i>	Liverwort	< 6 known populations	CF, RK, OHW	Forming shaded to partly exposed mats on a variety of rock types (siliceous, calcareous, and metamorphic) and trunks of <i>Quercus</i> , <i>Umbellularia</i> , and <i>Acer macrophyllum</i> ; 150-915 m. ^a





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
BR	<i>Pseudocalliergon trifarium</i> - name change from <i>Calliergon trifarium</i>	Moss		SW	Forming lawns or intermixed in medium to rich montane fens where it grows submerged to emergent in pools or on saturated ground, usually in full sunlight; fen pools may dry up in late summer; 1525-1830 m. ^a
BR	<i>Rhizomnium nudum</i> (*)	Moss	Habitat associated with older conifer forests	CF, RI	Moist conifer forest from mid to high elevation; humus and mineral soils in seepages, on soil over rock in the splash zone of a stream, and in vernal wet areas associated with forest depressions or ephemeral low gradient channels; full sun to full shade in dense forest stands. ^e
BR	<i>Rhytidium rugosum</i>	Moss		RK	Forming loose mats over dry, exposed rocks or soil, usually on the sides and tops of bluffs and cliffs, at middle to higher elevations; often subject to fog penetration; on calcareous, and basic and basalt substrates. ^a
BR	<i>Schistostega pennata</i> (*)	Moss	6-20 known populations Habitat associated with older conifer forests	CF, RI	Occurs on mineral soil in crevices on the lower and sheltered parts of the root mass of fallen trees; on soil around cave entrances in low light; along the edge or margin of the stream or wet area, stream terraces or lower slopes and where soils are relatively moist and humidity is high. Generally old-growth conifer stands. ^f
BR	<i>Scouleria marginata</i>	Moss	< 6 known populations	RI, RK	Occurs on bedrock material or very large boulders along the margins of perennial river systems; frequently submerged but is usually exposed during periods of low water flow; rock material is large granitic or volcanic that does not move during turbulent floodwater events; > 1200 m. ^g
BR	<i>Splachnum ampullaceum</i>	Moss		RI	Forming green sods on old dung of herbivores, or on soil enriched by dung, in peatlands or wetlands; plants in Oregon occurred in fens. ^a
BR	<i>Tayloria serrata</i>	Moss		CF, OHW	Forming green sods on old dung, rotten wood, or on soil enriched by dung on roadsides, trails, in dry to moist coniferous forest of various age classes including early seral, and in wetlands. ^a
BR	<i>Tetraphis geniculata</i> (*)	Moss	< 6 known populations Habitat associated with older conifer forests	CF	Found on large, legacy logs or stumps, decay class three, four and five, and occasionally on peaty banks; generally in old-growth conifer stands in cool moist micro-climate areas from sea level to subalpine elevations. ^h
BR	<i>Tetraplodon mnioides</i>	Moss	6-20 known populations	CF, SW	Forming stiff, densely-packed sods on old carnivore dung, or soil and rotten wood enriched by dung, on roadsides, trails, in dry to moist coniferous forest, and in peatlands. ^a
BR	<i>Tomentypnum nitens</i>	Moss		CF, RI	Forming loose or dense sods or intermixed with other bryophytes in medium to rich montane fens; favors slightly elevated sites such as logs, stumps, or hummocks formed by huckleberry and bog birch; 1525-1830 m. ^a

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
BR	<i>Tortula mucronifolia</i>	Moss		CF, RK	Forming small turfs or cushions on soil, tree roots, and sheltered ledges and crevices of rock outcrops and cliffs in conifer forests; 1525-2130 m. ^a
BR	<i>Trematodon boasii</i>	Moss		CF, RI	Forming loose mats on moist bare soil along the edges of trails, streams and ponds; subalpine zone. Soils usually have some organic content and are irrigated by meltwater from late-season snowbeds.
BR	<i>Tritomania exsectiformis</i>	Liverwort	Habitat associated with older conifer forests	CF, RI	Open to shaded coniferous forest, in association with low volume, perennial streams, springs and seeps; along gentle topographic gradients. Substratum is down wood, commonly decay class four, occasionally three or five; generally in direct contact with water. ^j
FU	<i>Albatrellus avellaneus</i>	Fungus	Habitat associated with older conifer forests	CF	Polypore. Endemic to the coastal lowlands; principally in coastal Sitka Spruce (50%) and Western Hemlock (38%) series, old growth forest; 30-335 m. ^k
FU	<i>Alpova alexsmithii</i>	Fungus		CF	Sequestrate. Principally on soil in Pacific Silver Fir (44%) and Mountain Hemlock (44%) series; mycorrhizal associate of <i>Tsuga</i> ; 835-1750 m. ^k
FU	<i>Arcangeliiella camphorata</i>	Fungus	< 6 known populations	CF, OHW	Sequestrate. Principally in soil and litter in Western Hemlock (44%), Tan Oak (31%) and Sitka Spruce (19%) series; associated species include Douglas fir, western hemlock, Pacific madrone, and incense cedar; 10-925 m. ^k
FU	<i>Boletus pulcherrimus</i> (*)	Fungus	< 6 known populations	CF, OHW	Bolete. In humus, associated with the roots of mixed conifers (<i>Abies grandis</i> , <i>Pseudotsuga menziesii</i>), and hardwoods (<i>Lithocarpus densiflorus</i>). ^k
FU	<i>Bridgeoporus nobilissimus</i> (*)	Fungus	Habitat associated with older conifer forests	CF	Polypore. A wood saprobe principally in Pacific silver fir (73%) and Western Hemlock (23%) series on noble fir and true fir decadent trees, snags, and stumps greater than 1 meter dbh; 90-1320 m. ^k
FU	<i>Chamonixia caespitosa</i>	Fungus		CF	Sequestrate. Found with <i>Tsuga</i> sp. and <i>Abies amabilis</i> at high elevation and <i>Tsuga heterophylla</i> , <i>Pseudotsuga menziesii</i> and <i>Picea sitchensis</i> in coastal forests. ^k
FU	<i>Choireomyces venosus</i>	Fungus	< 6 known populations	CF	Sequestrate. Associated with various <i>Pinaceae</i> spp., particularly <i>Pseudotsuga menziesii</i> and <i>Tsuga heterophylla</i> in low elevations; sporocarps beneath soil surface. ^k
FU	<i>Cortinariulus barlowensis</i>	Fungus	Habitat associated with older conifer forests	CF	Mushroom. Solitary to gregarious; principally in montane Pacific silver fir (44%) and coastal Western Hemlock (28%) series; 10-1435 m. ^k
FU	<i>Cudonia monticola</i> (*)	Fungus	6-20 known populations	CF	Earth tongue. Saprobe on <i>Picea</i> sp. needles and coniferous debris, litter and rotten wood; principally in Western Hemlock series (58%); associated species include Pacific silver fir, white fir, grand fir, subalpine fir, red fir, noble fir, Engelmann spruce, Douglas fir, western red cedar, western hemlock and mountain hemlock; 160-1830 m. ^k





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
FU	<i>Cystangium idahoensis</i> - name change from <i>Martellia idahoensis</i>	Fungus		CF	Sequestrate. Associated with roots of <i>Abies amabilis</i> , <i>A. lasiocarpa</i> , <i>A. procera</i> , <i>Picea engelmannii</i> , and <i>Tsuga mertensiana</i> from 1,200 to 1,650 m. ^k
FU	<i>Dermocybe humboldtensis</i>	Fungus	< 6 known populations	CF, MZ	Mushroom. Appears restricted to stable dunes in association with <i>Pinus</i> spp.; occurs in Douglas Fir (50%) and Grand Fir (50%) series; associated species include Douglas fir and ponderosa pine; 410-600 m. ^k
FU	<i>Destuntzia rubra</i> (*)	Fungus		CF, OHW, MZ	Sequestrate. Associated with roots of <i>Abies grandis</i> , <i>Arbutus menziesii</i> , <i>Lithocarpus densiflorus</i> , <i>Pseudotsuga menziesii</i> and <i>Sequoia sempervirens</i> ; >650 m. ^k
FU	<i>Gastroboletus imbellus</i> (*)	Fungus		CF	Sequestrate. Occurs in Pacific Silver Fir (50%) and Mountain Hemlock (50%) series; associated with roots of grand fir, subalpine fir and mountain hemlock; 770-1575 m. ^k
FU	<i>Gastroboletus vividus</i>	Fungus		CF	Sequestrate. Associated with roots of various Pinaceae; especially <i>Abies magnifica</i> and <i>Tsuga mertensiana</i> . ^k
FU	<i>Gomphus kauffmanii</i> (*)	Fungus	6-20 known populations	CF	Chanterelle. Mycorrhizal. Closely gregarious to caespitose in deep humus, litter, soil, wood or moss under pines or firs; partially hidden; occurs primarily in Pacific Silver Fir (31%), Mountain Hemlock (27%) or Western Hemlock (24%) series; associated species include Pacific silver fir, subalpine fir, Shasta red fir, Noble fir, lodgepole pine, Douglas fir, Pacific yew, western red cedar, western hemlock, mountain hemlock, Pacific dogwood and oak species; 60-2080 m. ^k
FU	<i>Gymnomycetes fragrans</i> - name change from <i>Martellia fragrans</i>	Fungus		CF	Sequestrate. Associated with roots of <i>Pseudotsuga menziesii</i> or <i>Tsuga mertensiana</i> ; 1,500-2,500 m. ^k
FU	<i>Gymnomycetes nondistincta</i>	Fungus		CF	Sequestrate. Associated with roots of Pacific silver fir and mountain Hemlock in Mountain Hemlock (50%) and Parkland (50%) series; 1820-2170 m. ^k
FU	<i>Helvella crassifunicata</i>	Fungus		CF	Elfin saddle. On soil in montane regions, with <i>Abies</i> spp. ^k
FU	<i>Leucogaster citrinus</i> (*)	Fungus	< 6 known populations	CF, OHW	Sequestrate. On soil; associated with roots of white fir, subalpine fir, lodgepole pine, western white pine, Douglas fir and western hemlock; other associated trees include Pacific silver fir, grand fir, mountain hemlock, tan oak, California laurel; 90-1490 m. ^k
FU	<i>Mythicomycetes corneipes</i>	Fungus		CF, RI	Mushroom. Associated with bog margins among mosses or on wet soil; coniferous forests and <i>Alnus</i> spp. ^k
FU	<i>Octaviania macrospora</i> - old spelling (<i>Octavianina macrospora</i>) (*)	Fungus		CF	Sequestrate. Associated with western hemlock in Western Hemlock series; 980 m. ^k
FU	<i>Otidea smithii</i> (*)	Fungus	< 6 known populations	CF, OHW	Cup fungi. On exposed soil, moss, litter or humus under Douglas fir, western hemlock, ponderosa pine, bigleaf maple, white oak and black cottonwood; occurs primarily in the Western Hemlock series (83%); 380-1140 m. ^k

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
FU	<i>Phaeocollybia californica</i>	Fungus		CF, OHW	Mushroom. Occurs on soil, litter and humus in association with roots of Pacific silver fir, Sitka spruce, Douglas fir and western hemlock; principally occurs in Western Hemlock series (57%); other tree associates include incense cedar, western red cedar, bigleaf maple, Pacific madrone, canyon live oak, Oregon white oak and California laurel; 95-1160 m. ^k
FU	<i>Phaeocollybia dissilifens</i> (*)	Fungus	6-20 known populations	CF, OHW	Mushroom. Occurs on soil, litter and humus in association with roots of Pacific fir, Sitka spruce, Douglas fir and western hemlock principally in Western Hemlock series (67%); other tree associates include western red cedar, bigleaf maple, red alder and California laurel; 95-740 m. ^k
FU	<i>Phaeocollybia gregaria</i>	Fungus	< 6 known populations	CF	Mushroom. Associated with the roots of Sitka spruce and Douglas fir in Sitka Spruce (50%) and Western Hemlock (50%) series; 145-455 m. ^k
FU	<i>Phaeocollybia olivacea</i> (*)	Fungus		CF, OHW	Mushroom. Scattered to gregarious; often found in arcs or fairy rings in thick humus, litter or soil in forests containing <i>Fagaceae</i> or <i>Pinaceae</i> species (<i>Abies</i> , <i>Picea</i> , <i>Pseudotsuga</i> , <i>Pinus</i> , <i>Calocedrus</i> , <i>Sequoia</i> and <i>Tsuga</i>); occurs primarily in Western Hemlock (55%), Tan Oak (14%) and Douglas Fir (13%) series; associated species include Pacific silver fir, white fir, grand fir, Noble fir, incense cedar, sugar pine, Sitka spruce, Douglas fir, Pacific yew, western hemlock, western red cedar, bigleaf maple, Pacific madrone, tan oak, canyon live oak, Oregon white oak and California black oak; 5-960 m. ^k
FU	<i>Phaeocollybia oregonensis</i> (*)	Fungus	6-20 known populations	CF	Mushroom. Soil in association with roots of Douglas fir, western hemlock and Pacific silver fir, primarily in Western Hemlock series (75%); associated species include Douglas fir, western hemlock and Pacific madrone; 250-1160 m. ^k
FU	<i>Phaeocollybia pseudofestiva</i> (*)	Fungus	6-20 known populations	CF, OHW	Mushroom. Scattered to caespitose, in humus or soil associated with species of <i>Pinaceae</i> , mixed conifers and hardwoods; occurs primarily in the Western Hemlock series (63%); associated species include western hemlock, Sitka spruce, western red cedar, Noble fir, Douglas fir, pines, oaks and bigleaf maple; 10-1120 m. ^k
FU	<i>Phaeocollybia scatesiae</i> (*)	Fungus	6-20 known populations	CF	Mushroom. Occurs in litter, associated with roots of Pacific silver fir, Douglas fir and western hemlock; occurs primarily in Western Hemlock (67%) and Pacific Silver Fir (17%) series; 190-1380 m. ^k
FU	<i>Phaeocollybia sipei</i> (*)	Fungus		CF, OHW	Mushroom. Occurs in humus, litter or soil, associated with roots of western hemlock, Douglas fir, red fir and Pacific silver fir; occurs primarily in Western Hemlock (68%) and Tan Oak (21%) series; associated species include western hemlock, Douglas fir, western red cedar, Port Orford cedar, Pacific yew, incense cedar, bigleaf maple, tan oak and California laurel; 110-1080 m. ^k





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
FU	<i>Phaeocollybia spadicea</i> (*)	Fungus		CF, OHW	Mushroom. Solitary, scattered or gregarious in humus, litter or soil, under mixed coniferous forests or forests associated with <i>Abies</i> , <i>Picea</i> , <i>Pseudotsuga</i> , and <i>Tsuga</i> ; occurs primarily in Western Hemlock (74%) and Sitka Spruce (16%) series; associated species include Pacific silver fir, incense cedar, Sitka spruce, Douglas fir, western red cedar, western hemlock, bigleaf maple and red alder; 3-960 m. ^k
FU	<i>Pseudorhizina californica</i> (*) (ex- <i>Gyromitra californica</i>)	Fungus	Habitat associated with older conifer forests	CF	Cup fungi. On or adjacent to well-rotted stumps or logs of coniferous trees, on litter or soil rich in brown rotted wood; primarily in Pacific Silver Fir (19%), Western Hemlock (17%) or White Fir (17%) series; associated species include Pacific silver fir, white fir, red fir, lodgepole pine, sugar pine, ponderosa pine, Douglas fir, Engelmann spruce, western red cedar, western hemlock, mountain hemlock, red alder and quaking aspen; 45-1835 m. ^k
FU	<i>Ramaria amyloidea</i> (*)	Fungus	< 6 known populations	CF	Coral. Occurs in humus, litter and soil, associated with <i>Abies</i> spp., <i>Pseudotsuga menziesii</i> and <i>Tsuga heterophylla</i> ; occurs primarily in Pacific Silver Fir (46%), White Fir (27%) and Western Hemlock (15%) series; associated species include Pacific silver fir, white fir, red fir, Shasta red fir, Noble fir, lodgepole pine, western white pine, Douglas fir, western red cedar, western hemlock and mountain hemlock; 550-1685 m. ^k
FU	<i>Ramaria gelatinaurantia</i> (*)	Fungus	< 6 known populations	CF	Coral. Occurs on litter and soil, associated with <i>Pinaceae</i> spp.; occurs primarily in Western Hemlock series (88%); associated species include western hemlock, Douglas fir, western red cedar and Sitka spruce; 500-1100 m. ^k
FU	<i>Ramaria largentii</i> (*)	Fungus	< 6 known populations	CF, OHW	Coral. Occurs on soil, litter and humus associated with <i>Pinaceae</i> spp.; primarily in Western Hemlock (48%), White Fir (19%), Douglas Fir (14%) and Pacific Silver Fir (14%) series; associated species include western hemlock, white fir, Douglas fir, Pacific silver fir, grand fir, sugar pine, western white pine, incense cedar, Pacific yew, western red cedar and Pacific madrone; 405-1555 m. ^k
FU	<i>Ramaria rubella</i> var. <i>blanda</i>	Fungus		CF	Coral. Fruits on wood in conifer forests. ^k
FU	<i>Ramaria spinulosa</i> var. <i>diminutiva</i>	Fungus	< 6 known populations	CF	Coral. Associated with <i>Pinaceae</i> spp; occurs in Douglas Fir series; 450 m. ^k
FU	<i>Rhizopogon chamaeleontinus</i>	Fungus		CF	Sequestrate/Truffle. Occurs in association with the roots of Douglas fir and sugar pine; 1065 m. ^k
FU	<i>Rhizopogon ellipsosporus</i>	Fungus	< 6 known populations	CF	Sequestrate/Truffle. In Oregon, occurs in soil in Douglas Fir (57%), Tan Oak (29%) and Mountain Hemlock (14%) series; associated species include western hemlock and <i>Acer circinatum</i> ; 330-1230 m. ^k
FU	<i>Rhizopogon exiguus</i>	Fungus		CF	Sequestrate/Truffle. Associated with roots of Douglas fir and western hemlock in Western Hemlock (80%) and Douglas Fir (20%) series; 25-1215 m. ^k

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
FU	<i>Rhizopogon inquinatus</i>	Fungus		CF	Sequestrate/Truffle. Associated with roots of <i>Pinus jeffreyi</i> , <i>Pseudotsuga menziesii</i> and <i>Tsuga heterophylla</i> . ^k
FU	<i>Sowerbyella rhenana</i> (*)	Fungus	6-20 known populations Habitat associated with older conifer forests	CF, OHW	Cup fungi. Occurs in scattered to gregarious or caespitose groups in litter, humus or soil in older, relatively undisturbed conifer communities; occurs primarily in Western Hemlock (81%) and Douglas Fir (11%) series; associated species include incense cedar, sugar pine, ponderosa pine, Douglas fir, western hemlock, bigleaf maple, hazelnut, tan oak, California black oak; 180-1090 m. ^k
FU	<i>Stagnicola perplexa</i>	Fungus		CF	Mushroom. On rotten wood. ^k
FU	<i>Thaxterogaster pavelekii</i>	Fungus		CF	Sequestrate/Truffle. Associated with roots of Sitka spruce and lodgepole pine in Sitka Spruce (63%) and Western Hemlock (37%) series; 5-180 m. ^k
LI	<i>Bryoria pseudocapillaris</i>	Lichen	< 6 known populations Habitat associated with older conifer forests	CF, MZ	Occurs on a narrow ecological amplitude; maritime-influenced sites with moderated temperatures and high humidity; frequent fog; grows on exposed coastal trees, shrubs, and rock; predominantly on shore pine and Sitka spruce in old scrub forests, windswept dunes, or rocky headlands; < 500 m. ^l
LI	<i>Bryoria spirallifera</i>	Lichen	Habitat associated with older conifer forests	CF, MZ	Narrow ecological amplitude; exposed coastal trees, snags and shrubs, in forests or woodlands of windswept dunes and headlands; within 3 km of the ocean; predominantly on shore pine and Sitka; < 50 m. ^l
LI	<i>Bryoria subcana</i>	Lichen	< 6 known populations	CF, MZ	Bark and wood of conifers in Sitka spruce (<i>Picea sitchensis</i>), western hemlock (<i>Tsuga heterophylla</i>), wet Douglas-fir (<i>Pseudotsuga menziesii</i>), wet noble fir (<i>Abies procera</i>), and mixed hardwood-coniferous forests; along coastal bays and streams, dune forests (tentative), coastal mountain ridges, and high precipitation summits; high humidity, either as coastal fog or high precipitation; host plant is old or the stand age is late-seral to old-growth; tolerates shade tolerant to intolerant; found within 50 km of the ocean. ^l
LI	<i>Calicium adpersum</i> (*)	Lichen	Habitat associated with older conifer forests	CF	Highly textured bark on the boles of old growth conifer trees; very restricted to the bark of old trees; in the Pacific Northwest of North America all known occurrences are on conifers > 200 years old; relatively open stands in drier microhabitats where sheltered from precipitation, such as in crevices of bark, the dry side of leaning trunks, or the underside of limbs; occurs elsewhere on oak, spruce, and decorticated wood. ^a





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
LI	<i>Chaenotheca subroscida</i> (*)	Lichen	< 6 known populations Habitat associated with older conifer forests	CF	Very restricted to the bark of old trees; in the Pacific Northwest of North America, most known occurrences are on conifers > 200 years old, occasional occurrences on younger trees (e.g. 150 years old) southward in the Klamath region; correlated with increasing distance from; moderation of microclimate is an important determinant of site suitability. ^a
LI	<i>Dermatocarpon melophyllizum</i> (*)	Lichen		RI, RK	Typically found on rocks of stream channels and lake margins within the splash zone and seeps and on basic and acidic rocks; found mostly within 50 cm above the water surface, in the submerged condition, and up to 2 m above the water surface; 61-2300 m. ^m
LI	<i>Erioderma solediatum</i>	Lichen	6-20 known populations	CF, MZ	Found in the coastal fog zone, in shore pine and Sitka spruce forests interspersed with willow/wax myrtle or ericaceous shrub thickets; epiphytic on huckleberry, rhododendron, manzanita, western hemlock, and bark of red alder in a riparian area; about 16 km from the coast ^l .
LI	<i>Heterodermia leucomela</i> - name change from <i>H. leucomelos</i>	Lichen	6-20 known populations Habitat associated with older conifer forests	CF, MZ	Small branches of Sitka spruce and shore pine on forested headlands in the coastal fog zone; California habitats include moist, coastal redwood forests; open, low coastal scrub; and dry, open, savanna-like valley and foothill woodlands dominated by California oak species and other broad-leaved trees and shrubs, and occasionally on rocks; < 480 m. ^l
LI	<i>Heterodermia sitchensis</i> (*)	Lichen		CF, MZ	Sheltered twigs of <i>Picea sitchensis</i> in wet, maritime coastal forests. May be restricted to <i>Picea sitchensis</i> . ^a
LI	<i>Hypogymnia duplicata</i> (*)	Lichen	6-20 known populations Habitat associated with older conifer forests		Narrow ecological amplitude; epiphyte on mountain hemlock, western hemlock, Pacific silver fir, Douglas-fir and subalpine fir in old-growth forests of the western Cascades, Olympics and Coast Range; habitat for Oregon populations is moist hemlock stands, true fir forests, moss-covered basalt outcrops, and snags in a bog; 330-1660 m. ⁿ

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
LI	<i>Hypotrachyna revoluta</i> (*)	Lichen		CF, MZ	Found on headlands and ridges or in marine estuaries and dune landforms in densely canopied stands of <i>Picea sitchensis</i> , <i>Alnus rubra</i> , or <i>Tsuga heterophylla</i> within a few kilometers of the ocean; in young stands –under 80 years or open dunes and wetlands supporting scattered trees and shrubs; exposed rocks; substrates are bare or moss-covered boles and twigs of <i>A. rubra</i> , <i>P. sitchensis</i> , shrubs and bare rock; < 450 m. ^a
LI	<i>Leioderma solediatum</i>	Lichen		CF, MZ	Found in semi-open shrub thickets of shore pine and ericaceous shrubs on stabilized dunes and deflation plains; epiphytic over thin bryophyte mats on the stems of the <i>ericaceous</i> shrubs; found in a young riparian stand of red alder surrounded by clearcuts; wide range of elevations; < 2600 m. ^k
LI	<i>Leptogium burnetiae</i> (*) - name change from <i>L. burnetiae</i> var. <i>hirsutum</i> (*)	Lichen	Habitat associated with older conifer forests 6-20 known populations Habitat associated with older conifer forests	CF, RK	Epiphytic on tree bark on <i>Quercus garryana</i> bark in the Columbia River Gorge; also on decaying logs, mosses and rock; 40-120 m. ^a
LI	<i>Leptogium cyanescens</i> (*)	Lichen	Habitat associated with older conifer forests	CF, OHW	Epiphytic on hardwoods and <i>Picea sitchensis</i> , and on rock restricted to humid localities. ^o
LI	<i>Lobaria linita</i>	Lichen	6-20 known populations Habitat associated with older conifer forests	CF, RK	Strongly associated with old-growth and climax forests; occurs in areas of high precipitation or in sites with cold air drainage at lower elevations; prefers lower boles of conifers, especially <i>A. amabilis</i> , but in drier habitats or at higher elevations it may also grow on moss-covered boulders or rock outcrops in cool, shaded, humid microsites; 215-1370 m. ^a
LI	<i>Microcalicium arenarium</i>	Lichen	Habitat associated with older conifer forests	CF, RK	Parasitic on lichens that form farinose crusts on aged bark or wood in sheltered locations such as in caves under the boles of large, old trees and on humid, rocky cliff faces protected from direct rain interception; most occurrences are likely on cliffs within the Columbia Gorge, but some are known from old-growth forests outside of the gorge. ⁱ





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
LI	<i>Niebla cephalota</i>	Lichen	CF, MZ, RK		Found on trees, rocks, and shrubs and restricted to the coastal fog belt; on exposed boles and branches of Sitka spruce and Monterey cypress, shore pine, and Hooker's willow; on forest edges of windswept headlands and sand dunes; sparsely forested estuaries and willow-dominated marshy areas; within a few kilometers of the Pacific Ocean; < 75 m.
LI	<i>Pannaria rubiginosa</i> (*)	Lichen	6-20 known populations	CF, MZ	Restricted to within a few kilometers of the ocean at or near sea-level; habitat data are limited; microhabitat requirement may be high humidity; substrates are wood and bark of <i>Picea sitchensis</i> , <i>Salix hookeriana</i> , <i>Lonicera involucrata</i> and old woody <i>Cytisus scoparius</i> . ^p
LI	<i>Pilophorus nigricaulis</i>	Lichen	< 6 known populations	CF, RK	Primarily on volcanic rock substrates (basalt and andesite); on lava flows, cliffs, rock outcrops, talus slopes, and large boulders; in low- to mid-elevation old-growth conifer forests dominated by Douglas-fir, true fir and western hemlock and shrub communities dominated by vine maple, subalpine parkland, or in open sites on rock associated with other cryptogams; 40-1430 m. ⁿ
LI	<i>Pseudocyphellaria mallota</i>	Lichen	6-20 known populations Habitat associated with older conifer forests	CF	In humid stands of <i>Pseudotsuga menziesii</i> and <i>Tsuga heterophylla</i> along with an abundant and diverse cyanolichen flora approximately 40-year old second-growth stands immediately adjacent to older stands; small conifer branches appear to be the most common substrate. ^a
LI	<i>Ramalina pollinaria</i>	Lichen	< 6 known populations Habitat associated with older conifer forests	CF, MZ, RI	Bark and wood of various trees and shrubs, especially old ones, shaded rocks, low elevation moist areas, swamps. ^a
LI	<i>Stereocaulon spathuliferum</i>	Lichen	CF, RK		Small crusts on basalt blocks of talus slopes, shaded to partially exposed, usually sheltered from precipitation but requiring seasonally cool and moist conditions in conifer forest habitat; 915-1525 m. ^a

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
LI	<i>Teloschistes flavicans</i>	Lichen	< 6 known populations	CF, MZ	Confined to exposed headlands and dunes of the immediate coast; on twigs, boles, and limbs of Sitka spruce, shore pine, Hooker's willow, coastal scrub stands, and at times common in litterfall; < 440 m. ^a
LI	<i>Texosporium sancti-jacobi</i>	Lichen		SC, MG	Found in arid to semi-arid shrub-steppe, grassland or savannah communities on "open habitat soils", or natural openings or gaps in arid vegetation that are not maintained by fire; sparsely vegetated with native forbs and bunchgrasses, free of weeds and support well developed biological soil crusts; nearly flat ground or slightly north-facing slopes; soils are non-saline and non-calcareous, ranging from fine- to coarse-textured but often hardened; restricted to microsites containing small bits of decaying organic matter, such as decaying rabbit pellets, dead stems of Selaginella, stubble from dead tufts of bunchgrass, small twigs in soil duff and on other soil lichens; 1000 m. ^a
LI	<i>Tholuma dissimilis</i> (*)	Lichen	< 6 known populations	CF	Conifer branches at subalpine and alpine habitats mostly, subalpine fir and Engelmann spruce, rarely on rock. Occasionally lower elevation where cool, moist; >2040 m. ⁿ
LI	<i>Usnea nidulans</i>	Lichen		CF, MZ	Exclusively in hypermaritime forests on conifers and deciduous trees on the immediate coast and in the Coast Ranges. ^a
VA	<i>Abronia umbellata</i> ssp. <i>breviflora</i>	Pink Sand-Verbena		MZ	Sandy beaches and foredunes, typically between the high-tide line and below the zone of driftwood accumulation ^o .
VA	<i>Adiantum jordanii</i>	California Maiden-Hair	6-20 known populations	CF, RK	Seasonally moist, shaded, rocky banks, cliffs, canyons, and ravines; >1000 m ^r
VA	<i>Agoseris elata</i>	Tall Agoseris		MG, OHW, CF	Yellow Pine Forest, Red Fir Forest, Lodgepole Forest, Subalpine Forest, wetland-riparian; 1600 to 3200 m. ^s
VA	<i>Agrostis howellii</i>	Howell's Bentgrass	6-20 known populations	RK, CF	Growing in shady woodlands and damp, vertical cliffs and talus slopes along streams in the Columbia River Gorge.
VA	<i>Anemone oregana</i> var.	Bog Anemone		RI, SW, CF	Sphagnum bogs and marshes of the immediate Pacific Coast and coast





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
	<i>felix</i>				range. ¹
VA	<i>Arabis koehleri</i> var. <i>koehleri</i>	Koehler's Rockcress	6-20 known populations	RK	Rock outcrops on the Umpqua River drainage; 225-380 m. ¹
VA	<i>Arabis macdonaldiana</i>	Macdonald's Rock-Cress		SE,RK	Deep reddish soils, steep slopes, dry ridges, serpentine areas; 1200 m. ¹
VA	<i>Arctostaphylos hispidula</i>	Hairy Manzanita		SE, SC, CF	Rocky serpentine soils or sandstone, open sites, forest; 300-600 m. ¹
VA	<i>Arnica viscosa</i>	Shasta Arnica		RK, CF	Open, rocky, subalpine to alpine sites; 2000-2500 m. ¹
VA	<i>Artemisia pycnocephala</i>	Coastal Sagewort	< 6 known populations	MZ, RK	Rocky or sandy soils, coastal strand; < 200 m. ¹
VA	<i>Asplenium septentrionale</i>	Grass-Fern		RK	Found in cracks and crevices of rock outcrops and large boulders within mixed conifer forest; composition of rock substrates is variable (basalt, granite, dacite, breccia); 600-3050 m. ^u
VA	<i>Astragalus applegatei</i>	Applegate's Milk-Vetch		SW	Flat, open, seasonally moist remnants of floodplain alkaline grassland of the Klamath Basin; 1250 m. ¹
VA	<i>Astragalus californicus</i>	California Milk-Vetch	6-20 known populations	MG	Dry, open areas in scrub, woodland; 300-1300 m. ¹
VA	<i>Astragalus gambelianus</i>	Gambel Milk-Vetch	6-20 known populations	MG, SC	Open, grassy areas, scrub; 50-900 m. ¹
VA	<i>Astragalus peckii</i>	Peck's Milk-Vetch		RK, MG	Very dry sites, on loose sandy soil or pumice; often found in or along dry water-courses; natural openings of sagebrush-juniper woodlands, lodgepole pine and ponderosa pine forests; 900-1100 m. ¹
VA	<i>Bensoniella oregana</i>	Bensonia		SW,RI,CF	Wet meadows, bogs and streams in deep soils under conifer forests; >1000 m. ¹
VA	<i>Botrychium minganense</i> (*)	Gray Moonwort	< 6 known populations	CF, RI	Habitat varies widely from dense forest to open meadow and from summer-dry meadows to permanently saturated fens and seeps. Plants stand in open sun or under dense herbaceous cover. Often found in association with old (>10 year) disturbances such as logging roads and road shoulders. ^v
VA	<i>Botrychium montanum</i>	Mountain Grape-Fern		CF, RI	Under old growth western red cedar in the northern part of its range and under incense cedar in CA. On alluvial terraces along small streams in fens, seeps and meadows where the soil is moist and high in organic matter. ^v
VA	<i>Botrychium pumicola</i>	Pumice Grape-Fern		RK, CF	Typically in loose volcanic (pumice) soils, often, at lower elevations, in frost pockets or comparable areas that retain moisture into late spring in relatively open sites with little competing vegetation. Also <i>Pinus contorta</i> — <i>Purshia tridentata</i> forests. ^v
VA	<i>Brodiaea terrestris</i>	Dwarf Brodiaea	< 6 known populations	MZ, MG, CF	Grassland, open woodlands; 0-1500 m. ¹
VA	<i>Calamagrostis breweri</i>	Brewer's Reedgrass		RI	Moist, subalpine and alpine meadows, lake margins, streambanks; 1300-3800 m. ¹
VA	<i>Callitriche marginata</i>	Winged Water-Starwort	< 6 known populations	RI	Becoming stranded (often in vernal pools) or submersed < ± 6 dm; < ± 1500 m. ¹
VA	<i>Calochortus coxii</i>	Crimite Mariposa-Lily	6-20 known populations	SE, MG, CF	North-facing open grassy slopes or woods, on serpentine; 200-1000 m. ¹
VA	<i>Calochortus greenei</i>	Greene's Mariposa-Lily		SC, MG	Shrubby hillsides, open woodlands, dry soils and slopes; 700-1100 m. ¹
VA	<i>Calochortus howellii</i>	Howell's Mariposa-Lily		SE	Dry, rocky, serpentine soils; 300-500 m. ¹
VA	<i>Calochortus indecorus</i>	Sexton Mt.		SE, MG CF, RK	Rocky, serpentine substrates. Probably in woodlands with grassy openings ¹

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
		Mariposa-Lily			
VA	<i>Calochortus monophyllus</i>	One-Leaved Mariposa-Lily	< 6 known populations	RK, MG	Wooded slopes, clay-loam soils; 400-1200 m. ^r
VA	<i>Calochortus nitidus</i>	Broad-Fruit Mariposa-Lily	< 6 known populations	RK, RI, MG	Low meadows along creeks; 700-900 m. ^r
VA	<i>Calochortus persistens</i>	Siskiyou Mariposa-Lily	< 6 known populations	RK, MG	Open areas in rocky soils; 1000-1500 m. ^w
VA	<i>Calochortus umpquaensis</i>	Umpqua Mariposa-Lily		SE, MG, CF	Grassland-forest ecotones on serpentine-derived soils; from closed canopy coniferous forests to open grass-forb meadows; 300-500 m. ^r
VA	<i>Camassia howellii</i>	Howell's Camas		SE, CF, OHW, MG	Serpentine endemic, on open, seasonally wet slopes. Rocky openings in low elevation Jeffrey pine woodlands and moist, grassy meadows. ^r
VA	<i>Camissonia gracilliflora</i>	Slender-Flowered Evening-Primrose		MG, SC, OHW	Open or shrubby slopes, generally clay soils, grasslands, oak; < 800 m. ^t
VA	<i>Cardamine pattersonii</i>	Saddle Mountain Bittercress		RI, MG	Grass balds, moist cliffs, rock crevices, moss mats over bedrock; in gravel along streams in forest; 820-960 m. ^a
VA	<i>Carex abrupta</i>	Abrupt-Beaked Sedge		MG	Moist mountain meadows and slopes; 1400-3300 m. ^r
VA	<i>Carex brevicaulis</i>	Short Stemmed Sedge	6-20 known populations	MZ, RI	Dry, open, sandy or rocky slopes, cliffs, and dunes; < 90 m. ^r
VA	<i>Carex capitata</i>	Capitate Sedge		RI, SW	Generally wet places, meadows, slopes; 1900-3900 m. ^t
VA	<i>Carex comosa</i>	Bristly Sedge		RI, SW	Swamps and wet thickets, stream, pond, and lakeshores, depressions in wet meadows, marshes, including freshwater tidal marshes; often in shallow water or on emergent stumps, floating logs, and floating mats of vegetation; < 700 m. ^r
VA	<i>Carex crawfordii</i>	Crawford's Sedge		RI, SW	Often in standing water, moist to wet places, open, sandy, dryish disturbed areas; 100-1500 m. ^r
VA	<i>Carex diandra</i>	Lesser Panicked Sedge		RI	Swampy, marshy, or boggy areas, especially wet meadows, fens, muskegs, floating mats, and peaty or marly shores of lakes and ponds (often in shallow, sometimes brackish water), less often swales, springy thickets, ditches, and wet sandy beaches of nonalkaline lakes; < 2800 m. ^r
VA	<i>Carex gynodynamis</i>	Hairy Sedge		RI, MG, CF, SW	Seeps, stream banks, roadside ditches, wet meadows and slopes, coastal prairies, mixed evergreen forest along the Pacific Coast; < 600 m. ^r
VA	<i>Carex klamathensis</i> (sw OR pops. of <i>Carex livida</i>)	A Sedge		RI, CF	Boreal fens, calcareous floating mats; 0-1100 m. ^r
VA	<i>Carex lasiocarpa</i> var. <i>americana</i>	Slender Sedge		RI	Sedge meadows, fens, bogs, lakeshores, stream banks, usually in very wet sites and sometimes forming floating mats; < 1300 m. ^r
VA	<i>Carex livida</i>	Pale Sedge		RI, CF	Boreal fens, calcareous floating mats; < 1100 m. ^r





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
VA	<i>Carex nervina</i>	Sierra Nerved Sedge		MG	Subalpine meadows; 1200–3000 m. ^r
VA	<i>Carex retrorsa</i>	Retorse Sedge		SW, RI	Swamps, wet thickets, often along streams, marshes, sedge meadows, shores of streams, ponds, and lakes; < 1900 m. ^r
VA	<i>Carex scabriuscula</i>	Siskiyou Sedge		SE, RI, SW, MG	Serpentine soils; 1000–2000 m. ^r
VA	<i>Carex serratodens</i>	Saw-Tooth Sedge		OHW, SW, RI, MG	Moist places on open hillsides, adjacent to springs, seeps, or streams; 100–1400 m. ^r
VA	<i>Castilleja chlorotica</i>	Green-Tinged Paintbrush		CF	In loose sandy soils; often in ponderosa pine woods; 1400–2500 m. ⁱ
VA	<i>Castilleja levisecta</i>	Golden Paintbrush		SW, MG	Open grasslands; moist in the winter but not inundated with water; often on glacial outwash or deposits; < 100 m. ⁱ
VA	<i>Castilleja mendocinensis</i>	Mendocino Coast Indian Paintbrush		MZ, SC, CF	Coastal bluffs, coastal prairie, scrub and conifer forests; < 100 m. ^t
VA	<i>Cheilanthes covillei</i>	Coville's Lip-Fern		RK	Rocky slopes, cliffs, and ledges, usually on igneous substrates; 100–2500 m. ^r
VA	<i>Cheilanthes intertexta</i>	Coastal Lipfern		RK	Rocky slopes and ledges, usually on igneous substrates; 500–2800 m. ^r
VA	<i>Chlorogalum angustifolium</i>	Narrow-Leaved Amole	< 6 known populations	MG, OHW	Heavy soils of grassland or woodland; < 500 m. ^r
VA	<i>Cicendia quadrangularis</i>	Timwort		RI, OHW, SW, MG, RK	Crevices, bases of rocks, coastal wetlands, vernal pools, moist valley grasslands and oak woodland; < 2700 m. ^r
VA	<i>Cicuta bulbifera</i>	Bulb-Bearing Water-Hemlock		RI, OHW, SW, MG, RK	Along the edges of marshes and lake margins, in bogs, wet meadows, shallow standing water and along slow moving streams; found on hummocks and floating mats and partially submerged rotting logs. ^x
VA	<i>Cimicifuga elata</i> var. <i>elata</i>	Tall Bugbane		CF, RI	In or along the margins of mixed, mature or old growth stands of mesic coniferous forest, or mixed coniferous-deciduous forest; Old-growth forests provide optimal light conditions; < 915 m. ^x
VA	<i>Collomia mazama</i>	Mt. Mazama Collomia		CF, RI, MG	Alpine meadows and slopes and dry rocky places in black hemlock, fir or lodgepole forest; 900–1850 m. ⁱ
VA	<i>Coptis trifolia</i>	Three-Leaf Goldthread		RI, CF	Associated with small wetland areas within mature coniferous forest on poorly drained soils. Not uniformly wet, a mosaic of channels and boggy depressions interspersed with slightly higher, drier hummocks. On hummocks growing in mineral soil or organic substrates; 1000–1170 m. ^y
VA	<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>	Point Reyes Bird's Beak		RI	Coastal salt marshes (< 10 m), inland alkaline flats; 1200–1900 m. ^t
VA	<i>Corydalis aquae-gelidae</i>	Cold-Water Corydalis		RI, CF	Close proximity to seeps, springs or streams with relatively cold water, a substrate of gravely sand, canopy closure of 70 to 90 percent; 370–1310 m. ^z
VA	<i>Cryptantha leiocarpa</i>	Seaside Cryptantha	6–20 known populations	MZ	Sandy soils, dunes; < 200 m. ^t
VA	<i>Cryptantha milo-bakeri</i>	Milo Baker's Cryptantha		RK	Rocky or gravely soils, generally coniferous forest; < 300–1500 m. ^t
VA	<i>Cryptogramma stelleri</i>	Steller's Rockbrake		RK, CF	Sheltered calcareous cliff crevices and rock ledges; typically in coniferous forest or other boreal habitats; < 3000 m. ^r
VA	<i>Cupressus bakeri</i>	Baker's Cypress	6–20 known populations	CF	Mixed evergreen forests; open slopes, flats, often serpentine; 1100–1800 m. ^t

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
VA	<i>Cyperus acuminatus</i>	Short-Pointed Cyperus		RI, SW	Wet, often sandy shores and damp, disturbed soils; < 1500 m. ^r
VA	<i>Cyripedium fasciculatum</i> (*)	Clustered Lady's-Slipper		CF	Along stream banks and on slopes that vary in steepness and aspect, under shrubs and cover of hardwoods in mixed conifer/hardwood under mature coniferous forests; frequently in mixed successional forest openings and edges with shade; strong association with <i>Pseudotsuga menziesii</i> ; suggests disturbance habitats such as fire; found growing in roadcuts, skid trails. ^{aa}
VA	<i>Delphinium leucophaeum</i>	White Rock Larkspur		MG, RK	Rock outcrops, rocky meadows; 50-100 m. ^r
VA	<i>Delphinium nudicaule</i>	Red Larkspur		RK,CF,OHW	Wooded, rocky slopes, moist talus, cliff faces; < 2600 m. ^r
VA	<i>Delphinium nuttallii</i>	Nuttall's Larkspur		RI, MG	Rock outcrops, rocky meadows; 20-300 m. ^r
VA	<i>Delphinium pavonaceum</i>	Peacock Larkspur		MG, OHW	Meadows, open woodlands; 50-100 m. ^r
VA	<i>Dicentra pauciflora</i>	Few-Flowered Bleedingheart		RK, CF	Openings in coniferous forests, in volcanic and granitic soils; 1200-2700 m. ^r
VA	<i>Dodecatheon austrofrigidum</i>	Frigid Shootingstar	6-20 known populations	RI, CF	At high elevations on basalt cliffs near streams and waterfalls, sometimes on rotting wood; at low elevations basalt rock crevices in major rivers, below high water line; 30-1200 m. ^a
VA	<i>Draba howellii</i>	Howell's Whitlow- Grass	6-20 known populations	RK	Rock crevices; 2000-3000 m. ^t
VA	<i>Epilobium oregonum</i>	Oregon Willow-Herb		SW, RI	Ultramafics, full sun or part shade; bogs, small streams, ditches; 500-1600 m. [#]
VA	<i>Ericameria arborescens</i>	Golden Fleece		CF, OHW, SC	Woodland, open forest, chaparral, especially after fire; generally < 1200 m. ^t
VA	<i>Erigeron cervinus</i>	Siskiyou Daisy		SE, MG, RK	Open, rocky slopes, meadows, pine to fir woods; 900-1900 m. ^t
VA	<i>Erigeron decumbens</i> var. <i>decumbens</i>	Willamette Valley Daisy	6-20 known populations	MG, OHW, SW	Clay soiled prairie in valley bottoms, often by creek drainages. ^{bb}
VA	<i>Erigeron howellii</i>	Howell's Daisy		RK, MG	Often found in moist, rocky sites, on protected slopes within mixed coniferous forests. Within the Columbia gorge; 20-1460 m. ^a
VA	<i>Eriogonum lobbii</i>	Lobb's Buckwheat		RK, MG, SC, CF	Gravelly to rocky or talus slopes, mixed grassland, shrub, and sagebrush communities, montane, subalpine, or alpine conifer woodlands; 1600-3800 m. ^r
VA	<i>Eriogonum umbellatum</i> var. <i>glaberrimum</i>	Green Buckwheat		MG	Sand or gravel; 1600-2300 m. ^t
VA	<i>Eriophorum charmissonis</i>	Russet Cotton- Grass	6-20 known populations	RI	Peat, bogs, marshes, muskegs; 0-3000 m. ^r
VA	<i>Erythronium elegans</i>	Coast Range Fawn- Lily		MG, SC, CF, RK	Open sites on rocky slopes and cliffs; edges of sphagnum bogs; mountain bogs, meadows, rocky balds; 820-1020 m. ^a
VA	<i>Erythronium howellii</i>	Howell's Adder's- Tongue		SE,CF, SC, MG	Serpentine influence, meadows open woodlands, mixed evergreen. ^{cc}
VA	<i>Eschscholzia caespitosa</i>	Gold Poppy	6-20 known populations	RK, MG, SC	Open chaparral, rocky slopes; < 1500 m. ^r
VA	<i>Eucephalus vialis</i>	Wayside Aster		CF, MG, OHW	Typically occurs on dry, upland conifer forests dominated by <i>P. menziesii</i> , usually accompanied by hardwoods typical of drier forests such as Pacific madroño, golden chinquapin, and Oregon white oak; 152-457 m. ^{dd}
VA	<i>Eucephalus gormanii</i>	Gorman's Aster		RK, CF	Open rocky slopes and exposed cliffs; 1200-1900 m. ^r
VA	<i>Filipendula occidentalis</i>	Queen-Of-The- Forest		RI, CF	Shady damp sites; on river banks, in rock crevices and seeps just above high water level; damp salmonberry shrublands; rock cliffs in remnant stands of





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VA	<i>Fritillaria camtschaticensis</i>	Black Lily		MG, RI	<i>Abies</i> and <i>Tsuga</i> ; in full sun or partial shade; < 950 m. ^a Moist areas from near tidesflats to mountain meadows; < 1000 m. ^r
VA	<i>Fritillaria gentneri</i>	Gentner's Fritillary		OHW, MG, SC, CF	Dry hillsides in open canopies of oak woodlands and chaparral shrub communities, mixed hardwood forests, coniferous forests and grasslands; 180-1360 m. ^{es}
VA	<i>Gentiana newberryi</i>	Newberry's Gentian		SW, MG	Wet mtn meadows; 1200-4000 m. ^t
VA	<i>Gentiana plurisetosa</i>	Elegant Gentian		SW	Lower montane coniferous forest, meadows, upper montane coniferous forest, mesic; 1230-1938 m. ^t
VA	<i>Gentiana setigera</i>	Waldo Gentian		SW, SE, MG	Serpentine bogs and wet meadows, in open to semi-shaded areas. ^{ff}
VA	<i>Gilia millefoliata</i>	Seaside Gilia	6-20 known populations	MZ	Stabilized coastal dunes; < 10 m. ^t
VA	<i>Hackelia bella</i>	Beautiful Stickseed		MG	Streambanks, roadsides, forest openings; 900-2000 m. ^t
VA	<i>Hastingsia bracteosa</i> var. <i>atropurpurea</i>	Purple-Flowered Rush-Lily		SW, SE	Ultramafic river-beds that have year-round water in rooting horizon and wet, open, sunny bogs; 500-700 m. ^{ff}
VA	<i>Hastingsia bracteosa</i> var. <i>bracteosa</i>	Large-Flowered Rush-Lily		SW, SE	Bogs, moist open meadows, seeps and wetlands often overlying serpentine or peridotite rock formations; open; < 240 m. ^{ff}
VA	<i>Heliotropium curassavicum</i>	Salt Heliotrope		SW	Moist to dry, saline soils; < 2100 m. ^t
VA	<i>Hieracium horridum</i>	Shaggy Hawkweed		RK	Boulders, gravels, meadows, pine forests; 1500-3700 m. ^r
VA	<i>Horkelia congesta</i> ssp. <i>congesta</i>	Shaggy Horkelia		MG, OHW	Grassland and oak savannah remnants and grassy balds. ^t
VA	<i>Horkelia tridentata</i> ssp. <i>tridentata</i>	Three-Toothed Horkelia		MG, OHW, CF	Dry, open coniferous forest; 300-2500 m. ^t
VA	<i>Howellia aquatilis</i>	Water Howellia		RI	In stagnant ponds, sloughs, orphaned rivers, oxbows; shallow. Typically in a matrix of dense forest vegetation. ^{gg}
VA	<i>Hydrocotyle verticillata</i>	Whorled Marsh-Pennywort		MZ, RI	Along edges of coastal and inland lakes, swampy ground, wetlands; < 100 m. ^t
VA	<i>Iliamna latibracteata</i>	California Globe-Mallow		CF, RI	Moist ground and stream sides in conifer forests, often on shady, disturbed ground; 500-2000 m. ^r
VA	<i>Iris tenax</i> var. <i>gormanii</i>	Gorman's Iris		MG	Dry soils in fields and open woods. ^r
VA	<i>Juncus kelloggii</i>	Kellogg's Rush		SW, RI	Sandy and clayey damp soils around vernal pools, seepage areas, and low spots in fields and meadows; < 800 m. ^r
VA	<i>Kalmiopsis fragrans</i>	Fragrant Kalmiopsis		RK, CF	Rock outcrops and crevices, in sun or shady coniferous forests; 480-1300 m. ^a
VA	<i>Keckeilla lemmonii</i>	Bush Beardtongue		CF, OHW, SC	Rocky slopes, coniferous and mixed forests, chaparral; 200-1900 m. ^t
VA	<i>Lasthenia ornduffii</i> - name change from <i>L. macrantha</i> ssp. <i>prisca</i>	Large-Flowered Goldfields		MZ, MG	Coastal bluffs; < 500 m. ^r
VA	<i>Lathyrus holochlorus</i>	Thin-Leaved Peavine		OHW, CF, MG	Low elevation roadsides, fencerows, creek banks, forest edges, oak savannas, shrublands, and grasslands; 30-610 m. ^a

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
VA	<i>Lewisia columbiana</i> var. <i>columbiana</i>	Columbia Lewisia		RK	Rocky slopes and crevices; 500-2300 m. ^r
VA	<i>Lewisia leana</i>	Lee's Lewisia		RK, CF	Sandy, rocky places, pine forest; 1300–3300 m. ^r
VA	<i>Lilium occidentale</i>	Western Lily		MZ, CF, SW	Poorly drained, organic soils on the edges of coastal bogs; < 100 m. ^{hh}
VA	<i>Limnanthes floccosa</i> ssp. <i>bellingiana</i>	Bellinger's Meadow-Foam	6-20 known populations	SW, SC, OHW	Edges of vernal ponds or seasonally wet rocky, open meadows and grassy openings in oak-pine/buckbrush chaparral woodlands; volcanic origin; low elevation. ⁱ
VA	<i>Limnanthes floccosa</i> ssp. <i>grandiflora</i>	Large-Flowered Woolly Meadowfoam		SW	High-elevation vernal pools (seasonal wetlands) in rocky meadows with shallow soils that are at least partially shaded in the spring; 1100-1200 m. ⁱⁱ
VA	<i>Limnanthes floccosa</i> ssp. <i>pumila</i>	Dwarf Meadow-Foam	6-20 known populations	SW	Narrow endemic; near the edges of vernal pools, wet trails, roads, and small streams; soils volcanic in origin; known only from Table Rock, OR. ⁱ
VA	<i>Limnanthes gracilis</i> ssp. <i>gracilis</i>	Slender Meadow-Foam		SW	Wet, open, serpentine valley bottomlands; meadows, intermittent creeks, depressions, swales, ditches. ⁱ
VA	<i>Limonium californicum</i>	Western Marsh-Rosemary	6-20 known populations	SW, RI	Coastal strand, salt marshes, sand hills, beaches, bays, alkaline flats; < 50 m ^t
VA	<i>Lomatium bradshawii</i>	Bradshaw's Desertparsley		MG, SW	Moist meadows and remnant prairie patches at low elevations. ^{jj}
VA	<i>Lomatium cookii</i>	Cook's Lomatium		MG, SC, OHW	Populations in the Agate Desert are found on the margins and bottoms of vernal pools with standing water from December to April or May; populations in the Illinois Valley can be found in moist, grassy meadows. ⁱⁱ
VA	<i>Lomatium engelmannii</i>	Englemann's Desert-Parsley	6-20 known populations	SE, CF	Gravelly serpentine slopes within conifer forests, usually Jeffrey Pine forest; 1150–2300 m. ^t
VA	<i>Lotus stipularis</i>	Stipuled Trefoil	6-20 known populations	CF, SC, RI	Open pine forests, streambeds, ditches, thickets, chaparral, logged areas; mixed evergreen forest, chaparral; < 1200 m. ^t
VA	<i>Lupinus sulphureus</i> ssp. <i>kincaidii</i>	Kincaid's Lupine		MG, OHW, CF	Open montane forest, dry, open woods, valley prairie grasslands, oak forests, often in sandy soil. ^{bb}
VA	<i>Lupinus tracyi</i>	Tracy's Lupine		CF	Dry, open montane forest; 1500–2000 m. ^t
VA	<i>Lycopodiella inundata</i>	Bog Club-Moss		SW, RI	Peat bogs, lakeshores, marshes, muddy depressions, pond margins, borrow pits; < 2000 m. ^t
VA	<i>Lycopodium complanatum</i>	Ground Cedar		CF	Dry open coniferous or mixed forest alpine slopes; < 2000 m. ^r
VA	<i>Meconella oregana</i>	White Fairpoppy	6-20 known populations	OHW, MG, SW	Sandy bluffs, meadows and partly sunny, moist banks; of conservation concern; < 300 m ^r
VA	<i>Microseris bigelovii</i>	Coast Microseris		MZ, RI, MG	Open sandy soil, or soil pockets on rocky coastal headlands, grasslands; < 100 m ^t
VA	<i>Microseris howellii</i>	Howell's Microseris		SE, SC, CF	Rocky serpentine soils, hillsides and alluvial flats, open shrublands and Pinus jeffreyi savannas; 300–1000 m. ^r
VA	<i>Mimulus bolanderi</i>	Bolander's Monkeyflower	6-20 known populations	RK, SC, OHW, CF	Burns, openings in chaparral, foothill woodland, yellow pine forest; disturbed areas; < 2000 m. ^t
VA	<i>Mimulus congdonii</i>	Congdon's Monkeyflower	< 6 known populations	RK	Disturbed areas or seepage, runoff areas on slopes, generally granitic soils; 120–1100 m. ^t





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
VA	<i>Mimulus evanescens</i>	Disappearing Monkeyflower	< 6 known populations	SW, RI	Moist gravelly, rocky areas, and low, wet fields, in sagebrush-juniper zones; 1200-1700 m. ^a
VA	<i>Mimulus tricolor</i>	Three-Colored Monkey-Flower		RI, SW	Vernally wet depressions, streambanks; generally < 600 m. ^t
VA	<i>Navarretia leucocephala</i> ssp. <i>leucocephala</i>	White-Flowered Navarretia	6-20 known populations	SW, MG, SC, OHW	Vernal pools, valley grassland, foothill woodland; < 500 m. ^t
VA	<i>Nemacladus capillaris</i>	Slender Nemacladus	< 6 known populations	RK	Dry slopes, burned areas in chaparral, yellow pine forest; 4000-2100 m. ^t
VA	<i>Oenothera wolffii</i>	Wolf's Evening-Primrose		MZ, MG	Pacific coastal headlands, bluffs, and dunes; roadcuts and roadsides near the coast and, possibly, moist sandy riparian areas. ⁱ
VA	<i>Ophioglossum pusillum</i>	Adder's-Tongue		MZ, RI SW	Open fens, marsh edges, pastures, and grassy shores and roadside ditches, north of the southern boundary of Wisconsin glaciation; 100-2000 m. ^r
VA	<i>Pellaea andromedifolia</i>	Coffee Fern		RK, SE, CF, OHW, SC	Rocky outcrops or dry areas, non-calcareous rock Generally rocky, 30-1800 m. ^t
VA	<i>Pellaea mucronata</i> ssp. <i>mucronata</i>	Bird's-Foot Fern	6-20 known populations	RK, CF, OHW, SC	Rocky outcrops, dry areas; Yellow Pine Forest, Foothill Woodland, Chaparral, Valley Grassland, Coastal Sage Scrub; 20-2400 m. ^t
VA	<i>Penstemon glaucinus</i>	Blue-Leaved Penstemon		CF, RK	At mid-elevations in open understory of pine forests, usually lodgepole or white-bark, occasionally ponderosa; open areas on exposed slopes, rims, ridges at higher elevations. ⁱ
VA	<i>Perideridia erythrorhiza</i>	Red-Rooted Yampah		MG,CF,OHW, SW	Lower elevations in poorly drained, heavy clay soils; found in moist prairies with tufted hairgrass and California oatgrass; pastureland and wood edges
VA	<i>Phacelia argentea</i>	Silvery Phacelia		MZ	Ponderosa pine, Jeffrey pine, or Oregon white woods; 1525 m. ^t
VA	<i>Phacelia leonis</i>	Siskiyou Phacelia		CF, SE	Sand dunes, bluffs, and bases of coastal headlands along the northern California and southern Oregon Pacific coast; < 20 m. ^t
VA	<i>Pilularia americana</i>	American Pillwort		SW	Moist to wet meadows, gravelly serpentine soils; openings in conifer forests; 1200-1900 m. ^t
VA	<i>Plagiobothrys austinae</i>	Austin's Plagiobothrys		SW	Vernal pools, mud flats, lake margins, reservoir margins, shallow water of ponds and temporary pools; 50-600 m. ^t
VA	<i>Plagiobothrys figuratus</i> ssp. <i>corallicarpus</i>	Coral Seeded Allocarya		SW, RI	Vernal pools, wet sites; < 500 m. ^t
VA	<i>Plagiobothrys greenei</i>	Greene's Popcorn Flower		SW, RI	Local endemic to Rogue Valley, Oregon.; semi-perennial wetlands in low areas on granitic soils. ⁱ
VA	<i>Plagiobothrys hirtus</i>	Rough Popcorn Flower	6-20 known populations	SW	Wet sites, grassland to woodland. ^t
VA	<i>Plagiobothrys lamprocarpus</i>	Shiny-Fruited Popcorn Flower		SW, RI	Seasonal wetlands that are inundated by water from late fall to early spring (vernal pools) at lower elevations; 100 to 150 m. ^{kk}
VA	<i>Poa rhizomata</i>	Timber Bluegrass	6-20 known populations	CF, MG	Only collection from "moist places in an old [dirt] road." Specific habitat data nonexistent. ⁱ
VA	<i>Poa unilateralis</i>	San Francisco Bluegrass		MG, MZ, SC	Shady, moist slopes in forest, in rich loose soils, over granitics; < 100 m. ^t
VA	<i>Pogogyne floribunda</i>	Profuse-Flowered Mesa Mint	< 6 known populations	SW	Rocky headlands, rocky or sandy coastal bluffs, and cliffs, cracks and ledges, at the top near the edges and on the steep faces. ⁱ
					Vernal pools and edges of seasonal ponds and intermittent flooded drainages; < 1500 m. ^t

Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
VA	<i>Polystichum californicum</i>	California Sword-Fern	6-20 known populations	CF, RI, RK	Woods, stream banks, to rocky open slopes with moisture; < 800 m. [†]
VA	<i>Potamogeton diversifolius</i>	Rafinesque's Pondweed		RI	Shallow water, ditches, ponds, lakes; < 2500 m. [†]
VA	<i>Pyrrocoma racemosa</i> var. <i>racemosa</i>	Racemose Pyrrocoma	< 6 known populations	SW, MZ	Coastal valleys and marshes, neutral or saline soils; < 300 m. [†]
VA	<i>Ranunculus austroreganus</i>	Southern Oregon Buttercup		OHW, MG	Open oak savannas and grasslands and along the margins of rocky vernal pools at low elevations on a valley floor and margins. [†]
VA	<i>Rhamnus ilicifolia</i>	Redberry		SC	Chaparral, montane forests; < 2000 m. [†]
VA	<i>Rhynchospora alba</i>	White Beakrush		RI	Acid, sphagnum, boggy, open sites, poor fens, often on floating mats or peaty intersites of rocky shores; 0–2000 m; < 2000 m. [†]
VA	<i>Ribes divaricatum</i> var. <i>pubiflorum</i>	Straggly Gooseberry	6-20 known populations	CF	Coastal bluffs, forest edges, uplands; < 650 m. [†]
VA	<i>Romanzoffia thompsonii</i>	Thompson's Mistmaiden		MG, SW, RK, RI	Grows in seasonally wet, usually open, rocky, sunny areas; moist rocky areas, wet cliffs, south facing slopes steep, well drained slopes; 230–1830m. [†]
VA	<i>Rorippa columbiae</i>	Columbia Cress	6-20 known populations	RI, SW	Meadows, playas, seasonal stream bottoms, river margins. [†]
VA	<i>Rotala ramosior</i>	Lowland Toothcup		RI, SW	Wet places, lake and pond margins, streams, sloughs, vernal pools, irrigated fields; < 1900 m. [†]
VA	<i>Saxifragopsis fragarioides</i>	Joint-Leaved Saxifrage		RK	Uncommon; rock crevices; 1500–3000 m. [†]
VA	<i>Scheuchzeria palustris</i> var. <i>americana</i>	Scheuchzeria		RI, SW	Floating mats, bogs, lake margins, Cascades; 1400–2000 m [†]
VA	<i>Schoenoplectus subterminalis</i> - name change from <i>Scirpus subterminalis</i>	Water Clubrush		RI, SW	Aquatic, shallow ponds, streams or standing water with mucky substrate; < 35, 920-1450 m. ^a
VA	<i>Scirpus pendulus</i>	Drooping Bulrush		RI, SW	Marshes, wet meadows, ditches, often associated with calcareous substrates; < 600 m. [†]
VA	<i>Sedum moranii</i>	Rogue River Stonecrop		RK, SE	Steep south to west facing slopes and rock outcrops; 200-275 m. ^a
VA	<i>Sericocarpus rigidus</i>	White-Topped Aster		MG	Open grasslands dominated by Idaho fescue and surrounded by Douglas fir; typically moist most of the year, but dry, or moisture-stressed, during late summer; in the clayey and exposed bedrock habitats; <i>Quercus garryana</i> and <i>Arbutus menziesii</i> are often present, but do not form a closed overstory. [†]
VA	<i>Sidalcea hickmanii</i> ssp. nov.	Hickman's Checkerbloom	< 6 known populations	MG, RK, SC	Chaparral, open conifer forest, sometimes on serpentine; 50-2200 m. [†]
VA	<i>Sidalcea malviflora</i> ssp. <i>patula</i>	Coast Checker Bloom	6-20 known populations	MZ, MG, CF, SE, ME	Open coastal forest, prairie, mixed evergreen forest, grassy coastal headlands and meadows, often serpentine soils; generally < 900 m. [†]
VA	<i>Sidalcea nelsoniana</i>	Nelson's Checkermallow		MG	Relatively open areas on damp soil, in meadows, wet prairie remnants, fencerows, roadsides, deciduous forest edges, occasionally Oregon ash wetlands; 45-610 m. ^a





Taxon	Scientific Name	Common Name	Comments	Habitat Group	Habitat
VA	<i>Silene hookeri</i> ssp. <i>bolanderi</i>	Bolander's Catchfly		SE, OHW, CF	Serpentine, rocky slopes, open areas, northern oak woodlands to yellow-pine forests; < 5000 feet. [†]
VA	<i>Sisyrinchium hitchcockii</i>	Hitchcock's Blue-Eyed Grass	6-20 known populations	MG	Grassy areas, openings in woods, mostly where somewhat dry later in season; Willamette Valley and Umpqua Valley; 200-1000 m. [†]
VA	<i>Sisyrinchium sarmentosum</i>	Pale Blue-Eyed Grass		MG, SW	Moist, grassy areas; 500-1000 m. [†]
VA	<i>Solanum parishii</i>	Parish's Horse-Nettle		CF, OHW, SC	Dry chaparral, oak/pine woodland, pine forest; < 2000 m. [†]
VA	<i>Sophora leachiana</i>	Western Sophora		OHW, CF, SE	Dry, open areas, open mixed woodlands, roadcuts and clearcuts; 140-460 m. ^a
VA	<i>Stellaria humifusa</i>	Creeping Chickweed		MZ	Lake shores, beaches, marshes, salt marshes, mainly northern coastal; 0-100 m. [†]
VA	<i>Streptanthus glandulosus</i>	Common Jewel Flower	< 6 known populations	SE,CF,OHW, MG, SC	Dry, open grasslands, chaparral, open conifer/oak woodland, sometimes on serpentine, mostly away from coast; 15-1300 m. [†]
VA	<i>Streptanthus howellii</i>	Howell's Streptanthus		SE,CF,OHW	Dry, serpentine slopes, mixed evergreen forests, open pine woods or brushy areas; 485-1220 m. ^a
VA	<i>Streptopus streptopoides</i>	Kruhsea		CF	Dense, damp coniferous forests; 0-1600 m. [†]
VA	<i>Sullivantia oregana</i>	Oregon Sullivantia		RK	Moist, shaded cliffs, especially near waterfalls; surrounding forest dominated by Douglas fir; 30-365 m. ^a
VA	<i>Thelypodium brachycarpum</i>	Short-Podded Thelypod		MG, SW, SE	Alkaline soils, adobe flats, pond margins; 800-2320 m. [†]
VA	<i>Trillium kurabayashii</i>	Siskiyou Trillium		CF, RI, SC, OHW	Moist conifer-hardwood forest, slopes, especially lower slopes, predominantly deciduous flat woods along streams; in open grassy meadows with scattered oak trees; 20-500 m. [†]
VA	<i>Utricularia gibba</i>	Humped Bladderwort	< 6 known populations	SW, RI	Shallow water, mud, mat-forming at surface of deep waters or not; 10-2300 m. [†]
VA	<i>Utricularia minor</i>	Lesser Bladderwort		SW, RI	Shallow (gen < 30 cm) acidic waters; 800-2900 m. [†]
VA	<i>Utricularia ochroleuca</i>	Northern Bladderwort		RI	Shallow (gen < 30 cm) acidic waters; 1300-2400 m. [†]
VA	<i>Viola primulifolia</i> ssp. <i>occidentalis</i>	Western Bog Violet		SE, SW	Serpentine bogs, fens, swamps, or marshes in mixed evergreen forests; < 800 m. [†]
VA	<i>Wolffia borealis</i>	Dotted Water-Meal		RI, SW	Freshwater wetlands, ponds, sloughs; < 1000m. [†]
VA	<i>Wolffia columbiana</i>	Columbia Water-Meal		RI, SW	Freshwater wetlands, ponds, sloughs; < 200m. [†]
VA	<i>Zigadenus fontanus</i>	Small-Flowered Death Camas	< 6 known populations	MG,SW,SE	Vernally moist or marshy areas, often on serpentine; < 500 m. [†]

(*) - Species with an (*) are former Survey and Manage species that remained Bureau Sensitive in Oregon.



- ^a USDI, BLM. 2008. Species Fact Sheets. Interagency Special Status / Sensitive Species Program (ISSSSP). <http://www.fs.fed.us/r6/sfpnw/issssp/planning-tools/>
- ^b USDA Forest Service Region 6, USDI BLM Oregon and Washington. 2005. Conservation Assessments for 11 Species of Bryophytes - *Batrachopsis lescurei* (James) Kindb., *Diplophyllum plicatum* Lindb., *Encalypta brevicolla* (Bruch & Schimp.) Bruch ex Angstr. var. *crumiana* (Horton) Crum & Anderson, *Herbertus aduncus* (Dicks.) S.F. Gray, *Herbertus sakuraii* (Warmst.) Hattori, *Kurzia makinoana* (Steph.) Grolle *Marsupella emarginata* (Ehrh.) Dum.var. *aquatica* (Lindbenb.) Dum. *Orthodontium gracile* (Wils. in Sm. & Sowerby) Schwaegr. ex B.S.G., *Plagiophila semidecurrrens* Lehm. & Lindbenb. var. *alaskana* (Evans) H.Inoue, *Radula brunnea* Steph., *Tritomaria quinqueidentata* (Huds.) Buch
- ^c USDI BLM 2007. Unpublished Data. Eugene BLM.
- ^d USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Judith A. Harpel Ph.D. and Lance Holmberg M.S. Conservation Assessment for *Iwatsukiella leucotricha* (Mitt.) Buck & Crum.
- ^e USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Judith A. Harpel Ph.D. and Lance Holmberg M.S. Conservation Assessment for *Rhizomnium nudum* (Britt. & Williams) Kop.
- ^f USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Judith A. Harpel Ph.D. and Lance Holmberg M.S. Conservation Assessment for *Schistostegia pennata* (Hedw.) Web. & Mohr.
- ^g USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Judith A. Harpel Ph.D. and Lance Holmberg M.S. Conservation Assessment for *Scouleria marginata* Britton
- ^h USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Judith A. Harpel Ph.D. and Lance Holmberg M.S. Conservation Assessment for *Tetraphis geniculata* Grig. ex Mitt
- ⁱ NatureServe. 2008. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.0. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: June 23, 2008)
- ^j USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Judith A. Harpel Ph.D. and Lance Holmberg M.S. Conservation Assessment for *Tritomaria exsectiformis* (Breidl.) Schiffn
- ^k Huff, R.; Kushman, K. 2007. Conservation Assessment for Fungi Included in Forest Service Regions 5 and 6 Sensitive and BLM California, Oregon and Washington Special Status Species Programs. Appendix I. Fungi species currently included in BLM CA or ORWA Special Status or Forest Service Regions 5 or 6 Sensitive Species Programs. Appendix II. Information on Additional Fungal Species. Appendix III. Fungi Work Group Priority Information and Conservation Gaps
- ^l USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Conservation Assessment for 11 Species of Coastal Lichens. *Bryoria pseudocapillaris* Brodo & D. Hawksw., *Bryoria spiriferella* Brodo & D. Hawksw., *Bryoria subcana* (Nyl. ex Stizenb.) Brodo & D. Hawksw., *Erioderma sorediatum* D.J. Galloway & P.M. Jørg., *Heteroderma leucomelos* Hedw., *Kaernefeltia californica* (Tuck.) Thell & Goward, *Leioderma sorediatum* D.J. Galloway & P.M. Jørg., *Leptogium brebissonii* Mont., *Niebla cephalota* (Tuck.) Rundel & Bowler, *Pyrrhospora quereina* (Dickson) Körber, *Teloschistes flavicans* (Sw.) Norman
- ^m USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2007. Doug A. Glavich. Conservation Assessment for *Dermatocarpon meiophyllizum* Vainio
- ⁿ SDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Conservation Assessment for 5 Species of Lichens *Hypogymnia duplicata* (Ach.) Rasm., *Pilophorus nigricaulis* Sato, *Pseudocyphellaria rainierensis* Imshaug, *Sitica arctica* Degel., *Tholurna dissimilis* (Norman) Norman.
- ^o USDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2006. Dr. Daphne Stone & Andrea Ruchty. *Leptogium cyanescens* - a catchall name for gray isidiate *Leptogium* species in the Pacific Northwest?
- ^p SDA Forest Service Region 6 and USDI BLM Oregon and Washington. 2005. Conservation Assessment for *Pannaria rubiginosa* (Ach.) Bory. Originally issued As Management Recommendations, 2003. Robin Leshner, Chiska Derr, and Linda Geiser. Reconfigured and updated, 2007. Jennifer L. Ferriell, Rob D. Huff, Doug A. Glavich
- ^q USDI BLM Coos Bay District and USDA F.S. Siuslaw N.F. 2004 Draft Conservation Strategy for Pink Sand-verbena (*Abronia umbellata* ssp. *breviflora*)
- ^r Flora of North America. 2008. <http://www.efloras.org>
- ^s California. <http://www.calflora.org/index0.html>
- ^t Hickman, J.C., ed. 1993. *The Jepson Manual: Higher plants of California*. University of California Press, Berkeley. [Third Printing, 1996].
- ^u USDA, U.S. Forest Service USDI, BLM. 2005. Conservation Assessment for the Forked Spleenwort (*Asplenium septentrionale*) Kathy Cushman and Sarah Malaby
- ^v USDA, U.S. Forest Service USDI, BLM. 2007. Conservation Assessment for 13 Species of Moonworts (*Botrychium* Swartz Subgenus *Botrychium*) Kathy Ahlenslager and Laura Potash.
- ^w USDI, USFWS. 2004. Species Assessment and Listing Priority Assignment. *Calochortus persistens* (Siskiyou mariposa lily)
- ^x Washington Natural Heritage Program. 2008. Washington Dept. of Natural Resources, Olympia, WA. www.dnr.wa.gov/ResearchScience/Topics/NaturalHeritage/Pages/
- ^y USDA, U.S. Forest Service USDI, BLM. 2005. Conservation Assessment for *Coptis trifolia* (L.) Salisb. Originally issued as Management Recommendations, December 1998 by Marty Stein. Reconfigured-January 2005 by Tracy L. Fuentes.
- ^z USDA, U.S. Forest Service USDI, BLM. 2005. Conservation Assessment for *Corydalis aquae-geidae* Peck & Wilson. Originally issued as Version 1.3 Management Recommendations, January, 1998 M. Stein. Reconfigured – January 2005 N. C. Vance and L. S. Larson
- ^{aa} USDA, U.S. Forest Service USDI, BLM. 2005. Conservation Assessment for *Cypripedium fasciculatum* Kellogg ex S. Watson. Originally issued as Management Recommendations December 1998 J. Seevers and F. Lang. Reconfigured – January 2005 N. Vance.
- ^{bb} USFWS. 2005. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Fender's Blue Butterfly (*Icaricia icaroides fenderi*), *Lupinus sulphureus* ssp. *kincaidii* (Kincaid's Lupine), and *Erigeron decumbens* var. *decumbens* (Willamette Daisy). Proposed Rule. Federal Register 70:66492-66539. November 2, 2005.
- ^{cc} Illustrated Flora of the Pacific States, Abrams, 1960



- ^{dd} USDA, U.S. Forest Service USDI, BLM. 2005. Conservation Assessment for *Eucephalus vialis* [Bradshaw] Blake. Originally issued as v. 2.0 Management Recommendations, 1998 by N. S. Wogen. Reconfigured 2005 by N. C. Vance and L. S. Larson
- ^{ee} USFWS. 2003. Recovery plan for *Fritillaria gentneri* (Gentner's fritillary). U.S. Fish and Wildlife Service, Portland, Oregon. viii + 89 pp.
- ^{ff} USDI, BLM Medford and Coos Bay Districts, USDA Six Rivers and Rogue-Siskiyou National forests, and USDI, USFWS Arcata and Roseburg Field Offices. 2006. Conservation Agreement for *Hastingsia bracteosa*, *H. atropurpurea*, *Gentiana setigera*, *Epilobium oregonum*, and *Viola primumifolia* ssp. *Occidentalis* and serpentine Darlingtonia wetlands and fens from Southwestern Oregon and Northwestern California.
- ^{gg} USFWS. 1996. Water Howellia (*Howellia aquatilis*) Recovery Plan. Helena, Montana. 52 p.
- ^{hh} USFWS. 1998. Recovery Plan for the Endangered Western Lily (*Lilium occidentale*). Portland, Oregon. 82 pp.
- ⁱⁱ USFWS. 2006. Draft Recovery Plan for Listed Species of the Rogue Valley Vernal Pool and Illinois Valley Wet Meadow Ecosystems. Region 1, Portland, Oregon. xiii + 136 pages
- ^{jj} USFWS. 1993. *Lomatium bradshawii*, (Bradshaw's lomatium) Recovery Plan. Portland, Oregon. 47 p.
- ^{kk} USFWS. 2003. Recovery Plan for the Rough Popcornflower (*Plagiobothrys hirtus*). Portland, Oregon. 60 p.



TABLE F-3. BOTANY SPECIES RANKINGS

Taxon	Scientific Name	Common Name	Federal Status	National Rank	Global Rank	ORNHIC State Rank	ORNHIC List	ODA State Status	Bureau Status	CB	EU	KF	MD	RO	SA
BR	ANDREAEA SCHOFIELDIANA	MOSS		N1?	G2G3	S1	2		OR-SEN						D
BR	BRYUM CALBRYOIDES	MOSS		N2N3	G3	S2	2		OR-SEN				D		
BR	CALYPOGEIA SPHAGNICOLA	LIVERWORT		NNR	G4	S2	2		OR-SEN	D	S				S
BR	CAMPYLOPUS SCHMIDII	MOSS		NNR	G4	S2	2		OR-SEN	S	D				S
BR	CHILOSCYPHUS GEMMIPARUS	LIVERWORT		N1	G1Q	S1	1		OR-SEN	S	S				S
BR	CODRIOPHORUS DEPRESSUS - name change from Racomitrium depressum	MOSS			G2G3	S1	2		OR-SEN				D		
BR	CRYPTOMITRIUM TENERUM	LIVERWORT		NNR	G4	S1	2		OR-SEN	S					
BR	DIPLOPHYLLUM PLICATUM	LIVERWORT		N3	G4	S2	2		OR-SEN	D	S			S	S
BR	ENCALYPTA BREVICOLLIS - variety no longer recognized (E. brevicolla var. crumiana)	MOSS		N1	G4	S1	2		OR-SEN	S			S		
BR	ENCALYPTA BREVIPES	MOSS		NNR	G3	S1	2		OR-SEN	S					
BR	ENTOSTHODON FASCICULARIS	MOSS		NNR	G4G5	S1	2		OR-SEN	S	D		D	S	S
BR	EPHEMERUM CRASSINERVIVUM	MOSS		NNR	G4	S1	2		OR-SEN	S			D		
BR	GYMNOMITRIUM CONCINNATUM	LIVERWORT		NNR	G5	S1	2		OR-SEN						S
BR	HELODIUM BLANDOWII	MOSS		NNR	G5	S2	2		OR-SEN				S	S	S
BR	HERBERTUS ADUNCUS	LIVERWORT		N3N4	G5	S1	2		OR-SEN						S
BR	IWATSUKIELLA LEUCOTRICHA	MOSS		N2	G4G5	S1	2		OR-SEN						S
BR	KURZIA MAKINOANA (*)	LIVERWORT		N2Q	G2G4Q	S1	2		OR-SEN	D					
BR	LIMBELLA FRYEI	MOSS	FSC		G1	S1	1	SC	OR-SEN	S	S				
BR	LOPHOZIA LAXA	LIVERWORT		NNR	G4	S2	2		OR-SEN	S					S
BR	MEESIA ULIGINOSA	MOSS		NNR	G4	S1	2		OR-SEN				D	S	
BR	METZGERIA VIOLACEA	LIVERWORT			G4	S1	2		OR-SEN	D	S				S
BR	ORTHODONTIUM PELLUCENS	MOSS		N1	G5	S1	2		OR-SEN						S
BR	POLYTRICHUM SPHAEROTHECIUM	MOSS		N1N2	G3G4	S1	2		OR-SEN						S
BR	PORELLA BOLANDERI	LIVERWORT		N2N3	G3	S1	2		OR-SEN	S	D		D		
BR	PSEUDOCALLIERGON TRIFARIUM - name change from Calliergon trifarium	MOSS		NNR	G4	S1	2		OR-SEN						S
BR	RHIZOMNIUM NUJUM (*)	MOSS		N4	G4	S2	NL		OR-SEN						S
BR	RHYTIDIUM RUGOSUM	MOSS		NNR	G5	S1	2		OR-SEN	D	S				
BR	SCHISTOSTEGA PENNATA (*)	MOSS		N3N4	G3G4	S2	2		OR-SEN	S	S		D	S	
BR	SCOULERIA MARGINATA	MOSS			G3	S2	3		OR-SEN	S	S		D	S	
BR	SPLACHNUM AMPULLACEUM	MOSS		NNR	G5	S1	2		OR-SEN	S	S				
BR	TAYLORIA SERRATA	MOSS		NNR	G4	S2	2		OR-SEN	S	D		D	D	S
BR	TETRAPHIS GENICULATA (*)	MOSS		N3	G3G5	S1	2		OR-SEN	S	S			S	D
BR	TETRAPLONDON MNIOIDES	MOSS		NNR	G4	S2	2		OR-SEN		D				D
BR	TOMENTYPNUM NITENS	MOSS		NNR	G5	S2	2		OR-SEN					S	S
BR	TORTULA MUCRONIFOLIA	MOSS		NNR	G5	S2	2		OR-SEN				S	D	S
BR	TREMATODON BOASII	MOSS		N1	G1	S1	1		OR-SEN	S					S



Taxon	Scientific Name	Common Name	Federal Status	National Rank	Global Rank	ORNHIC State Rank	ORNHIC List	ODA State Status	Bureau Status	CB	EU	KF	MD	RO	SA
BR	TRITOMARIA EXSECTIFORMIS	LIVERWORT		N4	G5	S2	2		OR-SEN			S			
FU	ALBATRELLUS AVELLANEUS	FUNGUS		N2	G2	S1?	1		OR-SEN	S	S				
FU	ALPOVA ALEXSMITHII	FUNGUS		N2	G2	S2	1		OR-SEN						S
FU	ARCANGELIELLA CAMPHORATA	FUNGUS		N2	G2	S2	1		OR-SEN	D	S				S
FU	BOLETUS PULCHERRIMUS (*)	FUNGUS		N2N3	G2G3	S2	1		OR-SEN	S	S	D	D		S
FU	BRIDGEOPORUS NOBILISSIMUS (*)	FUNGUS		N2	G3	S2S3	1		OR-SEN					S	D
FU	CHAMONIXIA CAESPITOSA	FUNGUS		NU	GU	S1	2		OR-SEN	S	S				D
FU	CHOIROMYCES VENOSUS	FUNGUS		N2	G4	S1	2		OR-SEN		D				
FU	CORTINARIUS BARLOWENSIS	FUNGUS		N3?	G3?	S2	2		OR-SEN	S	S				S
FU	CUDONIA MONTICOLA (*)	FUNGUS		N3	G3	S2S3	3		OR-SEN	D	S	D	D		D
FU	CYSTANGIUM IDAHOENSIS - name change from Martellia idahoensis	FUNGUS		N2N3	G2G3	S1	1		OR-SEN	S	S				S
FU	DERMOCYBE HUMBOLDTENSIS	FUNGUS		N1N2	G1G2	S1	1		OR-SEN	S	S	S	D		S
FU	DESTUNTZIA RUBRA (*)	FUNGUS		N2	G2	SH	1		OR-SEN						S
FU	GASTROBOLETUS IMBELLUS (*)	FUNGUS		NU	GH	SH	1		OR-SEN						S
FU	GASTROBOLETUS VIVIDUS	FUNGUS		N2?	G2?	S1	1		OR-SEN			S			S
FU	GOMPHUS KAUFFMANII (*)	FUNGUS		N2N4	G2G4	S3?	3		OR-SEN	S	S	S	D	D	D
FU	GYMNOMYCES FRAGRANS - name change from Martellia fragrans	FUNGUS		N2N3	G2G3	S1S3	1		OR-SEN					S	S
FU	GYMNOMYCES NONDISTINCTA	FUNGUS		N1	G1	S1	1		OR-SEN	S	S				S
FU	HELVELLA CRASSITUNICATA	FUNGUS		N3	G3	S2	2		OR-SEN	S	S	S			S
FU	LEUCOGASTER CITRINUS (*)	FUNGUS		N4	G3G4	S3S4	3		OR-SEN	S	S	D	D	D	D
FU	MYTHICOMYCES CORNEIPES	FUNGUS		N2N4	G2G4	S2?	2		OR-SEN	S	S				S
FU	OCTAVIANA MACROSPORA - spelling corrected from Octavianina macrospora (*)	FUNGUS		NH	GH	SH	1		OR-SEN	S	S				S
FU	OTIDEA SMITHII (*)	FUNGUS		N2	G2	S2	3		OR-SEN	S	S	S	D	D	D
FU	PHAEOLLYBIA CALIFORNICA	FUNGUS		N2?	G2?	S2?	1		OR-SEN	D	D	D	D	D	D
FU	PHAEOLLYBIA DISSILIENS (*)	FUNGUS		N2N3	G2G3	S2S3	3		OR-SEN	D	D				S
FU	PHAEOLLYBIA GREGARIA	FUNGUS		N1N2	G1G2	S1S2	1		OR-SEN	S	S				S
FU	PHAEOLLYBIA OLIVACEA (*)	FUNGUS		N2	G2	S2	NL		OR-SEN	D	D	D	D	D	D
FU	PHAEOLLYBIA OREGONENSIS (*)	FUNGUS		N2?	G2?	S2?	1		OR-SEN	D	D	S	S	S	D
FU	PHAEOLLYBIA PSEUDOFESTIVA (*)	FUNGUS		N3	G3	S3?	3		OR-SEN	D	S	D	S	D	D
FU	PHAEOLLYBIA SCATESIAE (*)	FUNGUS		N3?	G3?	S3?	3		OR-SEN	D	S	S	D	S	D
FU	PHAEOLLYBIA SIPEI (*)	FUNGUS		N3?	G3?	S3?	3		OR-SEN	D	D	S	S	S	D
FU	PHAEOLLYBIA SPADICEA (*)	FUNGUS		N3N4	G3G4	S3?	3		OR-SEN	D	D			D	D
FU	PSEUDORHIZINA CALIFORNICA (*)	FUNGUS		N4	G4	S2	2		OR-SEN	S	D	S	S	S	S
FU	RAMARIA AMYLOIDEA (*)	FUNGUS		N3	G3	S2?	2		OR-SEN	S	S				S
FU	RAMARIA GELATINIAURANTIA (*)	FUNGUS		N4	G4	S2?	3		OR-SEN	D	S				S
FU	RAMARIA LARGENTII (*)	FUNGUS		N3	G3	S2?	3		OR-SEN	D	S	D	D	D	S
FU	RAMARIA RUBELLA VAR. BLANDA	FUNGUS		NU	GU	S1?	2		OR-SEN	S	S				S
FU	RAMARIA SPINULOSA VAR. DIMINUTIVA	FUNGUS		NU	GU	S1?	1		OR-SEN	S	S	S	S	S	D



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FU	RHIZOPOGON CHAMALEONTINUS	FUNGUS		N1N2	G2G3	S1S2	2		OR-SEN		S		S		S
FU	RHIZOPOGON ELLIPSOPORUS	FUNGUS		N1N3	G2G3	S1S2	2		OR-SEN		S	S	D		
FU	RHIZOPOGON EXIGUUS	FUNGUS		N1N3	G2G3	S1S2	2		OR-SEN	S	S		S	S	S
FU	RHIZOPOGON INQUINATUS	FUNGUS		N2N4	G2G3	S1S2	2		OR-SEN		S				S
FU	SOWERBYELLA RHENANA (*)	FUNGUS		N3	G3G4	S3	3		OR-SEN	D	S	S	D	D	D
FU	STAGNICOLA PERPLEXA	FUNGUS		N2N4	G2G4	S1S2	2		OR-SEN						S
FU	THAXTEROGASTER PAVELEKII	FUNGUS		N2	G2	S2	1		OR-SEN	S					
LI	BRYORIA PSEUDOCAPILLARIS	LICHEN		N1N2	G3	S2	2		OR-SEN	D	S				S
LI	BRYORIA SPIRALIFERA	LICHEN		N1	G3	S2	2		OR-SEN	D	S				S
LI	BRYORIA SUBCANA	LICHEN		N2N3	G2G4	S2	2		OR-SEN	D	S			S	D
LI	CALICIUM ADPERSUM (*)	LICHEN		N2N3	G3G4	S1	2		OR-SEN	S	S			S	S
LI	CHAENOTHECA SUBROSCIDA (*)	LICHEN		N3	G3G4	S2	2		OR-SEN		S		D	D	D
LI	DERMATOCARPON MEIOPHYLLIZIUM (*)	LICHEN		N4	G4G5	S1S2	3		OR-SEN	S	S		D	D	D
LI	ERIODERMA SOREDIATUM	LICHEN		N1N3	G4	S2	2		OR-SEN	D	D				
LI	HETERODERMIA LEUCOMELA - name change from H. leucomelos	LICHEN		NNR	G4	S2S3	2		OR-SEN	D					D
LI	HETERODERMIA SITCHENSIS (*)	LICHEN		N1N2	G2G3	S1	2		OR-SEN						S
LI	HYPOGYMNA DUPLICATA (*)	LICHEN		N4	G4	S2	3		OR-SEN	S	S			S	D
LI	HYPOTRACHYNA REVOLUTA (*)	LICHEN		N4	G3G4	S1	2		OR-SEN	S	S				S
LI	LEIODERMA SOREDIATUM	LICHEN		NNR	G4	S1	2		OR-SEN	S	S				
LI	LEPTOGIUM BURNETIAE (*) - name change from L. burnetiae var. hirsutum (*)	LICHEN		N4	G5Q	S1	3		OR-SEN						D
LI	LEPTOGIUM CYANESCENS (*)	LICHEN		N4	G5	S1	2		OR-SEN	D	S		D	D	S
LI	LOBARIA LINITA	LICHEN		N3	G4G5	S1	2		OR-SEN	S	S		S	S	D
LI	MICROCALICIUM ARENARIUM	LICHEN		N3N4	G4G5	S1	2		OR-SEN		S				
LI	NIEBLA CEPHALOTA	LICHEN		N1N3	G3G4	S2	2		OR-SEN	D	S				S
LI	PANNARIA RUBIGINOSA (*)	LICHEN		N4	G4G5	S2	2		OR-SEN	S	D			S	D
LI	PILOPHORUS NIGRICAULIS	LICHEN		NNR	G3	S2	2		OR-SEN		S			S	D
LI	PSEUDOCYPHELLARIA MALLOTA	LICHEN		NNR	G4	S1	2		OR-SEN	S	D				
LI	RAMALINA POLLINARIA	LICHEN		N4	G4	S1S2	2		OR-SEN	D					S
LI	STEREOCAULON SPATHULIFERUM	LICHEN		NNR	G4G5	S1	2		OR-SEN		S			S	S
LI	TELOSCHISTES FLAVICANS	LICHEN		N4	G4	S1	2		OR-SEN	D					D
LI	TEXOSPORIUM SANCTI-JACOBI	LICHEN	FSC	N2	G3	S1	2		OR-SEN			S			
LI	THOLURNA DISSIMILIS (*)	LICHEN		N3	G3G5	S2	2		OR-SEN		S				S
LI	USNEA NIDULANS	LICHEN			G3G4	S1	2		OR-SEN		S				
VA	ABRONIA UMBELLATA SSP. BREVIFLORA	PINK SAND-VERBENA	FSC	N2	G4G5	S1	1	SE	OR-SEN	D					
VA	ADIANTUM JORDANII	CALIFORNIA MAIDEN-HAIR		NNR	G4G5	S2	2		OR-SEN	D			D	D	D
VA	AGOSERIS ELATA	TALL AGOSERIS		NNR	G4	S1	2		OR-SEN		S				



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VA	AGROSTIS HOWELLII	HOWELL'S BENTGRASS	FSC	N2	G2	S2	1	SC	OR-SEN		S				S
VA	ANEMONE OREGANA VAR. FELIX	BOG ANEMONE	FSC	N2	G4	S1	2		OR-SEN						D
VA	ARABIS KOEHLERI VAR. KOEHLERI	KOEHLER'S ROCKCRESS	FSC	N1	G3	S1	1	SC	OR-SEN						D
VA	ARABIS MACDONALDIANA	MACDONALD'S ROCK-CRESS	FE	N2	G2	S1	1	SE	FE						S
VA	ARCTOSTAPHYLOS HISPIDULA	HAIRY MANZANITA	FSC	N3	G3	S2	2		OR-SEN	D					S
VA	ARNICA VISCOSA	SHASTA-ARNICA	NNR	N4	G4	S2	2		OR-SEN						S
VA	ARTEMISIA PYCNOCEPHALA	COASTAL SAGEWORT	NNR	N4	G4G5	S1	2		OR-SEN	D					S
VA	ASPLENIUM SEPTENTRIONALE	GRASS-FERN	N4N5	N4	G4G5	S1	2		OR-SEN						S
VA	ASTRAGALUS APPLIGATEI	APPLIGATE'S MILK-VETCH	FE	N1	G1	S1	1	SE	FE						S
VA	ASTRAGALUS CALIFORNICUS	CALIFORNIA MILK-VETCH	N3	N3	G3	S1	2		OR-SEN						D
VA	ASTRAGALUS GAMBELIANUS	GAMBEL MILK-VETCH	NNR	N4	G5	S1	2		OR-SEN						D
VA	ASTRAGALUS PECKII	PECK'S MILK-VETCH	N3	N3	G3	S3	1	ST	OR-SEN						S
VA	BENSONIELLA OREGANA	BENSONIA	FSC	N3	G3	S3	1	SC	OR-SEN	D					D
VA	BOTRYCHUM MINGANENSE (*)	GRAY MOONWORT	NNR	N4	G4	S3	4		OR-SEN						S
VA	BOTRYCHUM MONTANUM	MOUNTAIN GRAPE-FERN	FSC	N3	G3	S2	2		OR-SEN						S
VA	BOTRYCHUM PUMICOLA	PUMICE GRAPE-FERN	N3	N3	G3	S3	1	ST	OR-SEN						S
VA	BRODIAEA TERRESTRIS	DWARF BRODIAEA	N4N5	N4	G4G5	S2	2		OR-SEN	D					S
VA	CALAMAGROSTIS BREWERI	BREWER'S REEDGRASS	NNR	N4	G3	S2	2		OR-SEN						S
VA	CALLITRICHE MARGINATA	WINGED WATER-STARWORT			G4	S2	2		OR-SEN						D
VA	CALOCHORTUS COXII	CRINITE MARIPOSA-LILY	FSC	N1	G1	S1	1	SE	OR-SEN						S
VA	CALOCHORTUS GREENEI	GREENE'S MARIPOSA-LILY	FSC	N2	G3	S3	1	SC	OR-SEN						S
VA	CALOCHORTUS HOWELLII	HOWELL'S MARIPOSA-LILY	FSC	N3	G3	S3	1	ST	OR-SEN						D
VA	CALOCHORTUS INDECORUS	SEXTON MT. MARIPOSA-LILY	NX	NX	GX	SX	1	SE	OR-SEN						S
VA	CALOCHORTUS MONOPHYLLUS	ONE-LEAVED MARIPOSA-LILY	NNR	N4	G3G4	S1	2		OR-SEN						D
VA	CALOCHORTUS NITIDUS	BROAD-FRUIT MARIPOSA-LILY	FSC	N3	G3	S1	2		OR-SEN						D



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VA	CALOCHORTUS PERSISTENS	SISKIYOU MARIPOSA-LILY		N1	G1	S1	1		OR-SEN					D	
VA	CALOCHORTUS UMPQUAENSIS	UMPQUA MARIPOSA-LILY	FSC	N1	G1	S1	1	SE	OR-SEN				S	D	
VA	CAMASSIA HOWELLI	HOWELL'S CAMAS	FSC	N2	G2	S2	1	SC	OR-SEN				D	S	
VA	CAMISSONIA GRACILIFLORA	SLENDER-FLOWERED EVENING-PRIMROSE		N4	G4	S2	2		OR-SEN					D	
VA	CARDAMINE PATTERSONII	SADDLE MOUNTAIN BITTERCRESS	FSC	N2	G2	S2	1	SC	OR-SEN		S				
VA	CAREX ABRUPTA	ABRUPT-BEAKED SEDGE		NNR	G5	S1	2		OR-SEN			D	S		
VA	CAREX BREVICALUIS	SHORT STEMMED SEDGE		NNR	G5	S2	2		OR-SEN	D	S			S	
VA	CAREX CAPITATA	CAPITATE SEDGE		NNR	G5	S2	2		OR-SEN			S	D		
VA	CAREX COMOSA	BRISTLY SEDGE		NNR	G5	S1	2		OR-SEN	S	D	D	S		
VA	CAREX CRAWFORDII	CRAWFORD'S SEDGE		NNR	G5	S1	2		OR-SEN	D				S	
VA	CAREX DIANDRA	LESSER PANICLED SEDGE		NNR	G5	S1	2		OR-SEN			S			
VA	CAREX GYNODYNAMA	HAIRY SEDGE		NNR	G4G5	S2	2		OR-SEN	D	D	D	D	D	
VA	CAREX KLAMATHENSIS (SW OR pops. of Carex livida)	A SEDGE			G2	S2	1		OR-SEN					D	
VA	CAREX LASIOCARPA VAR. AMERICANA	SLENDER SEDGE		NNR	G5	S2	2		OR-SEN			D			
VA	CAREX LIVIDA	PALE SEDGE		NNR	G5	S2	2		OR-SEN		S			S	
VA	CAREX NERVINA	SIERRA NERVED SEDGE		NNR	G5	S1	2		OR-SEN					S	
VA	CAREX RETRORSA	RETROSE SEDGE			G5	S1	2		OR-SEN		S				
VA	CAREX SCABRUSCULA	SISKIYOU SEDGE		N3N4	G3G4	S3	2		OR-SEN	S			D		
VA	CAREX SERRATODENS	SAW-TOOTH SEDGE		NNR	G5	S2	2		OR-SEN				D	D	
VA	CASTILLEJA CHLOROTICA	GREEN-TINGED PAINTBRUSH		N3	G3	S3	1		OR-SEN			S			
VA	CASTILLEJA LEVISECTA	GOLDEN PAINTBRUSH	FT	N1	G1	SH	1	SE	FT	S			S		
VA	CASTILLEJAMENDOCINENSIS	MENDOCINO COAST INDIAN PAINTBRUSH	FSC	N2	G2	S1	1		OR-SEN	S					
VA	CHEILANTHES COVILLEI	COVILLE'S LIP-FERN		NNR	G4?	S1	2		OR-SEN					D	
VA	CHEILANTHES INTERTEXTA	COASTAL LIPFERN		NNR	G5	S1	2		OR-SEN					D	
VA	CHLOROGALUM ANGUSTIFOLIUM	NARROW-LEAVED AMOLE		NNR	G4G5	S1	2		OR-SEN					D	



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VA	CICENDIA QUADRANGULARIS	TIMWORT		NNR	G4	S2	2		OR-SEN	D	D			D	S
VA	CICUTA BULBIFERA	BULB-BEARING WATER-HEMLOCK			G5	SH	2-ex		OR-SEN			S			
VA	CIMICIFUGA ELATA VAR. ELATA	TALL BUGBANE	FSC	N3	G3	S3	1	SC	OR-SEN	S	D		D	D	D
VA	COLLOMIA MAZAMA	MT. MAZAMA COLLOMIA		N3	G3	S3	1		OR-SEN			S			
VA	COPTIS TRIFOLIA	THREE-LEAF GOLDTHREAD		N5	G5	S1	2		OR-SEN						S
VA	CORDYLANTHUS MARITIMUS SSP. PALUSTRIS	POINT REYES BIRD'S BEAK	FSC	N2	G4?	S2	1	SE	OR-SEN	D					
VA	CORYDALIS AQUAE-GELIDAE	COLD-WATER CORYDALIS	FSC	N3	G3	S3	1	SC	OR-SEN	S					D
VA	CRYPTANTHA LEIOCARPA	SEASIDE CRYPTANTHA		NNR	G3G4	S1	2		OR-SEN	D					
VA	CRYPTANTHA MILO-BAKERI	MILO BAKER'S CRYPTANTHA		NNR	G3G4	S1	2		OR-SEN				D		
VA	CRYPTOGRAMMA STELLERI	STELLER'S ROCKBRAKE		NNR	G5	S1	2		OR-SEN	S					
VA	CUPRESSUS BAKERI	BAKER'S CYPRESS	FSC	N3	G3	S1	2		OR-SEN				D		
VA	CYPERUS ACUMINATUS	SHORT-POINTED CYPERUS		N5	G5	S1	2		OR-SEN	S	S		S	S	S
VA	CYPRIPEDIUM FASCICULATUM (*)	CLUSTERED LADY'S-SLIPPER	FSC	N4	G4	S3	2	SC	OR-SEN			S	D	S	S
VA	DELPHINIUM LEUCOPHAEUM	WHITE ROCK LARKSPUR	FSC	N2	G4	S2	1	SE	OR-SEN						S
VA	DELPHINIUM NUJICAULE	RED LARKSPUR		NNR	G4	S2	2		OR-SEN				D	S	S
VA	DELPHINIUM NUTTALLII	NUTTALL'S LARKSPUR		N4	G4	S1	2		OR-SEN						S
VA	DELPHINIUM PAVONACEUM	PEACOCK LARKSPUR	FSC	NNR	G1Q	S1	1	SE	OR-SEN						S
VA	DICENTRA PAUCIFLORA	FEW-FLOWERED BLEEDINGHEART	FSC	NNR	G3?	S1	2		OR-SEN				D		
VA	DODECATHEON AUSTRORFRIGIDUM	FRIGID SHOOTINGSTAR	FSC	N2	G2	S2	1		OR-SEN						D
VA	DRABA HOWELLII	HOWELL'S WHITLOW-GRASS		NNR	G4	S2	2	SC	OR-SEN				S		
VA	EPILOBIUM OREGANUM	OREGON WILLOW-HERB	FSC	N2	G2	S1	1	SC	OR-SEN				D	S	S
VA	ERICAMERIA ARBORESCENS	GOLDEN FLEECE		NNR	G4	S1	2		OR-SEN	D			S		
VA	ERIGERON CERVINUS	SISKIYOU DAISY	FSC	N3	G3	S2	2		OR-SEN	S			S		
VA	ERIGERON DECUMBENS VAR. DECUMBENS	WILLAMETTE VALLEY DAISY	FE	N1	G4	S1	1	SE	FE	D				S	S
VA	ERIGERON HOWELLII	HOWELL'S DAISY	FSC	N2	G2	S2	1	SC	OR-SEN						S



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VA	ERIOGONUM LOBBII	LOBB'S BUCKWHEAT		N4	G4	S2	2		OR-SEN					S	
VA	ERIOGONUM UMBELLATUM VAR. GLABERRIMUM	GREEN BUCKWHEAT	FSC	N2?	G5	S1?	1		OR-SEN					S	
VA	ERIOPHORUM CHAMISSONIS	RUSSET COTTON-GRASS		NNR	G5	S1	2		OR-SEN	D	S				
VA	ERYTHRONIUM ELEGANS	COAST RANGE FAWN-LILY	FSC	N1	G1	S1	1	ST	OR-SEN		S				D
VA	ERYTHRONIUM HOWELLII	HOWELL'S ADDER'S-TONGUE		N3	G3G4	S3	1		OR-SEN					D	
VA	ESCHSCHOLZIA CAESPITOSA	GOLD POPPY		NNR	G5	S1	2		OR-SEN					D	S
VA	EUCEPHALUS VIALIS	WAYSIDE ASTER	FSC	N3	G3	S3	1	ST	OR-SEN	S	D			D	D
VA	EUCHEPHALUS GORMANII	GORMAN'S ASTER		N3	G3	S3	1		OR-SEN						D
VA	FILIPENDULA OCCIDENTALIS	QUEEN-OF-THE-FOREST	FSC	N2N3	G2G3	S2	1	SC	OR-SEN						D
VA	FRITILLARIA CAMSCHATCENSIS	BLACK LILY		NNR	G5	S1	2		OR-SEN					D	
VA	FRITILLARIA GENTNERI	GENTNER'S FRITILLARY	FE	N1	G1	S1	1	SE	FE		S			D	
VA	GENTIANA NEWBERRYI	NEWBERRY'S GENTIAN		N4	G4	S2	2		OR-SEN					S	
VA	GENTIANA PLURISETOSA	ELEGANT GENTIAN	FSC	N3	G3	S1	1		OR-SEN					S	
VA	GENTIANA SETIGERA	WALDO GENTIAN	FSC	N2	G2	S2	1	SC	OR-SEN	D				D	
VA	GILIA MILLEFOLIATA	SEASIDE GILIA	FSC	N2	G2	S1	1		OR-SEN	D					
VA	HACKELIA BELLA	BEAUTIFUL STICKSEED		N3?	G3?	S1	2		OR-SEN					D	
VA	HASTINGSIA BRACTEOSA VAR. ATROPURPUREA	PURPLE-FLOWERED RUSH-LILY	FSC	N1	G2	S1	1	ST	OR-SEN					D	
VA	HASTINGSIA BRACTEOSA VAR. BRACTEOSA	LARGE-FLOWERED RUSH-LILY	FSC	N2	G2	S2	1	ST	OR-SEN					D	
VA	HELIOTROPUM CURASSAVICUM	SALT HELIOTROPE		N2N4	G5	S2	2		OR-SEN					D	
VA	HIERACIUM HORRIDUM	SHAGGY HAWKWEED			G4	S1	2		OR-SEN					S	
VA	HORKELIA CONGESTA SSP. CONGESTA	SHAGGY HORKELIA	FSC	N2	G4	S2	1	SC	OR-SEN	D				D	S
VA	HORKELIA TRIDENTATA SSP. TRIDENTATA	THREE-TOOTHED HORKELIA		N4?	G4G5	S1	2		OR-SEN					D	S
VA	HOWELLIA AQUATILIS	WATER HOWELLIA	FT	N3	G3	S1	1		FT		S			S	
VA	HYDROCOTYLE VERTICILLATA	WHORLED MARSH-PENNYWORT		N4N5	G5	S1	2		OR-SEN	S	S				
VA	ILIAMNA LATIBRACTEATA	CALIFORNIA GLOBE-MALLOW		N3	G3	S2	2		OR-SEN	D				D	D
VA	IRIS TENAX VAR. GORMANII	GORMAN'S IRIS			G4G5	S1	1		OR-SEN		S			D	
VA	JUNCUS KELLOGGII	KELLOGG'S RUSH			G3?	SNR	3		OR-SEN	D				S	S



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VA	KALMIOPSIS FRAGRANS	FRAGRANT KALMIOPSIS	FSC	G1	G1	S1	1		OR-SEN						S
VA	KECKIELLA LEMMONII	BUSH BEARDTONGUE		NNR	G4	S1	2		OR-SEN				S		
VA	LASTHENIA ORNDUFFII - name change from L. macrantha ssp. prisca	LARGE-FLOWERED GOLDFIELDS	FSC	N2	G3	S2	1	SC	OR-SEN	D					
VA	LATHYRUS HOLOCHLORUS	THIN-LEAVED PEAVINE	FSC	N3	G2	S2	1		OR-SEN		D			S	D
VA	LEWISIA COLUMBIANA VAR. COLUMBIANA	COLUMBIA LEWISIA	NNR	G4	G4	S2	2		OR-SEN						S
VA	LEWISIA LEANA	LEE'S LEWISIA	NNR	G4	G4	S2	2		OR-SEN				D	S	
VA	LILIUM OCCIDENTALE	WESTERN LILY	FE	N1	G1	S1	1	SE	FE		D				
VA	LIMNANTHES FLOCCOSA SSP. BELLINGERIANA	BELLINGER'S MEADOW-FOAM	FSC	N2	G4	S2	1	SC	OR-SEN			D	D		
VA	LIMNANTHES FLOCCOSA SSP. GRANDIFLORA	LARGE-FLOWERED WOOLLY MEADOWFOAM	FE	N1	G4	S1	1	SE	FE				S		
VA	LIMNANTHES FLOCCOSA SSP. PUMILLA	DWARF MEADOW-FOAM	FSC	N1	G4	S1	1	ST	OR-SEN				D		
VA	LIMNANTHES GRACILIS SSP. GRACILIS	SLENDER MEADOW-FOAM		N2	G3	S2	1	SC	OR-SEN				D	D	
VA	LIMONIUM CALIFORNICUM	WESTERN MARSH-ROSEMARY	NNR	G4	G4	S1	2		OR-SEN	D					
VA	LOMATIUM BRADSHAWII	BRADSHAW'S DESERTPARSLEY	FE	N2	G2	S2	1	SE	FE		D				S
VA	LOMATIUM COOKII	COOK'S LOMATIUM	FE	N1	G1	S1	1	SE	FE				D		
VA	LOMATIUM ENGELMANNII	ENGELMANN'S DESERT-PARSLEY		N3	G3	S1	2		OR-SEN				S		
VA	LOTUS STIPULARIS	STIPULED TREFOIL	NNR	G5	G5	S2	2		OR-SEN				D	S	
VA	LUPINUS SULPHUREUS SSP. KINCAIDII	KINCAID'S LUPINE	FT	N2	G5	S2	1	ST	FT		D			D	S
VA	LUPINUS TRACYI	TRACY'S LUPINE	NNR	G4	G4	S2	2		OR-SEN				S		
VA	LYCOPODIELLA INUNDATA	BOG CLUB-MOSS	NNR	G5	G5	S2	2		OR-SEN	D	D				D
VA	LYCOPODIUM COMPLANATUM	GROUND CEDAR	NNR	G5	G5	S2	2		OR-SEN						S
VA	MECONELLA OREGANA	WHITE FAIRYPOPPY	FSC	N2	G2G3	S1	1	SC	OR-SEN		S		D	S	
VA	MICROSERIS BIGELOVII	COAST MICROSERIS	NNR	G4	G4	S2	2		OR-SEN	D	S				
VA	MICROSERIS HOWELLII	HOWELL'S MICROSERIS	N3	G3	G3	S3	4	ST	OR-SEN				D		
VA	MIMULUS BOLANDERI	BOLANDER'S MONKEYFLOWER	NNR	G4	G4	S1	2		OR-SEN				D		
VA	MIMULUS CONGDONII	CONGDON'S MONKEYFLOWER	NNR	G4G5	G4G5	S1?	2		OR-SEN				D		
VA	MIMULUS EVANESCENS	DISAPPEARING MONKEYFLOWER	FSC	N2	G2	S2	1	SC	OR-SEN			D			



Taxon	Scientific Name	Common Name	Federal Status	National Rank	Global Rank	ORNHIC State Rank	ORNHIC List	ODA State Status	Bureau Status	CB	EU	KF	MD	RO	SA
VA	MIMULUS TRICOLOR	THREE-COLORED MONKEY-FLOWER		NNR	G4	S2	2		OR-SEN			S			S
VA	NAVARRETTIA LEUCOCEPHALA SSP. LEUCOCEPHALA	WHITE-FLOWERED NAVARRETTIA		NNR	G4	S2	2		OR-SEN		S	D	D		
VA	NEMACLADUS CAPILLARIS	SLENDER NEMACLADUS		NNR	G4	S1	2		OR-SEN				D		
VA	OENOTHERA WOLFII	WOLF'S-EVENING-PRIMROSE	FSC	N1	G1	S1	1	ST	OR-SEN		D				
VA	OPHIOGLOSSUM PUSILLUM	ADDER'S-TONGUE		NNR	G5	S1	2		OR-SEN		S	S			S
VA	PELLAEA ANDROMEDIFOLIA	COFFEE FERN		NNR	G4	S2	2		OR-SEN		D	S	D	D	D
VA	PELLAEA MUCRONATA SSP. MUCRONATA	BIRD'S-FOOT FERN		N4?	G5	S1	2		OR-SEN				D		
VA	PENSTEMON GLAUCINUS	BLUE-LEAVED PENSTEMON	FSC	N3	G3	S3	1		OR-SEN			D			
VA	PERIDERIDIA ERYTHORHIZA	RED-ROOTED YAMPAH	FSC	N1	G1	S1	1	SC	OR-SEN		S	D	D		D
VA	PHACELIA ARGENTEA	SILVERY PHACELIA	FSC	N2	G2	S2	1	ST	OR-SEN		D				
VA	PHACELIA LEONIS	SISKIYOU PHACELIA	FSC	N2	G2	S1	1		OR-SEN				S		
VA	PILULARIA AMERICANA	AMERICAN PILLWORT		NNR	G5	S2	2		OR-SEN		S	S			
VA	PLAGIOBOTHRY'S AUSTINIAE	AUSTIN'S PLAGIOBOTHRY'S		NNR	G4	S2?	2		OR-SEN				D		
VA	PLAGIOBOTHRY'S FIGURATUS SSP. CORALLICARPUS	CORAL SEEDED ALLOCARYA	FSC	N1	G4	S1	1	SC	OR-SEN				D		
VA	PLAGIOBOTHRY'S GREENEI	GREENE'S POPCORN FLOWER		NNR	G4	S2?	2		OR-SEN				D		
VA	PLAGIOBOTHRY'S HIRTUS	ROUGH POPCORN FLOWER	FE	N1	G1	S1	1	SE	FE				D		
VA	PLAGIOBOTHRY'S LAMPROCARPUS	SHINY-FRUITED POPCORN FLOWER		NX	GX	SX	1	SE	OR-SEN				S		
VA	POA RHIZOMATA	TIMBER BLUEGRASS		N3N4	G3G4	S1?	2		OR-SEN				D		
VA	POA UNILATERALIS	SAN FRANCISCO BLUEGRASS			G3	S1	2	SC	OR-SEN		S				
VA	POGOGYNE FLORIBUNDA	PROFUSE-FLOWERED MESA MINT	FSC	N3	G3	S1	1		OR-SEN				D		
VA	POLYSTICHUM CALIFORNICUM	CALIFORNIA SWORD-FERN		NNR	G4	S2	2		OR-SEN		D	S	D	D	D
VA	POTAMOGETON DIVERSIFOLIUS	RAFINESQUE'S PONDWEED		N5	G5	S1	2		OR-SEN				S		
VA	PYRROCOMA RACEMOSA VAR. RACEMOSA	RACEMOSE PYRROCOMA		NNR	G5	S1	2		OR-SEN		D				S



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Taxon	Scientific Name	Common Name	Federal Status	National Rank	Global Rank	ORNHC State Rank	ORNHC List	ODA State Status	Bureau Status	CB	EU	KF	MD	RO	SA
VA	RANUNCULUS AUSTROOREGANIUS	SOUTHERN OREGON BUTTERCUP		N2	G2	S2	1	SC	OR-SEN				D		
VA	RHAMNUS ILICIFOLIA	REDBERRY		N5	G5	S1	2		OR-SEN				D		
VA	RHYNCHOSPORA ALBA	WHITE BEAKRUSH		NNR	G5	S2	2		OR-SEN	D	S	S			S
VA	RIBES DIVARICATUM VAR. PUBIFLORUM	STRAGGLY GOOSEBERRY		NNR	G4	S2	2		OR-SEN		S		D		
VA	ROMANZOFFIA THOMPSONII	THOMPSON'S MISTMAIDEN		N3	G3	S3	1		OR-SEN	D	D		S	D	S
VA	RORIPPA COLUMBAE	COLUMBIA CRESS	FSC	N3	G3	S3	1	SC	OR-SEN				D		
VA	ROTALA RAMOSIOR	LOWLAND TOOTHCUP		N5	G5	S2	2		OR-SEN		S				
VA	SAXIFRAGOPSIS FRAGARIOIDES	JOINT-LEAVED SAXIFRAGE		NNR	G3?	S1	2		OR-SEN				D		
VA	SCHEUCHZERIA PALUSTRIS VAR. AMERICANA	SCHEUCHZERIA		NNR	G5	S2	2		OR-SEN		S	S			
VA	SCHOENOPLECTUS SUBTERMINALIS - name change from Scirpus subterminalis	WATER CLUBRUSH		NNR	G4G5	S2	2		OR-SEN	D	S	S	S	S	S
VA	SCIRPUS PENDULUS	DROOPING BULRUSH		N5?	G5	S1	2		OR-SEN	S	S		D	S	S
VA	SEDUM MORANII	ROGUE RIVER STONECROP		N1	G1	S1	1	SC	OR-SEN				D		
VA	SERICOCARPUS RIGIDUS	WHITE-TOPPED ASTER	FSC	N3	G3	S2	1	ST	OR-SEN		D				S
VA	SIDALCEA HICKMANII SSP. NOV.	HICKMAN'S CHECKERBLOOM			G3	S1	1		OR-SEN				D		
VA	SIDALCEA MALVIFLORA SSP. PATULA	COAST CHECKER BLOOM	FSC	N1	G5	S1	1	SC	OR-SEN	D					
VA	SIDALCEA NELSONIANA	NELSON'S CHECKERMALLOW	FT	N2	G2	S2	1	ST	FT						D
VA	SILENE HOOKERI SSP. BOLANDERI	BOLANDER'S CATCHFLY		N4?	G4	S1	2		OR-SEN				D		
VA	SISYRINCHIUM HITCHCOCKII	HITCHCOCK'S BLUE-EYED GRASS	FSC	N1	G2	S1	1		OR-SEN		D				D
VA	SISYRINCHIUM SARMENTOSUM	PALE BLUE-EYED GRASS	FSC	N1N2	G1G2	S1	1	SC	OR-SEN		S				S
VA	SOLANUM PARISHII	PARISH'S HORSE-NETTLE		NNR	G4	S2	2		OR-SEN				D		
VA	SOPHORA LEACHIANA	WESTERN SOPHORA	FSC	N2	G2	S2	1	SC	OR-SEN				D		
VA	STELLARIA HUMIFUSA	CREeping CHICKWEED		NNR	G5?	S1	2		OR-SEN						D
VA	STREPTANTHUS GLANDULOSUS	COMMON JEWEL FLOWER		NNR	G4	S1	2		OR-SEN				D		



Taxon	Scientific Name	Common Name	Federal Status	National Rank	Global Rank	ORNHIC State Rank	ORNHIC List	ODA State Status	Bureau Status	CB	EU	KF	MD	RO	SA
VA	STREPTANTHUS HOWELLII	HOWELL'S STREPTANTHUS		N2	G2	S2	1	SC	OR-SEN	S			D		
VA	STREPTOPUS STREPTOPOIDES	KRUHSEA		NNR	G5	S2	2		OR-SEN						S
VA	SULLIVANTIA OREGANA	OREGON SULLIVANTIA	FSC	N2	G2	S2	1	SC	OR-SEN						S
VA	THELYPODIUM BRACHYCARPUM	SHORT-PODED THELYPODY	FSC	N3	G3	S2	2		OR-SEN			S			
VA	TRILLIUM KURABAYASHII	SISKIYOU TRILLIUM		NNR	G4G5	S1	2		OR-SEN	D					
VA	UTRICULARIA GIBBA	HUMPED BLADDERWORT		N5	G5	S1	2		OR-SEN	D	D				S
VA	UTRICULARIA MINOR	LESSER BLADDERWORT		NNR	G5	S2	2		OR-SEN	D	S	S	D	S	S
VA	UTRICULARIA OCHROLEUCA	NORTHERN BLADDERWORT		NNR	G4?	S1	2		OR-SEN						S
VA	VIOLA PRIMULIFOLIA SSP. OCCIDENTALIS	WESTERN BOG VIOLET	FSC	N2	G5	S2	1	SC	OR-SEN	S			D		
VA	WOLFFIA BOREALIS	DOTTED WATER-MEAL		NNR	G5	S1	2		OR-SEN		S		D	D	D
VA	WOLFFIA COLUMBIANA	COLUMBIA WATER-MEAL		NNR	G5	S1	2		OR-SEN		S		S	S	D
VA	ZIGADENUS FONTANUS	SMALL-FLOWERED DEATH CAMAS	FSC	N3?	G3	S1	2		OR-SEN				D		

(*) = Survey and Manage species that remained Bureau Sensitive in Oregon.
See preceding text for abbreviations and their meanings.

