

Lichen Species Observed in the Cedar River Municipal Watershed, King County, Washington, U.S.A.

Compiled by Katherine Glew

October 2007

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Alectoria</i>	<i>sarmentosa</i>	(Ach.) Ach.	Late seral conifer forests		T. Stout	Yes
<i>Alectoria</i>	<i>sarmentosa</i>	(Ach.) Ach.	Tends to be in older forests, but may occur in younger forests. Litterfall	Epiphytic on trees, mainly conifers, often on the main trunk	K. Glew	Yes
<i>Alectoria</i>	<i>vancouverensis</i>	(Gyelnik) Gyelnik ex Brodo & D. Hawksw.	Reflects a more coastal influence, but can be in western Cascades. Litterfall	Bark and wood	K. Glew	Yes
<i>Bryoria</i>		Brodo et D. Hawksw.	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On dead twigs and branches of conifer	D. Wagner	Yes
<i>Bryoria</i>	<i>capillaris</i>	(Ach.) Brodo & D. Hawksw.	Late seral conifer forests		T. Stout	Yes
<i>Bryoria</i>	<i>capillaris</i>	(Ach.) Brodo & D. Hawksw.	Most common in <i>Abies</i> , <i>Picea</i> , <i>Pseudotsuga</i> and <i>Thuja</i> forests. Litterfall	On bark and wood of conifers. Can be on hardwoods	K. Glew	Yes
<i>Bryoria</i>	<i>fremontii</i>		Typical in dry <i>Pinus</i> and <i>Pseudotsuga</i> forests. Treetops of mesic lowland forests. Litterfall	On bark and wood of conifers. Can be on hardwoods	K. Glew	Yes
<i>Byoria</i>	<i>friabilis</i>	Brodo & D. Hawksw.	Most often found in moist elevations at lower elevations	On bark of conifers and hardwoods.	K. Glew	Yes
<i>Bryoria</i>	<i>fuscescens</i>	(Gyeln.) Brodo & D. Hawksw.	Late seral conifer forests		T. Stout	Yes
<i>Bryoria</i>	<i>fuscescens</i>	(Gyeln.) Brodo & D. Hawksw.	Typical of mature conifer forests. Litterfall	Conifer bark or wood	K. Glew	Yes
<i>Bryoria</i>	<i>glabra</i>	(Motyka) Brodo & D. Hawksw.	Mountain conifer forests – low to mid elevations. Litterfall	Conifer bark or wood	K. Glew	Yes
<i>Bryoria</i>	<i>lanestris</i>	(Ach.) Brodo & D. Hawksw.	Conifer forests	Conifer bark and wood	K. Glew	Yes
<i>Bryoria</i>	<i>pseudofuscescens</i>	(Gyeln.) Brodo & D. Hawksw.	Late seral conifer forests		T. Stout	Yes
<i>Bryoria</i>	<i>trichodes</i>	(Michaux) Brodo & D. Hawksw.	Wet forests with a cool coastal influence. Litterfall	Bark, wood or conifers	K. Glew	Yes
<i>Bryoria</i> sp.	sp.	Brodo & D. Hawksw.	Litterfall		K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 1 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Candelaria</i>	<i>concolor</i>	(Dickson) Stein	Crustose Valleys and foothills, occasionally in mountains. Intermediate pollution tolerance	On nutrient-rich rock. More typically on bark, mainly hardwoods. Nitrophilous	K. Glew	Yes
<i>Candellariella</i>	<i>vitellina</i>	Mosbach	Crustose - Cosmopolitan	On rock	K. Glew	Yes
<i>Cavernularia</i>	<i>hultenii</i>	Degelius	Moist conifer forests at mid to low elevation	On bark and wood of conifers. Can be on hardwoods	K. Glew	Yes
<i>Cetraria</i>	<i>sp.</i>	Ach. s.s.	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On trunk of conifer, at base; on rotting wood, mostly of stumps	D. Wagner	Yes
<i>Cetrelia</i>	<i>cetrariodes</i>	(Del. ex Duby) W.Culb. & C.Culb.	Riparian areas and valleys in lower forests. Especially on <i>A. rubra</i> in swampy areas	Bark – mainly <i>Alnus rubra</i> and other hardwoods Found in litterfall	K. Glew	Yes
<i>Chaenotheca</i>	<i>ferruginea</i>	(Turner ex Sm.) Mig.	Crustose		K. Glew	Yes
<i>Chrysothrix</i>	<i>granulosa</i>	G. Thor	Crustose		K. Glew	Yes
<i>Cladonia</i>	<i>albonigra</i>	Brodo & Ahti	Open road cuts in CRMW. Moist conifer forests, low to mid elevations	Humus over rock or soil	K. Glew	Yes
<i>Cladonia</i>	<i>arbuscula</i>	(Wallr.) Rabenh.	Cool rocky sites at low elevation	Soil and soil over rock	K. Glew	Yes
<i>Cladonia</i>	<i>asahinae</i>	J.W. Thomson	Open road cut	Rotten wood or soil	K. Glew	Yes
<i>Cladonia</i>	<i>bacillaris</i>	(Ach.) Nyl., Not. Sällsk.	Young to middle age forests	Humus, tree bases and rotten logs	K. Glew	Yes
<i>Cladonia</i>	<i>bellidiflora</i>	(Ach.) Schaer.	Talus and rock		T. Stout	Yes
<i>Cladonia</i>	<i>bellidiflora</i>	(Ach.) Schaer.	Cool, moist talus slopes, occasionally in forests	Mossy rocks, bark, wood	K. Glew	Yes
<i>Cladonia</i>	<i>borealis</i>	S. Stenroos	Widespread at all elevations	Moss and soil over rock, old stumps	K. Glew	Yes
<i>Cladonia</i>	<i>cariosa</i>	(Ach.) Spreng.	Exposed road cuts in CRMW, disturbed sites	Soil	K. Glew	Yes
<i>Cladonia</i>	<i>carneola</i>	(Fr.) Fr.	Adjacent to streams		T. Stout	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 2 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Cladonia</i>	<i>carneola</i>	(Fr.) Fr.	Low to mid range forests previously logged	Humus-rich soil, stumpsrotten wood	K. Glew	Yes
<i>Cladonia</i>	<i>cenotea</i>	(Fr.) Fr.	Cool moist valleys from lowlands to subalpine. Shaded and exposed sites	Rotten logs, tree bases	K. Glew	Yes
<i>Cladonia</i>	<i>chlorophaea (aff.)</i>	(Flörke ex Sommerf.) Spreng.	Talus and rock		T. Stout	
<i>Cladonia</i>	<i>chlorophaea</i>	(Flörke ex Sommerfelt) Sprengel	Forests and open areas. Shaded or exposed, roadcuts	Soil, humus, bark, rotten wood, moss and detritus	K. Glew	Yes
<i>Cladonia</i>	<i>coniocraea</i>	(Flörke) Spreng.			T. Stout	Yes
<i>Cladonia</i>	<i>coniocraea</i>	(Flörke) Spreng.	Occurs in a wide variety of forests – shaded and exposed	Rotten wood, tree bases, chest high	K. Glew	Yes
<i>Cladonia</i>	<i>cornuta</i>	(L.) Hoffm.			T. Stout	Yes
<i>Cladonia</i>	<i>cornuta</i>	(L.) Hoffm.	Cool, moist montane habitats	Peaty soil and on fallen logs	K. Glew	Yes
<i>Cladonia</i>	<i>crispata</i>	(Ach.) Flot.		Soil, soil over rock rotten wood	K. Glew	Yes
<i>Cladonia</i>	<i>cyanipes</i> ?	(Sommerf.) Nyl.			K. Glew	Yes
<i>Cladonia</i>	<i>digitata</i>	(L.) Hoffm.			K. Glew	Yes
<i>Cladonia</i>	<i>ecmocyna</i>	Leighton	Talus, rock, and wetland		T. Stout	Yes
<i>Cladonia</i>	<i>ecmocyna</i>	Leighton	Exposed to lightly shaded areas, especially talus slopes and rock outcrops	Soil, humus, moss	K. Glew	Yes
<i>Cladonia</i>	<i>fimbriata</i>	(Linnaeus) Fries	Found in a variety of habitats, exposed to shaded, low to mid elevations	Soil, rotten wood, bark, stumps and roadcuts	K. Glew	Yes
<i>Cladonia</i>	<i>furcata</i>	(Hudson) Schrader			T. Stout	Yes
<i>Cladonia</i>	<i>furcata</i>	(Hudson) Schrader	Moist forests, low to mid elevations, partly shaded roadcuts	Soil, moss, humus. Occasionally tree base, rotten wood	K. Glew	Yes
<i>Cladonia</i>	<i>gracilis</i>	(L.) Willd.	Exposed to lightly shaded areas, especially talus slopes and rock outcrops	Soil humus, soil over rock, rotten logs	K. Glew	Yes
<i>Cladonia</i>	<i>macilenta</i>	Hoffm.	Shaded and open sites, clear cuts to old growth, mid to low elevations	Bark, wood, tree bases, stumps, fallen logs	K. Glew	Yes
<i>Cladonia</i>	<i>mitis</i>	Sandst.	Rock outcrops and talus slopes.	Soil, humus, soil over rock	K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 3 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
			Cool, moist areas			
<i>Cladonia</i>	<i>norvegica</i>	Tønsberg & Holien	Humid forests	Rotten wood and tree base	K. Glew	Yes
<i>Cladonia</i>	<i>ochrochlora</i>	Flörke	Occurs in a wide variety of forests – shaded and exposed	Rotten wood, tree bases and chest high	K. Glew	Yes
<i>Cladonia</i>	<i>pyxidata</i>	(L.) Hoffm.	Seim-open to open areas, disurbed to undisturbed, roadcuts	Mineral soil or soil.moss over rock	K. Glew	Yes
<i>Cladonia</i>	<i>rangiferina</i>	(L.) Nyl.	Talus slopes and rock outcrops. Cool moist slopes in narrow valleys	Humus, soil over rock	K. Glew	Yes
<i>Cladonia</i>	<i>rei</i> ?	= C. subulata	Rare – in forests	Soil, sometimes wood	K. Glew	Yes
	<i>scabriuscula</i>	(Delise) Nyl.	Talus and rock		T. Stout	Yes
<i>Cladonia</i>	<i>scabriuscula</i>	(Delise) Nyl.	Mainly coastal	Soil and mossy rock	K. Glew	Yes
<i>Cladonia</i>	<i>squamosa</i>	(Scop.) Hoffm.	Humid forests at low to mid elevation	Soil, soil over rock, tree base, rotten logs	K. Glew	Yes
<i>Cladonia</i>	<i>subsquamosa</i> ?	Kremp.	Humid forests at low to mid elevation	Soil, soil over rock, tree base, rotten logs	K. Glew	Yes
<i>Cladonia</i>	<i>subulata</i> ?	(L.) F. H. Wigg		Soil and rotten wood	K. Glew	Yes
<i>Cladonia</i>	<i>sulphurina</i>	(Michaux) Fr.			T. Stout	Yes
<i>Cladonia</i>	<i>sulphurina</i>	(Michaux) Fr.	Lowland to subalpine forests. Rock oucrops and talus slopes	Rotten wood, bark, humus-rich soil	K. Glew	Yes
<i>Cladonia</i>	<i>transcendens</i>	(Vain.) Vain.	Late seral conifer forests		T. Stout	Yes
<i>Cladonia</i>	<i>transcendens</i>	(Vainio) Vainio	Shaded and open sites, clear cuts to old growth, mid to low elevations	Bark, wood, tree bases, stumps, fallen logs	K. Glew	Yes
<i>Cladonia</i>	<i>umbricola</i>	Tønsberg & Ahti			T. Stout	Yes
<i>Cladonia</i>	<i>umbricola</i>	Tønsberg & Ahti	Low to mid elevation forests – canyons, stream bottoms, valleys	Bark or decaying wood	K. Glew	Yes
<i>Cladonia</i>	<i>verruculosa</i>	(Vain.) Ahti	Disturbed sites – open to partly open sites. Roadcuts, clearcuts, Humid low to mid elevations	Soil and rotten wood	K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 4 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Cladonia</i>	<i>sp.</i>	P. Browne	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On trunk of conifer, at base; on rotting wood, mostly of stumps	D. Wagner	Yes
<i>Cladonia</i>	<i>sp.</i>	P. Browne			K. Glew	Yes
<i>Collema</i>	<i>nicrescens ?</i>	(Hudson) D.C.	Low elevation hardwood forests, often riparian areas	On bark of deciduous trees and shrubs	K. Glew	Yes
<i>Collema</i>	<i>sp.</i>	F.H. Wigg			K. Glew	Yes
<i>Cystocoleus ?</i>		Thwaites	Cliff walls and moist habitats	Less often on bark and needles	K. Glew	Yes
<i>Diploschistes</i>	<i>scruposus</i>	(Schreber) Norman	Crustose – exposed, arid sites	On rock	K. Glew	Yes
<i>Ephebe</i>	<i>lanata ?</i>	(L.) Vainio	Damp or seepy areas	Usually on rock	K. Glew	Yes
<i>Evernia</i>	<i>prunastri</i>	(L.) Ach.	Mid-seral conifer forests, and adjacent to streams		T. Stout	Yes
<i>Evernia</i>	<i>prunastri</i>	(L.) Ach.	Common in lowland habitats, especially hardwood forests.	Wood or bark, especially on hardwoods and shrubs	K. Glew	Yes
<i>Fuscopannaria</i>	<i>cyanolepra</i>	(Tuck.) PM Jørg.	Leprose – roadcuts with strong oceanic influence	Seepy soils	K. Glew	Yes
<i>Fuscopannaria</i>	<i>pacifica</i>	P.M. Jørg.	Squamulose		K. Glew	Yes
<i>Fuscopannaria</i>	<i>sp.</i>		Squamulose – sheltered humid habitats		K. Glew	Yes
<i>Graphis</i>	<i>scripta</i>	(L.) Ach.	Crustose – common in riparian habitats on <i>Alnus rubra</i>	bark	K. Glew	Yes
<i>Halecania ?</i>			Crustose	Bark	K. Glew	Yes
<i>Hymenelia ?</i>		Kremp.	Crustose – humid/moist habitats	Rock	K. Glew	Yes
<i>Hypogymnia</i>	<i>apinnata</i>	Goward & McCune	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On dead twigs and branches of conifer	D. Wagner	Yes
<i>Hypogymnia</i>	<i>apinnata</i>	Goward & McCune	Humid conifer forests, low to mid elevation	Bark and wood, mainly on conifers. Litterfall	K. Glew	Yes
<i>Hypogymnia</i>	<i>bitteri ?</i>				K. Glew	Yes
<i>Hypogymnia</i>	<i>duplicata</i>	(Ach.) Rass.	Cool moist coastal forests, low elevations to coastal mountain tops, inland	Bark and wood of conifers	K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 5 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Hypogymnia</i>	<i>enteromorpha</i>	(Ach.) Nyl.	Mid-seral and Late seral conifer forests		T. Stout	Yes
<i>Hypogymnia</i>	<i>enteromorpha</i>	(Ach.) Nyl.	Humid low to mid elevation forests	Wood and bark, mainly conifers	K. Glew	Yes
<i>Hypogymnia</i>	<i>imshaugii</i>	Krog	early, mid-, and late seral Late seral conifer forests		T. Stout	Yes
<i>Hypogymnia</i>	<i>imshaugii</i>	Krog	Low elevations to subalpine forests, humid	Bark and wood. Litterfall	K. Glew	Yes
<i>Hypogymnia</i>	<i>inactiva</i>	(Krog) Ohlsson	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On dead twigs and branches of conifer.	D. Wagner	Yes
<i>Hypogymnia</i>	<i>inactiva</i>	(Krog) Ohlsson	Humid low to mid elevation forests. More shade toerand than most hypogymnias	Bark and wood – b oth conifers and hardwoods. Litterfall	K. Glew	Yes
<i>Hypogymnia</i>	<i>occidentalis</i>	L. Pike	Humid low elevation to subalpine forests. Common on <i>Thuja</i> and <i>Psuedotsuga</i>	Bark and wood – usually conifers	K. Glew	Yes
<i>Hypogymnia</i>	<i>physodes</i>	(L.) Nyl.	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On dead twigs and branches of conifer	D. Wagner	Yes
<i>Hypogymnia</i>	<i>physodes</i>	(L.) Nyl.	Common in forests from low to mid elevation	Bark and wood	K. Glew	Yes
<i>Hypogymnia</i>	<i>rugosa</i>	(G. Merr.) L. Pike	Mid- and late seral conifer forests		T. Stout	Yes
<i>Hypogymnia</i>	<i>rugosa</i>	(G. Merr.) L. Pike	Humid mid elevation to subalpine forests. Often in mixed <i>Abies</i> and <i>Tsuga</i> stands	Conifer bark	K. Glew	Yes
<i>Hypogymnia</i>	<i>tubulosa</i>	(Schaerer) Havaas.	Mid-seral conifer forests	d	T. Stout	Yes
<i>Hypogymnia</i>	<i>tubulosa</i>	(Schaerer) Havaas.	Open to semi-open habitats – low to mid elevations, riparian areas, wooded wetlands	Bark and wood	K. Glew	Yes
<i>Hypotrachyna</i>	<i>sinuosa</i>	(Sm.) Hale	Mid-seral conifer forests, and adjacent to streams		T. Stout	Yes
<i>Hypotrachyna</i>	<i>sinuosa</i>	(Sm.) Hale	Moist riparian forests at low elevations	Mainly <i>Alnus rubra</i> , but also on other hardwoods, conifers	K. Glew	Yes
<i>Icmadophila</i>	<i>ericetorum</i>	(L.) Zahlbr.	Crustose	Tree stumps old wood	K. Glew	Yes
<i>Lecanora</i>	<i>allophana</i> (group)	Nyl.	Crustose		K. Glew	Yes
<i>Lecanora</i>	<i>farinaria</i> ?	Borrer	Crustose	Bark	K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 6 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Lecanora</i>	<i>pacifica</i>	Tuck.	Crustose	Bark and twigs	K. Glew	Yes
<i>Lecanora</i>	<i>polytropa</i>	(Hoffm.) Rabenh.	Crustose	Rock	K. Glew	Yes
<i>Lecanora</i>	<i>symmicta</i>	(Ach.) Ach.	Crustose	Bark and twigs	K. Glew	Yes
<i>Lecanora</i>	<i>sp.</i>	Ach.	Crustose		K. Glew	Yes
<i>Lecidea</i>	<i>lapicida</i>	(Ach.) Ach.	Crustose	Rock	K. Glew	Yes
<i>Lecidea</i>	<i>tesselata</i>	(Sm.) Flörke - Szatala	Crustose	Rock	K. Glew	Yes
<i>Lecidea</i>	<i>spp.</i>	Ach.	Crustose		K. Glew	Yes
<i>Lepraria</i>	<i>sp.</i>	Ach.	Crustose	Mostly bark	K. Glew	Yes
<i>Leptogium</i>	<i>lichenoides ?</i>	(L.) Zahlbr.	Rock outcrops and talus slopes, humid climates	Soil and moss (over rock)	K. Glew	Yes
<i>Leptogium</i>	<i>palmatum</i>	(Huds.) Mont.	Roadcuts, disturbed areas, outcrops and talus	Soil and moss (over rock)	K. Glew	Yes
<i>Lichenomphalia</i>	<i>umbellifera</i>	(L.) Redhead, Lutzoni, Moncalvo & Vilgalys	Moist lowland forests	On moss or tree stumps	K. Glew	Yes
<i>Lobaria</i>	<i>linita</i>	(Ach.) Rabenh.	Montane, mainly epiphytic; moist habitats with oceanic influence	Trees, shrubs, mossy rocks	K. Glew	Yes
<i>Lobaria</i>	<i>oregana</i>	(Tuck.) Müll. Arg.	Oceanic forest, mid elevations to old growth forests. Sometimes in humid low elevation forests, foothills	Usually on conifer trees – <i>Pseudotsuga</i> , <i>Tsuga heterophylla</i>	K. Glew	Yes
<i>Lobaria</i>	<i>pulmonaria</i>	(L.) Hoffm.	Humid low to mid elevation forests, in areas of strong oceanic influence	Conifers and hardwoods, shrubs and mossy rocks	K. Glew	Yes
<i>Loxosporopsis</i>	<i>corallifera</i>	Brodo, Henssen & Imshaug	Crustose	Ba rk	K. Glew	Yes
<i>Melanelia</i>	<i>sp.</i>	Essl.			K. Glew	Yes
<i>Melanelixia</i>	<i>subaurifera</i>	(Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch	Forest and shrub habitats at low to mid elevation	Bark and wood, mainly hardwoods, shrubs	K. Glew	Yes
<i>Melanohalea</i>	<i>exasperatula</i>	(Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch	Wide range of habitats from low to mid elevation; continental to oceanic climates; shade to open, exposed areas	Bark and wood, conifers and hardwoods	K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 7 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Menegazzia</i>	<i>substerilis</i>	(H. Magn.) R. Sant.			K. Glew	Yes
<i>Menegazzia</i>	<i>terebrata</i>	(Hoffm.) A. Massal.	Adjacent to streams		T. Stout	Yes
<i>Menegazzia</i>	<i>terebrata</i>	(Hoffm.) A. Massal.			K. Glew	Yes
<i>Micarea</i>	<i>sp.</i>	Fr.	Crustose		K. Glew	Yes
<i>Mycoblastus</i>	<i>affinis</i>	(Schaerer) Schauer	Crustose		K. Glew	Yes
<i>Mycoblastus</i>	<i>sanguinarius</i>	(L.) Norman	Crustose		K. Glew	Yes
<i>Nephroma</i>	<i>bellum</i>	(Sprengel) Tuck.			K. Glew	Yes
<i>Nephroma</i>	<i>parile</i>	(Ach.) Ach.			K. Glew	Yes
<i>Nodobryoria</i>	<i>oregana</i>	(Tuck.) Common & Brodo			K. Glew	Yes
<i>Ochrolechia</i>	<i>oregonensis</i>	H. Magn.			K. Glew	Yes
<i>Ochrolechia</i>	<i>sp.</i>	A. Massal.	Crustose		K. Glew	Yes
<i>Parmelia</i>	<i>hygrophila</i>	Goward & Ahti	Mid-seral conifer forests		T. Stout	Yes
<i>Parmelia</i>	<i>hygrophila</i>	Goward & Ahti			K. Glew	Yes
<i>Parmelia</i>	<i>pseudosulcata</i>	Gyelnik.			K. Glew	Yes
<i>Parmelia</i>	<i>sulcata</i>	Taylor	Mid-seral and Late seral conifer forests		T. Stout	Yes
<i>Parmelia</i>	<i>sulcata</i>	Taylor			K. Glew	Yes
<i>Parmelia</i>	<i>saxatilis</i>	(L.) Ach.			K. Glew	Yes
<i>Parmeliopsis</i>	<i>ambigua</i>	(Wulfen) Nyl.	Late seral conifer forests		T. Stout	Yes
<i>Parmeliopsis</i>	<i>ambigua</i>	(Wulfen) Nyl.			K. Glew	Yes
<i>Parmeliopsis</i>	<i>hyperopta</i>	(Ach.) Arnold	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On trunk of conifer, 1+ meter above base and below	D. Wagner	Yes
<i>Parmeliopsis</i>	<i>hyperopta</i>	(Ach.) Arnold			K. Glew	Yes
<i>Peltigera</i>	<i>britannica</i>	(Gyeln.) Holt.-Hartw. & Tønsberg			K. Glew	Yes
<i>Peltigera</i>	<i>canina</i>	(L.) Willd.			K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 8 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Peltigera</i>	<i>cinnamomea</i>	Goward			K. Glew	Yes
<i>Peltigera</i>	<i>collina</i>	(Ach.) Schrad.			K. Glew	Yes
<i>Peltigera</i>	<i>collina</i>	(Ach.) Schrad.			T. Stout	Yes
<i>Peltigera</i>	<i>didactyla</i>	(With.) JR Laundon			K. Glew	Yes
<i>Peltigera</i>	<i>digenii</i>	Gyelnik			K. Glew	Yes
<i>Peltigera</i>	<i>malacea</i> ?	(Ach.) Funck			K. Glew	Yes
<i>Peltigera</i>	<i>membranacea</i>	(Ach.) Nyl.			T. Stout	Yes
<i>Peltigera</i>	<i>membranacea</i>	(Ach.) Nyl.			K. Glew	Yes
<i>Peltigera</i>	<i>neckeri</i>	Hepp ex Müll.Arg.			K. Glew	Yes
<i>Peltigera</i>	<i>neopolydactyla</i>	(Gyeln.) Gyeln.			K. Glew	Yes
<i>Peltigera</i>	<i>pacifica</i>	Vitik.			K. Glew	Yes
<i>Peltigera</i>	<i>praetextata</i>	(Flörke ex Sommerf.) Zopf			K. Glew	Yes
<i>Peltigera</i>	<i>retifoveata</i>	Vitik.			K. Glew	Yes
<i>Peltigera</i>	<i>venosa</i>	(L.) Hoffm.	Talus and rock		T. Stout	Yes
<i>Peltigera</i>	<i>venosa</i>	(L.) Hoffm.			K. Glew	Yes
<i>Peltigera</i> ?	<i>cyanomorph</i> ?				K. Glew	Yes
<i>Peltigera</i>	<i>sp.</i>	Willd.			K. Glew	Yes
<i>Pertusaria</i>	<i>amara</i>	(Acharius) Nylander	Crustose		K. Glew	Yes
<i>Pertusaria</i>	<i>sp.</i>	<i>Peltigera</i>	Willd.	Lichen	K. Glew	Yes
<i>Physcia</i>	<i>tenella</i>	(Scop.) DC			K. Glew	Yes
<i>Pilophorus</i>	<i>acicularis</i>	(Ach.) Th. Fr.	Crustose		K. Glew	Yes
<i>Pilophorus</i>	<i>clavatus</i>	L.	Crustose		K. Glew	Yes
<i>Placopsis</i>	<i>lambii</i>	Hertel & V. Wirth	Crustose		K. Glew	Yes
<i>Placynthiella</i>	<i>sp.</i>	Elenkin	Crustose		K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 9 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Plasimatia</i>	<i>lacunosa</i> ?	(Ach.) Culb. & C. Culb.			K. Glew	Yes
<i>Platismatia</i>	<i>glauca</i>	(L.) Culb. & C. Culb.	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On dead twigs and branches of conifer	D. Wagner	Yes
<i>Platismatia</i>	<i>glauca</i>	(L.) Culb. & C. Culb.			K. Glew	Yes
<i>Platismatia</i>	<i>herrei</i>	(Imshaug) W. L. Culb. & C. F. Culb.	Late seral conifer forests		T. Stout	Yes
<i>Platismatia</i>	<i>herrei</i>	(Imshaug) W. L. Culb. & C. F. Culb.			K. Glew	Yes
<i>Platismatia</i>	<i>norvegica</i>	(Lyngé) WL Culb. & CF Culb.			K. Glew	Yes
<i>Platismatia</i>	<i>stenophylla</i>	(Tuck.) Culb. & C. Culb.			K. Glew	Yes
<i>Protopannaria</i>	<i>pezizoides</i>	(Weber) P. M. Jørg. & S. Ekman.	Squamulose		K. Glew	Yes
<i>Pseudocyphellaria</i>	<i>rainierensis</i>	Imshaug.			K. Glew	Yes
<i>Ramalina</i>	<i>dilacerata</i>	(Hoffm.) Wain.			K. Glew	Yes
<i>Ramalina</i>	<i>farinacea</i>	(L.) Ach.	Early seral conifer forests		T. Stout	Yes
<i>Ramalina</i>	<i>farinacea</i>	(L.) Ach.			K. Glew	Yes
<i>Rhizocarpon</i>	<i>disporum/geminitum</i>		Crustose		K. Glew	Yes
<i>Rhizocarpon</i>	<i>geographicum group</i>	(L.) DC	Crustose		K. Glew	Yes
<i>Rhizocarpon</i>	<i>geographicum group</i>	(L.) DC	Crustose		K. Glew	Yes
<i>Rhizocarpon</i>	<i>grande</i> ?	(Flörke ex Flotow) Arnold	Crustose		K. Glew	Yes
<i>Rinodina</i>	<i>sp.</i>	(Ach.) Gray	Crustose		K. Glew	Yes
<i>Sphaerophorus</i>	<i>globosus</i>	(Huds.) Vainio	Late seral conifer forests		T. Stout	Yes
<i>Sphaerophorus</i>	<i>globosus</i>	(Huds.) Vainio			K. Glew	Yes
<i>Sporastatia</i>	<i>testudinea</i>	(Ach.) A. Massal.	Crustose			
<i>Stereocaulon</i>	<i>alpinum</i>	Laurer			K. Glew	Yes
<i>Stereocaulon</i>	<i>glareosum</i> ?	(Savicz) H. Magn.			K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 10 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Stereocaulon</i>	<i>paschale</i>	(L.) Hoffm.			K. Glew	Yes
<i>Stereocaulon</i>	<i>sterile</i>	(Savicz) Lamb ex Kro			K. Glew	Yes
<i>Stereocaulon</i>	<i>vesuvianum</i>	Pers.			K. Glew	Yes
<i>Stereocaulon</i>	<i>sp.</i>	Hoffm.	Adjacent to streams		T. Stout	Yes
<i>Stereocaulon</i>	<i>sp.</i>	Hoffm.	Found in rock areas and on rock outcrops		K. Glew	Yes
<i>Sticta</i>	<i>fuliginosa</i> ADM	(Hoffm.) Ach.			K. Glew	Yes
<i>Tephromela</i>	<i>atra</i>	(Huds.) Hafellner	Crustose. On bark and rock		K. Glew	Yes
<i>Thelotrema</i>	<i>lepadinum</i>	(Ach.) Ach.	Crustose		K. Glew	Yes
<i>Trapeliopsis</i>	<i>granulosa</i>	(Hoffm.) Lumbsch	Crustose		K. Glew	Yes
<i>Trapeliopsis</i>	<i>sp.</i>	Hertel & Gotth. Schneider	Crustose		K. Glew	Yes
<i>Tremolechia</i>	<i>atrata</i>	(Ach.) Hertel	Crustose		K. Glew	Yes
<i>Tuckermannopsis</i>	<i>chlorophylla</i>	(Willd.) Hale	Mid-seral and Late seral conifer forests.		T. Stout	Yes
<i>Tuckermannopsis</i>	<i>chlorophylla</i>	(Willd.) Hale	Exposed sites to dry forest interiors – full sun to full shade. Litterfall	Bark, wood, fallen trees	K. Glew	Yes
<i>Tuckermannopsis</i>	<i>orbata</i>	(Nyl.) M. J. Lai	Mid-seral and Late seral conifer forests		T. Stout	Yes
<i>Tuckermannopsis</i>	<i>orbata</i>	(Nyl.) MJ Lai	Mainly low elevation mesic forests from shade to exposed sites. Litterfall	On bark and wood of conifers. Can be on hardwoods	K. Glew	Yes
<i>Tuckermannopsis</i>	<i>platyphylla</i>	(Tuck.) Hale	Crowns of trees in low elevation mesic forests. Litterfall	On bark and wood of conifers. Can be on hardwoods	K. Glew	Yes
<i>Tuckermannopsis</i>	<i>subalpina</i>	(Imshaug) Karnefelt	Semi open to open subalpine forests	Base of conifer trees or soil. Also on ericaceous shrubs	K. Glew	Yes
<i>Umbilicaria</i>	<i>angulata</i>	Tuck.			K. Glew	Yes
<i>Umbilicaria</i>	<i>cylindrica</i> ?	(L.) Delise ex Duby			K. Glew	Yes
<i>Umbilicaria</i>	<i>hyperborea</i>	(Ach.) Hoffm.			K. Glew	Yes
<i>Umbilicaria</i>	<i>polyphylla</i>	(L.) Baumg.			K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 11 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Umbilicaria</i>	<i>sp.</i>	Hoffm.			K. Glew	Yes
<i>Usnea</i>	<i>ceratina ?</i>	Ach.			K. Glew	Yes
<i>Usnea</i>	<i>chaetophora ?</i>	Stirton			K. Glew	Yes
<i>Usnea</i>	<i>cornuta ?</i>	Körber			K. Glew	Yes
<i>Usnea</i>	<i>diplotypus</i>	Vainio			K. Glew	Yes
<i>Usnea</i>	<i>diplotypus ?</i>	Vainio			K. Glew	Yes
<i>Usnea</i>	<i>filipendula</i>	Stirton	Late seral conifer forests		T. Stout	Yes
<i>Usnea</i>	<i>filipendula</i>	Stirton			K. Glew	Yes
<i>Usnea</i>	<i>flavocardia (wirthii)</i>	Räsänen (syn.: <i>U. wirthii</i> . P. Clerc)	Late seral conifer forests		T. Stout	Yes
<i>Usnea</i>	<i>flavocardia (wirthii)</i>	Räsänen (syn.: <i>U. wirthii</i> . P. Clerc)			K. Glew	Yes
<i>Usnea</i>	<i>glabrata</i>	(Ach.) Vain.			K. Glew	Yes
<i>Usnea</i>	<i>lapponica</i>	Vainio	Late seral conifer forests		T. Stout	Yes
<i>Usnea</i>	<i>lapponica</i>	Vainio			K. Glew	Yes
<i>Usnea</i>	<i>longissima</i>	Ach.			K. Glew	Yes
<i>Usnea</i>	<i>longissima</i>	Ach.			K. Glew	Yes
<i>Usnea</i>	<i>pacificana</i>	Halonen.			K. Glew	Yes
<i>Usnea</i>	<i>scabrata</i>	Nyl.			K. Glew	Yes
<i>Usnea</i>	<i>subfloridana</i>	Stirton	Mid-seral conifer forests		T. Stout	Yes
<i>Usnea</i>	<i>subfloridana</i>	Stirton			K. Glew	Yes
<i>Usnea</i>	<i>substerilis</i>	Motyka			K. Glew	Yes
<i>Usnea</i>	<i>sp.</i>	Dill. ex Adans.	Young second-growth conifer forest dominated by <i>Tsuga heterophylla</i>	On dead twigs and branches of conifer; on trunk of conifer, at base	D. Wagner	Yes
<i>Xanthoria</i>	<i>candelaris</i>	(L.) Th. Fr.			K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 12 of 12

GENUS	SPECIES	AUTHOR	COMMENT/TYPICAL HABITAT	TYPICAL SUBSTRATE	OBSERVER	VOUCHERED
<i>Xanthoria</i>	<i>polycarpa</i>	(Hoffmann) Rieber			K. Glew	Yes
<i>Xanthoria</i>	<i>sp.</i>	(Fr.) Th. Fr.			K. Glew	Yes

Moss and bryophyte species observed in the Cedar River Municipal Watershed, King County, Washington., USA

October 2007

Page 13 of 12