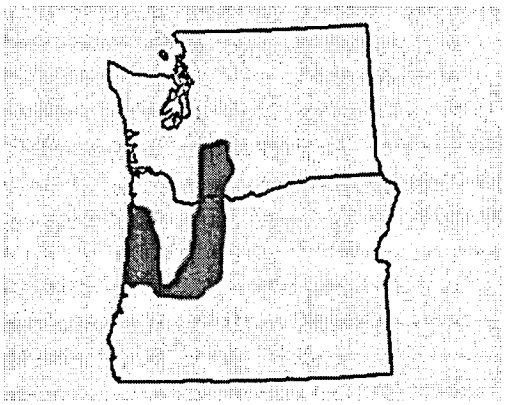
Wetland Plant Associations of the Western Hemlock Zone In the Central Coastal and Westslope Cascade Mountains



Oregon
NATURAL
HERITAGE
PROGRAM

Compiled by:
Michael Murray
Ecologist, ORNHP
August 2000

Table 4. Preliminary list of associations with important natural features.

Association	[1]Administered by	Importance
Carex aperta	Detroit RD Sweet Home RD	ONHP-listed association
Carex lenticularis	Middle Fork RD Willamette NF	ONHP-listed association
Eleocharis quinqueflora	Willamette NF	ONHP-listed association
Thuja plicata / (Lysichiton americanum) [old-growth]	Willamette NF	ONHP-listed association
Thuja plicata / Athyrium filix-femina [old-growth]	Willamette NF	ONHP-listed association
Fauria crista-galli	Salem BLM	Only known occurrence of species and association in Oregon
[2]*Ledum glandulosum – Gaultheria shallon – Pteridium aquilinum*	Eugene BLM	Only known occurrence of association in Oregon. Found at boundary of Willamette Valley and Coast Range ecoregions.
Trichophorum cespitosum – (Tofieldia glutinosa)	Willamette NF	Habitat for *Myrica gale*
Myrica gale	Willamette NF	Habitat for *Myrica gale*
Hypericum anagalloides	Hebo RD Middle Fork RD Salem BLM Willamette NF	Habitat for *Rhynchospora alba*
Xerophyllum tenax	Willamette NF	Habitat for *Tauschia stricklandii*

Mitella pentandra	Trace	46.7
Viola palustris	2	40.0
Trautvetteria caroliniensis	2	40.0
Ligusticum grayi	1	40.0
Vaccinium ovalifolium	2	33.3
Valeriana sitchensis	Trace	33.3
Equisetum arvense	Trace	33.3
Glyceria elata	2	26.7
Athyrium filix-femina	Trace	26.7
Rubus pedatus	Trace	26.7
Carex luzulina	Trace	26.7
Pedicularis groenlandica	Trace	26.7
Salix planifolia ssp. planifolia	7	20.0

Carex cusickii

22 7 23	Avg Cover (%)	Constancy (%)
Carex cusickii	77	100.0
Spiraea douglasii	21	57.1
Sphagnum	19	57.1
Lychnis coronaria	4	57.1
Elymus caninus	Trace	42.9
Menyanthes trifoliata	Trace	42.9
Hypericum anagalloides	Trace	28.6
Lemna minor	Trace	28.6

Carex amplifolia

86 2 24	Avg Cover (%)	Constancy (%)
Carex amplifolia	30	100.0
Glyceria elata	13	100.0
Scirpus microcarpus	10	100.0
Carex obnupta	15	50.0
Oenanthe sarmentosa	15	50.0
Lotus	13	50.0
Brachythecium frigidum	8	50.0
Lysichiton americanum	8	50.0
Mentha X piperita	8	50.0
Plagiomnium medium	8	50.0
Mimulus guttatus	3	50.0
Angelica	2	50.0
Sorbus dumosa	2	50.0

Carex aperta

61 2 3	Avg Cover (%)	Constancy (%)
Carex aperta	93	100.0
Carex exsiccata	4	100.0
Spiraea douglasii	3	50.0

Physical Environment Characteristics

Microposition (Microp) designates topography within less than 100 feet of plot: 1=Ridgetop/saddle; 2=Upper 1/3 of slope; 3=Middle 1/3; 4=Lower 1/3; 5=Bench/Narrow flat; 6=Toe of slope; 7=Canyon bottom, and; 8=Basin. Microvertical (Microv) and microhorizontal (Microh) designate ground surface: 1=Convex; 2=Flat; 3=Concave, and; 4=Undulating.

	Elev (feet)	Slope (%)	Aspect (degrees)	Microp	Microv	Microh
Bryophyte-dominated Associations						
Sphagnum						
Average	3384	1	159	8	2	2
Minimum	2300	0	0	2	1	1
Maximum	4600	6	300	9	4	4
Found in small basins and lakesides. Fens (water is flowing from outside of community) and bogs (precipitation is predominant) both support this association. Often, it is within a mosaic of other communities. Deep organic peat soils are characteristic. The water table is usually near the surface. These sites are easily disturbed by prodding feet which loosen the sphagnum layer and bring inflow to depressions.						
Sphagnum - Carex aquatilis var. dives						
Average	3880	1	155	8	2	2
Minimum	3160	0	98	8	2	2
Maximum	4520	5	212	8	4	4
Sphagnum angustifolium - Menyantes trifoliata						
Average	3285	0	95	5	2	2
Minimum	3285	0	0	5	2	2
Maximum	3285	0	190	5	2	2
Vaccinium uliginosum / Sphagnum						
Average	3350	1	252	8	2	2
Minimum	2950	0	252	8	2	2
Maximum	4000	2	252	8	2	2
Herb-dominated Associations						
Boykinia major						
Average	1648	0	243	#N/A	#N/A	#N/A
Minimum	10	0	180	5	2	2
Maximum	3285	0	305	10	3	3

Found in a wet depressed meadow and on the edge of a peatland. Soil is organic to 22cm or greater, then sand and organic mixture becoming more sandy. These soils appear to be permanently satured.

Calamagrostis canadensis

Average	3200	1	215	8	2	2
Minimum	3000	0	215	8	2	2
Maximum	3600	2	215	8	2	3

Caltha leptosepala

Average	4367	4	142	8	1	4
Minimum	4000	0	30	6	1	1
Maximum	4900	10	297	9	4	4

Found in a wet meadow. The upper layer is primarily organic with some gravel and charcoal. Water table is 12cm deep where sand predominates. A clay layer is apparent below 25cm. This description is from a single site – Moon Lake.

Carex amplifolia

Average	2225	4	318	#N/A	2	2
Minimum	1000	0	280	3	2	2
Maximum	3450	7	355	9	2	2

Found in both a river floodplain and peatland. Saturated silt or muck changing to predominantly sand or clay at about 40cm depth. Appears that water table retreats to 40cm depth after spring flooding.

Carex aperta

1 plot only	3150	3	60	6	3	2
Minimum	1970	0	140	7	1	1
Maximum	2200	0	315	8	2	2

Situated in wet meadow and upper stream banks. Soils are variable with clay and sand.

Carex aquatilis var. dives

Average	3896	1	183	8	2	2
Minimum	2720	0	0	3	1	1
Maximum	4920	3	320	9	2	2

Deep mucky soils which are homogenous to about 80cm depth. There's a network of fine roots and rhizomes afforded by the dense cover of Carex aquatilis var. dives. Logs can sometimes be found in much to depth of 80cm depth. Water is commonly at or above soil surface, remaining saturated into late summer.

Carex aquatilis var. dives - (Eleocharis quinqueflora)

Average	4217	2	157	8	2	3
Minimum	3690	0	157	1	2	2
Maximum	4480	3	157	8	2	3

Wet depressed meadows. Typified by deep saturated organic mantle or peat. Dense root matter is characteristic. Surface water may appear in spring and early summer.

Carex cusickii

Average	2057	0	250	8	2	2
Minimum	1970	0	140	7	1	1
Maximum	2200	0	315	8	2	2

Sites are peatlands and ponds. The association is supported by saturated mucks as well as old floating and sunken logs and floating mats of litter and root mass. The logs may serve as sponges by soaking up water and making it available to plants.