

Rare Plant Inventory and Community Vegetation Survey Lake Wenatchee State Park



Botrychium multifidum, leathery grapefern,
an unusual plant found on the lakeshore
at Lake Wenatchee State Park

Conducted for
The Washington State Parks and Recreation Commission
PO Box 42650, Olympia, Washington 98504

Conducted by
Dana Visalli, Methow Biodiversity Project
PO Box 175, Winthrop, WA 98862
In cooperation with the Pacific Biodiversity Institute

December 31, 2004

Rare Plant Inventory and Community Vegetation Survey Lake Wenatchee State Park



Yellow avalanche lily, *Erythronium grandiflorum*, one of the first flowers to bloom at Lake Wenatchee State Park.

were conducted simultaneously. Plant community polygons were initially delineated remotely using orthophotos and ASTER satellite images. These tentative community assignments were then ground checked for accuracy and for dominant plant associations. Forested associations were determined using the *Field Guide for Forested Plant Associations of the Wenatchee National Forest* (Lillybridge et al, 1995), while wetland associations were taken from the *Classification and Management of Aquatic, Riparian, And Wetland Sites on the national Forests of Eastern Washington* (Kovalchik & Clausnitzer, 2004).

The park was first visited on May 14, 2004 to investigate early blooming plant species; one botanist and one GIS technician surveyed the park on June 9 and 10, and two botanists and two GIS technicians worked at the park on August 11 and 12. All of the polygons in the park were visited twice, and all of the plant species encountered were identified.

Results

246 vascular plant species were identified in the park, expanding on the 80 plant species known from a more cursory inventory conducted in 1992. One plant species that is listed with the Washington Natural Heritage Program (WNHP) as a ‘Sensitive- Not Yet Ranked’ (SNR), awlwort (*Subularia aquatica*), was found in the course of the project. We are informed by the WNHP that this is the only currently

A comprehensive rare plant inventory and plant community vegetation survey was conducted in Lake Wenatchee State Park by a team of 2 professional botanists and 2 Geographic Information Systems (GIS) technicians during the spring and summer field season of 2004. Much of this 323 acre state park is covered by second growth coniferous forest, but the park also includes several thousand feet of lake shore along Lake Wenatchee, a half acre island, and two thousand feet of shoreline along the Wenatchee River as it leaves the lake. The habitat bordering the lake and river form botanically complex wetlands in mid-summer, as the water level drops, adding considerably to the botanical and biological diversity contained in the park.

Methods

Rare plant surveys and community vegetation surveys



Awlwort, *Subularia aquatica*, in it's shallow-water habitat. This is not a showy species.



Awlwort, emerging from the receding waters of the Wenatchee River in August, 2004.



The south shore of the Wenatchee River, just downstream from Lake Wenatchee. The river ran at the forest edge (right side of image) in June; by August the wetland plant community pictured had emerged from the receding water.

known population of this species in the state. In Lake Wenatchee State Park it occurs along the south shore of the Wenatchee River at the outlet of the lake, and downstream along the shore for 200 yards. It is part of an unusual community of wetland plants that only begin their growth cycle after the water in the lake and along the riverbank begins to drop in June. Many of these species are not in bloom until late July or early August.

27 alien plant species were counted in the park, which is 11% of the 245 total known species. Virtually all of the alien species are ones that are ubiquitous in the western states. Most require



The southwest shore of Lake Wenatchee, in Lake Wenatchee State Park. The wetland vegetation visible between the large log on the right and the lake shore appeared in late June and July as the water level of the lake dropped.



Emerald Island, which lies within the park boundaries. Among the plant species that emerge on the shoreline as the lake water recedes is leathery grapefern, *Botrychium multifidum*, pictured on the report cover.



Coniferous forest covers much of Lake Wenatchee State Park. Typically Douglas-fir dominates the stands, although the plant community will often key to the grand fir series because of younger trees of this species growing in the understory.

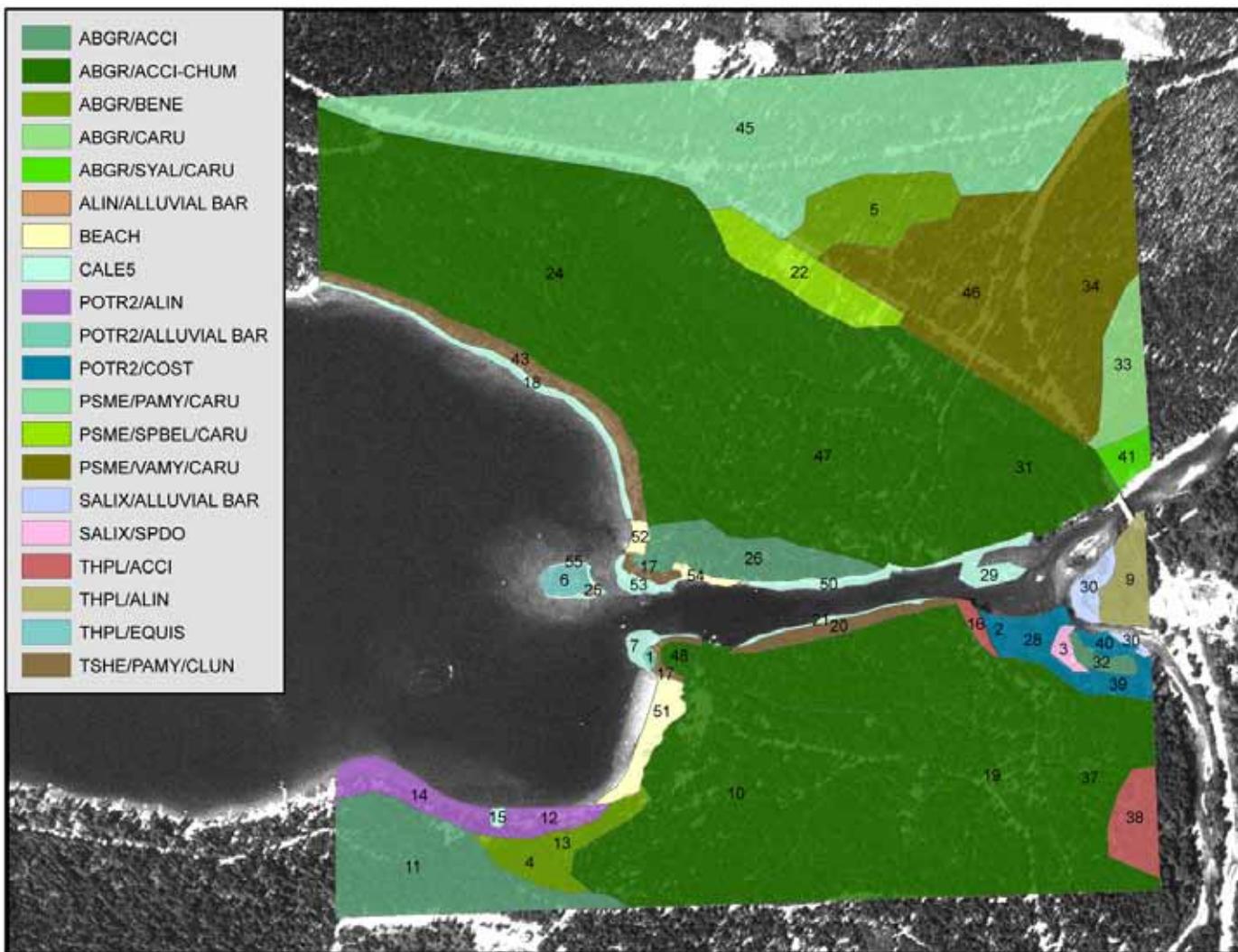
disturbed, sunlit ground on which to thrive. Thus most are excluded from the forested areas, and are found primarily in the highly disturbed areas in the park, such as along roadways and in and around the campgrounds.

Vegetation data was gathered for each polygon in the format provided by Washington State Parks and Recreation Commission. A total of 46 discrete vegetation communities (polygons) were delineated, composed of 19 primary plant associations.

The plant communities in the park indicate that there is a distinct gradient of available soil moisture in the park, with drier soils in the northeast quadrant giving rise to an open forest with abundant ponderosa pine, while the southern half of the park is dominated by Douglas-fir, with grand fir in the understory. The probable cause of this gradient is the proximity of Lake Wenatchee to the southern half of the park, doubtless cooling the air temperatures in the immediate vicinity and producing fog, thereby reducing solar insolation and evaporation.

The forests throughout the park are second-growth, with very few old-growth trees extant. There is an appreciable accumulation of fuels on the forest floor, indicating that the current planning efforts to introduce prescribed burns in the park are well justified.

Lake Wenatchee Vegetation Polygons



Key to Plant Associations

ABGR/ACCI	Abies grandis/Acer circinatum	Grand fir/Vine maple
ABGR/ACCI-CHUM	Abies grandis/Acer circinatum/Chimaphila umbellatum	Grand fir/Vine maple/Pipsisswa
ABGR/BENE	Abies grandis/Berberis nervosa	Grand fir/Cascade Oregon grape
ABGR/CARU	Abies grandis/Calamagrostis rubescens	Grand fir/Pinegrass
ABGR/SYAL/CARU	Abies grandis/Symphoricarpos albus/Calamagrostis rubescens	Grand fir/Common snowberry/Pinegrass
ALIN/ALLUVIAL BAR	Alnus rubra/Alluvial bar	Red alder/Alluvial bar
CALES	Carex lenticularis	Lakeshore sedge
POTR2/ALIN	Populus trichocarpa/Alnus incana	Black cottonwood/Mountain alder
POTR2/ALLUVIAL BAR	Populus trichocarpa/Alluvial Bar	Black cottonwood/Alluvial bar
POTR2/COST	Populus trichocarpa/Cornus stolonifera	Black cottonwood/Red-oiser dogwood
PSME/PAMY/CARU	Pseudotsuga menziesii/Pachistima myrsinites	Douglas fir/Pachistima
PSME/SPBEL/CARU	Pseudotsuga menziesii/Spiraea betulifolia/Calamagrostis rubescens	Douglas fir/Birchleaf Spiraea/Pinegrass
PSME/VAMY/CARU	Pseudotsuga menziesii/Vaccinium myrsinites/C. rubescens	Douglas fir/Low blueberry/Pinegrass
SALIX/ALLUVIAL BAR	Salix species/Alluvial bar	Willow/Alluvial bar
SALIX/SPDO	Salix species/Spiraea douglasii	Willow/Hardhack
THPL/ACCI	Thuja plicata/ Acer circinatum	Red cedar/Vine maple
THPL/ALIN	Thuja plicata/Alnus incana	Red cedar/Mountain alder
THPL-EQUIS	Thuja plicata/Equisetum species	Red cedar/Horsetail
TSHE/PAMY/CLUN	Tsuga heterophylla/Pachistima myrsinites/Clintonia uniflora	Western hemlock/Pachistima/Beadlily

Lake Wenatchee Survey Routes



Survey Dates:

May 14: one field worker
June 9-10: two field workers
August 10-11: four field workers

Subularia aquatica- Awlwort



Awlwort in its aquatic habitat



Awlwort emerging from shallow water

Occurrence in Washington: This is the only current record of *Subularia aquatica* in the state.

Occurrence at Lake Wenatchee State Park: Approximately 100 plants were counted growing in shallow water along the south shore of the Wenatchee River, for the first 200 yards downstream from outlet of the lake.

Habitat: Usually grows submerged along the margins of ponds and lakes, and along the margins of slow-moving streams.

Location:

Recognition: A small, rather grass-like, tufted annual 2-5" tall, usually growing submerged in shallow water.

Threats: The heavy recreational use of the shoreline at the outlet of the lake by waders and swimmers is uprooting some plants in that vicinity. The population extends downstream along the south shore of the river to areas where there is no disturbance. Some consideration is being given to raising the level of the lake by several feet; this would destroy the present population of this species, although it might repopulate the new shoreline.

Rare plant info redacted. Contact Washington State Parks and Recreation Commission for further information.

Vascular Plants of Lake Wenatchee State Park

#	Code	Scientific Name	Common Name	Family- Scientific	Family- Common	Type	Alien?
1	ABAM	<i>Abies amabilis</i>	Pacific silver fir	Pinaceae	Pine	t	
2	ABGR	<i>Abies grandis</i>	grand fir	Pinaceae	Pine	t	
3	ACCI	<i>Acer circinatum</i>	vine maple	Aceraceae	Maple	s	
4	ACGLD4	<i>Acer glabrum v. douglasii</i>	Douglas maple	Aceraceae	Maple	s	
5	ACMA3	<i>Acer macrophyllum</i>	bigleaf maple	Aceraceae	Maple	t	
6	ACMI2	<i>Achillea millefolium</i>	common yarrow	Compositae	Composite	p	
7	ACRU2	<i>Actaea rubra</i>	baneberry	Ranunculaceae	Buttercup	p	
8	ADBI	<i>Adenocaulon bicolor</i>	pathfinder	Compositae	Composite	p	
9	AGEX	<i>Agrostis exarata</i>	spike bentgrass	Gramineae	Grass	g	
10	ALSC	<i>Allium schoenoprasum</i>	chives	Liliaceae	Lily	p	
11	ALV2	<i>Allotropa virgata</i>	candystick	Ericaceae	Heather	p	
12	ALIN2	<i>Alnus incana</i>	mountain alder	Betulaceae	Birch	t	
13	ALRU2	<i>Alnus rubra</i>	red alder	Betulaceae	Birch	t	
14	AMAL2	<i>Amelanchier alnifolia</i>	serviceberry	Rosaceae	Rose	s	
15	AMME	<i>Amsinckia menziesii</i>	small-flowered fiddleneck	Boraginaceae	Borage	a	
16	ANMA	<i>Anaphalis margaritacea</i>	pearly everlasting	Compositae	Composite	p	
17	ANMI3	<i>Antennaria microphylla</i>	rosy pussytoes	Compositae	Composite	p	
18	ANRA	<i>Antennaria racemosa</i>	raceme pussytoes	Compositae	Composite	p	
19	APAN2	<i>Apocynum androsaemifolium</i>	spreading dogbane	Apocynaceae	Dogbane	p	
20	APSI	<i>Apocynum sibiricum</i>	Indian hemp	Apocynaceae	Dogbane	p	
21	AQFO	<i>Aquilegia formosa</i>	red columbine	Ranunculaceae	Buttercup	p	
22	ARDO	<i>Arceuthobium douglasii</i>	dwarf mistletoe	Loranthaceae	Mistletoe	p	
23	ARUV	<i>Arctostaphylos uva-ursi</i>	kinnikinnick	Ericaceae	Heather	p	
24	ARMA18	<i>Arenaria macrophylla</i>	big-leaved sandwort	Caryophyllaceae	Pink	p	
25	ARDO3	<i>Artemisia douglasiana</i>	Douglas sagebrush	Compositae	Composite	p	
26	ASPR	<i>Asperugo procumbens</i>	catchweed	Boraginaceae	Borage	a	a
27	ASFO	<i>Aster foliaceus</i>	leafy aster	Compositae	Composite	p	
28	ASOC	<i>Aster occidentalis</i>	western aster	Compositae	Composite	p	
29	ATFI	<i>Athyrium filix-femina</i>	lady-fern	Polypodiaceae	Common Fern	f	
30	BASA3	<i>Balsamorhiza sagittata</i>	arrowleaf balsamroot	Compositae	Composite	p	
31	BAOR	<i>Barbara orthoceras</i>	American wintercress	Brassicaceae	Mustard	p	
32	BEAQ	<i>Berberis aquifolium</i>	Tall Oregon grape	Berberidaceae	Barberry	s	
33	BENE	<i>Berberis nervosa</i>	Cascade Oregon grape	Berberidaceae	Barberry	s	
34	BOMU	<i>Botrychium multifidum</i>	leathery grapefern	Ophioglossaceae	Adder's-tongue	p	
35	BOTRY	<i>Botrychium sp</i>	moonwort	Ophioglossaceae	Adder's-tongue	p	
36	BRCA	<i>Bromus carinatus</i>	California brome	Gramineae	Grass	g	
37	CARU	<i>Calamagrostis rubescens</i>	pinegrass	Gramineae	Grass	g	
38	CAVE2	<i>Callitricha verna</i>	spring water-starwort	Callitrichaceae	Water-starwort	p	
39	CALY	<i>Calochortus lyallii</i>	hairy cat's ear	Liliaceae	Lily	p	
40	CABU	<i>Calypso bulbosa</i>	fairy slipper	Orchidaceae	Orchid	p	
41	CABU2	<i>Capsella bursa-pastoris</i>	shepherd's purse	Cruciferae	Mustard	a	a
42	CAPE	<i>Cardamine pensylvanica</i>	Pennsylvania bittercress	Cruciferae	Mustard	a	
43	CAAQ	<i>Carex aquatilis</i>	water sedge	Cyperaceae	Sedge	g	
44	CAAU	<i>Carex aurea</i>	golden sedge	Cyperaceae	Sedge	g	
45	CACO11	<i>Carex concinnoidea</i>	northwest sedge	Cyperaceae	Sedge	g	
46	CADE9	<i>Carex deweyana</i>	Dewey's sedge	Cyperaceae	Sedge	g	
47	CAGE2	<i>Carex geyeri</i>	elk sedge	Cyperaceae	Sedge	g	
48	CAIN17	<i>Carex interrupta</i>	green-fruited sedge	Cyperaceae	Sedge	g	
49	CALA30	<i>Carex lanuginosa</i>	woolly sedge	Cyperaceae	Sedge	g	
50	CALE5	<i>Carex lenticularis</i>	lakeside sedge	Cyperaceae	Sedge	g	
51	CAMI7	<i>Carex microptera</i>	small-winged sedge	Cyperaceae	Sedge	g	
52	CAMU*	<i>Carex muricata</i>	muricate sedge	Cyperaceae	Sedge	g	
53	CAOB3	<i>Carex obnupta</i>	slough sedge	Cyperaceae	Sedge	g	
54	CAOE	<i>Carex oederi</i>	green sedge	Cyperaceae	Sedge	g	
55	CAPA14	<i>Carex pachystachya</i>	thick-headed sedge	Cyperaceae	Sedge	g	
56	CARE4	<i>Carex retrorsa</i>	retorse sedge	Cyperaceae	Sedge	g	
57	CAST5	<i>Carex stipata</i>	sawbeak sedge	Cyperaceae	Sedge	g	
58	CAHI9	<i>Castilleja hispida</i>	harsh paintbrush	Scrophulariaceae	Figwort	p	

#	Code	Scientific Name	Common Name	Family- Scientific	Family- Common	Type	Alien?
59	CAMI12	Castilleja miniata	scarlet paintbrush	Scrophulariaceae	Figwort	p	
60	CESA	Ceanothus sanguineus	redstem ceanothus	Rhamnaceae	Buckthorn	s	
61	CEVE	Ceanothus velutinus	snowbrush	Rhamnaceae	Buckthorn	s	
62	CEDI3	Centaurea diffusa	diffuse knapweed	Compositae	Composite	b	a
63	CHAL7	Chenopodium album	lambsquarters	Chenopodiaceae	Goosefoot	a	a
64	CHME	Chimaphila menziesii	little pipsisswa	Ericaceae	Heather	p	
65	CHUM	Chimaphila umbellata	pipsissewa	Ericaceae	Heather	p	
66	CHLE80	Chrysanthemum leucanthemum	oxeye daisy	Compositae	Composite	p	a
67	CIAR4	Cirsium arvense	Canada thistle	Compositae	Composite	p	a
68	CIED	Cirsium edule	indian thistle	Compositae	Composite	p	
69	CIVU	Cirsium vulgare	bull thistle	Compositae	Composite	b	a
70	CLLI2	Clematis ligusticifolia	western white clematis	Ranunculaceae	Buttercup	s	
71	CLUN	Clintonia uniflora	beadlily	Liliaceae	Lily	p	
72	COPA3	Collinsia parviflora	blue-eyed Mary	Scrophulariaceae	Figwort	a	
73	COGR4	Collomia grandiflora	large-flowered collomia	Polemoniaceae	Phlox	p	
74	COLI2	Collomia linearis	narrow-leaf collomia	Polemoniaceae	Phlox	a	
75	COVOL	Convolvulus sp	morning-glory	Convolvulaceae	Morning-glory	a	
76	COMA4	Corallorrhiza maculata	spotted coralroot	Orchidaceae	Orchid	p	
77	COST4	Cornus stolonifera	redosier dogwood	Cornaceae	Dogwood	s	
78	CRDO2	Crataegus douglasii	Douglas hawthorn	Rosaceae	Rose	s	
79	CRTO4	Cryptantha torreyana	Torrey's cryptantha	Boraginaceae	Borage	a	
80	CYFR2	Cystopteris fragilis	fragile fern	Polypodiaceae	Common Fern	f	
81	DAGL	Dactylis glomerata	orchardgrass	Gramineae	Grass	g	a
82	DIFO	Dicentra formosa	Pacific bleedingheart	Fumariaceae	Fumitory	p	
83	DIHO3	Disporum hookeri	Hooker's fairybells	Liliaceae	Lily	p	
84	DISM2	Disporum smithii	Smith's fairybells	Liliaceae	Lily	p	
85	DEJE	Dodecatheon jefferyi	tall mountain shootstar	Primulaceae	Primrose	p	
86	ELPA3	Eleocharis palustris	common spike-rush	Cyperaceae	Sedge	g	
87	ELGL	Elymus glaucus	blue wild rye	Gramineae	Grass	g	
88	EPAN2	Epilobium angustifolium	fireweed	Onagraceae	Evening-primrose	p	
89	EPMI	Epilobium minutum	small-flowered willow-herb	Onagraceae	Evening-primrose	a	
90	EPWA	Epilobium watsonii	Watson's willowherb	Onagraceae	Evening-primrose	p	
91	EQAR	Equisetum arvense	field horsetail	Equisetaceae	Horsetail	p	
92	EQHY	Equisetum hyemale	common scouring-rush	Equisetaceae	Horsetail	p	
93	ERGR	Erythronium grandiflorum	yellow avalanche lily	Liliaceae	Lily	p	
94	FEMI2	Festuca microstachys	small fescue	Gramineae	Grass	g	a
95	FEOC	Festuca occidentalis	western fescue	Gramineae	Grass	g	
96	FEOV	Festuca ovina	sheep fescue	Gramineae	Grass	g	
97	FRVIP	Fragaria virginiana	virginia strawberry	Rosaceae	Rose	p	
98	GATR3	Galium triflorum	fragrant bedstraw	Rubiaceae	Madder	p	
99	GADI2	Gayophytum diffusum	spreading groundsmoke	Onagraceae	Evening-primrose	a	
100	GOOB2	Goodyera oblongifolia	rattlesnake plantain	Orchidaceae	Orchid	p	
101	HADI7	Habenaria dilatata	white bog-orchid	Orchidaceae	Orchid	p	
102	HAUN	Habenaria unalascensis	Alaska rein-orchid	Orchidaceae	Orchid	p	
103	HECO6	Hemitomes congestum	gnome-plant	Ericaceae	Heather	p	
104	HERA3	Heterocodon rariflorum	heterocodon	Campanulaceae	Harebell	p	
105	HIAL2	Hieracium albiflorum	white-flowered hawkweed	Compositae	Composite	p	
106	HISC2	Hieracium scouleri	woolly-weed	Compositae	Composite	p	
107	HIVU2	Hippuris vulgaris	mare's-tail	Hippuridaceae	Mare's-tail	p	
108	HODI	Holodiscus discolor	oceanspray	Rosaceae	Rose	s	
109	HYAN2	Hypericum anagalloides	bog St. Johnswort	Hypericaceae	St-Johns-wort	p	
110	HYPE	Hypericum perforatum	St. Johnswort	Hypericaceae	St-Johns-wort	p	a
111	HYMO3	Hypopitys monotropa	pinesap	Ericaceae	Heather	p	
112	IRPS	Iris pseudacorus	yellow iris	Iridaceae	Iris	p	a
113	JUAR4	Juncus articulatus	jointed rush	Juncaceae	Rush	g	
114	JUBA	Juncus balticus	Baltic rush	Juncaceae	Rush	g	
115	JUEN	Juncus ensifolius	dagger-leaved rush	Juncaceae	Rush	g	
116	JUFI	Juncus filiformis	thread rush	Juncaceae	Rush	g	

#	Code	Scientific Name	Common Name	Family- Scientific	Family- Common	Type	Alien?
117	JUOR	<i>Juncus orthophyllus</i>	straight-leaved rush	Juncaceae	Rush	g	
118	JURE	<i>Juncus regelii</i>	Regel's rush	Juncaceae	Rush	g	
119	KEGA	<i>Kelloggia galiooides</i>	kelloggia	Rubiaceae	Madder	p	
120	LAMU	<i>Lactuca muralis</i>	wall lettuce	Compositae	Composite	a	a
121	LAOC	<i>Larix occidentalis</i>	Western larch	Pinaceae	Pine	c	
122	LAPO3	<i>Lathyrus polyphyllus</i>	leafy peavine	Leguminosae	Pea	p	
123	LICA	<i>Ligusticum canbyi</i>	licoriceroot	Umbelliferaceae	Parsley	p	
124	LICO	<i>Lilium columbianum</i>	tiger lily	Liliaceae	Lily	p	
125	LIDA	<i>Linaria dalmatica</i>	dalmation toadflax	Scrophulariaceae	Figwort	p	
126	LIBO3	<i>Linnaea borealis</i>	twinflower	Scrophulariaceae	Figwort	p	
127	LICA	<i>Listera caurina</i>	northwest trayblade	Orchidaceae	Orchid	p	
128	LIGL2	<i>Lithophragma glabrum</i>	smooth fringecup	Saxifragaceae	Saxifrage	a	
129	LOTR2	<i>Lomatium triternatum</i>	narrow-leaved desert parsley	Umbelliferaceae	Parsley	p	
130	LOCI3	<i>Lonicera ciliosa</i>	orange honeysuckle	Caprifoliaceae	Honeysuckle	s	
131	LON5	<i>Lonicera involucrata</i>	black twinberry	Caprifoliaceae	Honeysuckle	p	
132	LUPO2	<i>Lupinus polyphyllus</i>	many-leaved lupine	Leguminosae	Pea	p	
133	LUSE4	<i>Lupinus sericeus</i>	silky lupine	Leguminosae	Pea	p	
134	LUCA*	<i>Luzula campestris</i>	field woodrush	Juncaceae	Rush	g	
135	LYAL	<i>Lychnis alba</i>	white campion	Caryophyllaceae	Pink	p	a
136	LYAM	<i>Lycopus americanus</i>	bugleweed	Labiatae	Mint	p	
137	LYAS	<i>Lycopus asper</i>	rough bungleweed	Labiatae	Mint	p	
138	LYUN/	<i>Lycopus uniflorus</i>	northern bungleweed	Labiatae	Mint	p	
139	MAMI	<i>Madia minima</i>	small-head tarweed	Compositae	Composite	a	
140	MACH2	<i>Matricaria chamomilla</i>	wild chamomile	Compositae	Composite	a	a
141	MAMA11	<i>Matricaria matricarioides</i>	pineapple weed	Compositae	Composite	a	
142	MESU	<i>Melica subulata</i>	Alaska oniongrass	Gramineae	Grass	g	
143	MEAL2	<i>Melilotus alba</i>	white clover	Leguminosae	Pea	b	a
144	MEAR4	<i>Mentha arvensis</i>	Canadian mint	Labiatae	Mint	p	
145	MEPA	<i>Mertensia paniculata</i>	tall bluebells	Boraginaceae	Borage	p	
146	MINU	<i>Microseris nutans</i>	nodding microseris	Compositae	Composite	p	
147	MIGR	<i>Microsteris gracilis</i>	pink-eyed Mary	Polemoniaceae	Phlox	a	
148	MIGU	<i>Mimulus guttatus</i>	yellow monkeyflower	Scrophulariaceae	Figwort	p	
149	MIMO3	<i>Mimulus moschatus</i>	musk monkeyflower	Scrophulariaceae	Figwort	p	
150	MOPA5	<i>Montia parvifolia</i>	littleleaf montia	Caryophyllaceae	Pink	a	
151	MOPE	<i>Montia perfoliata</i>	miner's lettuce	Caryophyllaceae	Pink	a	
152	MYDI	<i>Myosotis discolor</i>	yellow and blue forgetmenot	Boraginaceae	Borage	a	
153	MYSP2	<i>Myriophyllum spicatum</i>	water-milfoil	Haloragaceae	Water-milfoil	p	
154	NEBR	<i>Nemophila breviflora</i>	Great Basin nemophila	Hydrophyllaceae	Waterleaf	a	
155	OSCH	<i>Osmorrhiza chilensis</i>	mountain sweet-cicely	Umbelliferaceae	Parsley	p	
156	PAMY	<i>Pachistima myrsinoides</i>	pachistima	Celastraceae	Stafftree	s	
157	PAOC	<i>Panicum occidentale</i>	western witchgrass	Gramineae	Grass	g	
158	PEBR	<i>Pedicularis bracteosa</i>	bracted lousewort	Scrophulariaceae	Figwort	p	
159	PERA	<i>Pedicularis racemosa</i>	sickletop lousewort	Scrophulariaceae	Figwort	p	
160	PEFR3	<i>Penstemon fruticosus</i>	shrubby penstemon	Scrophulariaceae	Figwort	s	
161	PESE5	<i>Penstemon serrulatus</i>	Cascade penstemon	Scrophulariaceae	Figwort	s	
162	PHHA	<i>Phacelia hastata</i>	silverleaf phacelia	Hydrophyllaceae	Waterleaf	p	
163	PHAR3	<i>Phalaris arundinacea</i>	reed canarygrass	Gramineae	Grass	p	a?
164	PHLE4	<i>Philadelphus lewisii</i>	Lewis' mockorange	Hydrangeaceae	Hydrangea	s	
165	PICO	<i>Pinus contorta</i>	lodgepole pine	Pinaceae	Pine	t	
166	PIMO	<i>Pinus monilifera</i>	western white pine	Pinaceae	Pine	t	
167	PIPO	<i>Pinus ponderosa</i>	ponderosa pine	Pinaceae	Pine	t	
168	PLLA	<i>Plantago lanceolata</i>	narrowleaf plantain	Plantaginaceae	Plantain	p	a
169	PLMA2	<i>Plantago major</i>	common plantain	Plantaginaceae	Plantain	p	a
170	POAN	<i>Poa annua</i>	annual bluegrass	Gramineae	Grass	g	a
171	POBU	<i>Poa bulbosa</i>	bulbous bluegrass	Gramineae	Grass	g	a
172	POAV	<i>Polygonum aviculare</i>	prostrate knotweed	Polygonaceae	Buckwheat	a	
173	POMU	<i>Polystichum munitum</i>	sword-fern	Polypodiaceae	Common Fern	f	
174	POTR15	<i>Populus trichocarpa</i>	black cottonwood	Salicaceae	Willow	t	

#	Code	Scientific Name	Common Name	Family- Scientific	Family- Common	Type	Alien?
175	PORI2	<i>Potamogeton richarsonii</i>	Richardson's pondweed	Potamogetonaceae	Pondweed	p	
176	POGL9	<i>Potentilla glandulosa</i>	sticky cinquefoil	Rosaceae	Rose	p	
177	PRVU	<i>Prunella vulgaris</i>	self-heal	Labiatae	Mint	p	
178	PSME	<i>Pseudotsuga menziesii</i>	Douglas fir	Pinaceae	Pine	t	
179	PTAQ	<i>Pteridium aquilinum</i>	bracken fern	Polypodiaceae	Common Fern	f	
180	PTAN2	<i>Pterospora andromedea</i>	pinchedrops	Ericaceae	Heather	p	
181	PYPI2	<i>Pyrola picta</i>	whitevein pyrola	Ericaceae	Heather	p	
182	PYSE	<i>Pyrola secunda</i>	sidebells pyrola	Ericaceae	Heather	p	
183	PYFU	<i>Pyrus fusca</i>	pacific crabapple	Rosaceae	Rose	s	
184	RAAQ	<i>Ranunculus aquatilis</i>	white water buttercup	Ranunculaceae	Buttercup	p	
185	RAFL2	<i>Ranunculus flammula</i>	spear-leaved buttercup	Ranunculaceae	Buttercup	p	
186	RAOC	<i>Ranunculus occidentalis</i>	western buttercup	Ranunculaceae	Buttercup	p	
187	RARER	<i>Ranunculus repens v. repens</i>	creeping buttercup	Ranunculaceae	Buttercup	p	a
188	RAUN	<i>Ranunculus uncinatus</i>	woodland buttercup	Ranunculaceae	Buttercup	p	
189	RILA	<i>Ribes lacustre</i>	swamp current	Grossulariaceae	Current	s	
190	ROAC*	<i>Rosa acicularis</i>	prickly rose	Rosaceae	Rose	s	
191	ROGY	<i>Rosa gymnocarpa</i>	baldhip rose	Rosaceae	Rose	s	
192	RONUH	<i>Rosa nutkana v hispida</i>	Nootka rose	Rosaceae	Rose	s	
193	ROWO	<i>Rosa woodsii</i>	Woods' rose	Rosaceae	Rose	s	
194	RUDI2	<i>Rubus discolor</i>	Himalayan blackberry	Rosaceae	Rose	s	a
195	RULE	<i>Rubus leucodermis</i>	black raspberry	Rosaceae	Rose	s	
196	RUPA	<i>Rubus parviflorus</i>	thimbleberry	Rosaceae	Rose	s	
197	RUSP	<i>Rubus spectabilis</i>	salmonberry	Rosaceae	Rose	s	
198	RUUR	<i>Rubus ursinus</i>	trailing blackberry	Rosaceae	Rose	s	
199	RUAC3	<i>Rumex acetosella</i>	sheep sorrel	Polygonaceae	Buckwheat	a	a
200	SACO	<i>Salix commutata</i>	undergreen willow	Salicaceae	Willow	s	
201	SALA5	<i>Salix lasiandra</i>	pacific willow	Salicaceae	Willow	s	
202	SAME2	<i>Salix melanopsis</i>	dusky willow	Salicaceae	Willow	s	
203	SARI	<i>Salix rigida</i>	rigid (Mackenzie) willow	Salicaceae	Willow	s	
204	SASC	<i>Salix scouleriana</i>	Scouler's willow	Salicaceae	Willow	t	
205	SACE3	<i>Sambucus cerulea</i>	blue elderberry	Caprifoliaceae	Honeysuckle	s	
206	SARA2	<i>Sambucus racemosa</i>	red elderberry	Caprifoliaceae	Honeysuckle	s	
207	SAGR5	<i>Sanicula graveolens</i>	Sierra sanicle	Umbelliferaceae	Parsley	p	
208	SCMI2	<i>Scirpus microcarpus</i>	panicked bulrush	Cyperaceae	Sedge	p	
209	SIMEM	<i>Silene menziesii v. menziesii</i>	Menzie's silene	Caryophyllaceae	Pink	p	
210	SIIDO	<i>Sisyrinchium idahoense</i>	Idaho sisyrinchium	Iridaceae	Iris	p	
211	SIHY	<i>Sitanion hystrix</i>	squirreltail	Gramineae	Grass	p	
212	SMRA	<i>Smilacina racemosa</i>	western solomon's seal	Liliaceae	Lily	p	
213	SMST	<i>Smilacina stellata</i>	star-flowered solomon's seal	Liliaceae	Lily	p	
214	SOCA6	<i>Solidago canadensis</i>	goldenrod	Compositae	Composite	p	
215	SOSC	<i>Sorbus scopulina</i>	Cascade mountain-ash	Rosaceae	Rose	s	
216	SPAN2	<i>Sparganium angustifolium</i>	floating bur-reed	Sparganiaceae	Burreed	p	
217	SPBEL	<i>Spiraea betulifolia lucida</i>	spinyleaf spiraea	Rosaceae	Rose	s	
218	SPDO	<i>Spiraea douglasii</i>	hardhack	Rosaceae	Rose	s	
219	SPRO	<i>Spiranthes romanzoffiana</i>	white ladies-tresses	Orchidaceae	Orchid	p	
220	STCO14	<i>Stachys cooleyae</i>	cooley's hedge-nettle	Labiatae	Mint	p	
221	STCA	<i>Stellaria calycantha</i>	northern starwort	Caryophyllaceae	Pink	a	
222	STOC2	<i>Stipa occidentalis</i>	western needlegrass	Gramineae	Grass	g	
223	SUAQ	<i>Subularia aquatica</i>	awlwort	Brassicaceae	Mustard	p	
224	SYAL	<i>Symporicarpus albus</i>	common snowberry	Caprifoliaceae	Honeysuckle	s	
225	TAVU	<i>Tanacetum vulgare</i>	common tansy	Compositae	Composite	p	a
226	TAOF	<i>Taraxacum officinale</i>	common dandelion	Compositae	Composite	b	a
227	THOC	<i>Thalictrum occidentale</i>	western meadowrue	Ranunculaceae	Buttercup	p	
228	THPL	<i>Thuja plicata</i>	western redcedar	Cupressaceae	Cyperess	t	
229	TOGL2	<i>Tofieldia glutinosa</i>	sticky tofieldia	Liliaceae	Lily	p	
230	TRLA6	<i>Trifolium latifolia</i>	western starflower	Primulaceae	Primrose	p	
231	TRPR2	<i>Trifolium pratense</i>	red clover	Leguminosae	Pea	p	a
232	TRRE3	<i>Trifolium repens</i>	white clover	Leguminosae	Pea	p	a

#	Code	Scientific Name	Common Name	Family- Scientific	Family- Common	Type	Alien?
233	TROV	<i>Trillium ovatum</i>	white trillium	Liliaceae	Lily	p	
234	TYLA	<i>Typha latifolia</i>	common cattail	Typhaceae	Cat-tail	p	
235	URDI	<i>Urtica dioica</i>	stinging nettle	Urticaceae	Nettle	p	
236	VAME	<i>Vaccinium membranaceum</i>	thinleaf huckleberry	Ericaceae	Heather	s	
237	VAMY2	<i>Vaccinium myrtillus</i>	low blueberry	Ericaceae	Heather	s	
238	VAOX	<i>Vaccinium oxycoccus</i>	wild cranberry	Ericaceae	Heather	s	
239	VASI	<i>Valeriana sitchensis</i>	Sitka valerian	Valerianaceae	Valerian	p	
240	VEVI	<i>Veratrum viride</i>	American false hellebore	Liliaceae	Lily	p	
241	VEAM2	<i>Veronica americana</i>	American brooklime	Scrophulariaceae	Figwort	p	
242	VEAR	<i>Veronica arvensis</i>	field speedwell	Scrophulariaceae	Figwort	a	
243	VESE	<i>Veronica serpyllifolia</i>	thymeleaf speedwell	Scrophulariaceae	Figwort	p	
244	VIED	<i>Viburnum edule</i>	highbush cranberry	Caprifoliaceae	Honeysuckle	s	
245	VIGL	<i>Viola glabella</i>	pioneer violet	Violaceae	Violet	p	
246	VIPA4	<i>Viola palustris</i>	marsh violet	Violaceae	Violet	p	

Key to species list:

Code: USDA Plant Code

Type: a=annual, b=biennial, f=fern, g=graminoid (grass or related), p=perennial, s=shrub, t=tree

Alien: a=alien, non-native species

