

# Listed Macrolichens in the PNW

## Northwest Lichenologists, November 2013

This list includes only species of concern west of the Cascade crest. Rankings are defined below. Species listed under the ROD but not by OR, WA or BC are not included.

| Species   | ROD<br>1 | Am.<br>ROD<br>2 | OR<br>3 | WA<br>4 | BC<br>5 | Notes  |
|---|----------|-----------------|---------|---------|---------|--|
| <i>Acrosyphus sphaerophoroides</i>  | -        | -               | -       | 1       | 1       | on wood and acidic rock; low elevation to subalpine, open rocky areas or forests. Coastal BC to WA Cascades (Snohomish Co.).                           |
| <i>Alectoria lata</i>   | -        | -               | -       | 2       | -       | Although populations from northern CA and south are distinct; more northern reports are clouded by apparent intergradation with <i>A. sarmentosa</i> . |
| <i>Alectoria nigricans</i> =<br><i>Gowardia nigricans</i>                             | -        | -               | -       | 2       | -       | On alpine sod, WA and north  |
| <i>Alectoria ochroleuca</i>   | -        | -               | -       | 2       | -       | On alpine sod, WA and north  |
| <i>Alectoria vancouverensis</i>   | -        | -               | -       | -       | 1       | On trees and shrubs at low elevations; rare in BC  |
| <i>Anaptychia crinalis</i> =<br><i>Anaptychia setifera</i>                            | -        | -               | 1       | -       | 2       | On trees, humid boreal sites, AK and BC, but also very rare on Oregon coast; should be added to Oregon list.   |
| <i>Arctoparmelia incurva</i>  | -        | -               | -       | 1       | -       | On rock; WA and north  |
| <i>Bryocaulon divergens</i>   | -        | -               | -       | 3       | -       | On alpine sod; basis for WA record unclear   |
| <i>Bryoria bicolor</i>  | -        | -               | 1       | -       | -       | Coastal ridges and mountaintops, conifers; NW OR and north   |
| <i>Bryoria pseudocapillaris</i>   | 1,3      | B               | 3       | -       | -       | Immediate coast, conifers; OR and south  |
| <i>Bryoria spiralis</i>   | 1,3      | B               | 2       | -       | -       | Immediate coast, conifers; OR and south  |
| <i>Bryoria subcana</i>  | 1,3      | B               | 2       | -       | -       | Coast Range, conifers  |
| <i>Bunodophoron melanocarpum</i>  | NR       | -               | -       | 1       | -       | Near the coast   |
| <i>Cetraria californica</i> (= <i>Kaernefeltia californica</i> )                      | -        | -               | -       | 4       | 2       | Immediate coast, on conifers, fairly common in OR, rare in BC; = <i>Kaernefeltia californica</i>   |
| <i>Cladonia novochlorophaea</i>   | -        | -               | -       | 1*      | -       | Known in our area only from Mima Prairie, Thurston Co., WA, on soil  |
| <i>Cladonia norvegica</i>   | 3        | B               | -       | 4       | -       | Coast Range and Cascades, conifers and rotten logs   |
| <i>Cladonia poroscypha</i>  | -        | -               | -       | 1*      | -       | Coastal states, soil and moss over rock  |
| <i>Cladonia portentosa</i> ssp.<br><i>pacifica</i>                                    |          |                 |         | 4       |         | = <i>Cladonia portentosa</i> ssp. <i>pacifica</i> coastal from SE AK to CA, rarely inland to Cascades  |
| <i>Collema curtisporum</i>  | -        | -               | 1       | -       | -       | see Macrolichens of PNW  |
| <i>Collema fecundum</i>   | -        | -               | -       | -       | 2       | coastal rock; BC and north   |
| <i>Collema nigrescens</i>   | 4        | F               | -       | 4       | 2       | conifers and hardwoods west of Cascades; occasional in Oregon, rare in BC  |
| <i>Cornicularia normoerica</i>  | -        | -               | -       | 3       | -       | Fairly common on noncalcareous montane to subalpine summits and ridges   |
| <i>Dactylina arctica</i>  | -        | -               | -       | 1       | -       | On alpine sod; common in Rockies of AL and BC; very rare in PNW  |
| <i>Dactylina ramulosa</i>   | -        | -               | -       | 1       | -       | Arctic S in Rocky Mountains to WY. Two collections in WA, one is from alpine area on Haystack Mountain on the E side of the North Cascades             |
| " <i>Dendrisocaulon</i> "<br>( <i>Sticta oroborealis</i><br>and/or <i>Lobaria</i> sp) | 1,3      | B               | -       | 4       | -       | West side, hardwoods and conifers; taxonomic confusion; probably two or three taxa with similar morphology   |
| <i>Dermatocarpon meiophyllizum</i>  | 1,3      | B               | -       | 3       | -       | Semi-aquatic, on rock in mountain and foothill streams. Formerly mostly misidentified as <i>D. luridum</i> .   |
| <i>Dermatocarpon moulinsii</i>  |          |                 |         | 3       |         | Dry, often calcareous rock; widespread in W N America but uncommon   |
| <i>Dermatocarpon polyphyllizum</i>  | -        | -               | 1       | -       | -       | Wallowa Co., OR; alpine calciphile   |

|  |       |   |     |    |   |  |
|--|-------|---|-----|----|---|--|
| <i>Erioderma soledium</i>  | 1,3   | - | 2   | 1  | 1 | Immediate coast, <i>Pinus</i> /shrubs community, old dunes, on ericaceous shrubs or conifers   |
| <i>Flavoparmelia caperata</i>  |       |   |     | 1  |   | Deception Pass, WA. immediate coast  |
| <i>Flavopunctelia flaventior</i>   | -     | - | -   | -  | 1 | Trees and mossy rock near Victoria and on <i>Artemisia</i> near Kamloops   |
| <i>Fuscopannaria laceratula</i>  | -     | - | -   | 2* | 2 | Coastal; conifers and mossy rock; more common in SE Alaska   |
| <i>Heterodermia japonica</i>   |       |   | 1   |    |   | In the Pacific Northwest, currently known only from twigs of <i>Picea sitchensis</i> in old-growth, fog-drenched coastal headland forest   |
| <i>Heterodermia leucomela</i>  | -     | - | 2-3 | 4  | 2 | Seaside conifers; uncommon in OR, rare in BC   |
| <i>Heterodermia sitchensis</i>   | 3     | E | 1   | -  | 1 | Restricted to the immediate coast. In Oregon, at one site found on twigs of <i>Picea sitchensis</i> on ridgetop exposed to ocean winds in old-growth temperate rainforest. In BC, Seaside conifers near Ucluelet and Tofino. So far not found in WA. |
| <i>Heterodermia speciosa</i>   | -     | - | -   | -  | 2 | Hardwoods, north coastal and boreal; BC and north  |
| <i>Hydrothyria venosa</i>  |       |   |     |    |   | (see <i>Peltigera gowardii</i> )   |
| <i>Hypogymnia duplicata</i>  | 1,2,3 | A | 2   | -  | - | OR Coast Range and near Mt. Hood, conifers; more common northward  |
| <i>Hypogymnia heterophylla</i>   | -     | - | -   | 4  | 2 | Abundant on coastal conifers and hardwoods in northern CA and OR, rare in BC   |
| <i>Hypogymnia oceanica</i>   | 1,3   | F | -   | 4  | - | West side, usually riparian, conifers and hardwoods; uncommon in OR to common in coastal BC and AK   |
| <i>Hypogymnia pulverata</i>  | -     | - | 1   | -  | - | Only a few locations known for western N Am, one from <i>Picea sitchensis</i> forest on Oregon coast and several from coastal Alaska   |
| <i>Hypogymnia subphysodes</i>  | -     | - | 1   | -  | - | Only one location known for western N Am, from <i>Pinus contorta</i> forest on Oregon coast  |
| <i>Hypotrachyna revoluta</i>   | 3     | E | 1   | 4  | - | Coast Range and immediate coast, very rare in Cascades; usually on bark, rarely on rock  |
| <i>Hypotrachyna riparia</i>  | -     | - | 1   | -  | - | Riparian hardwoods, foothills of Cascades; so far OR only  |
| <i>Leioderma soledium</i>  | 1,3   | - | 1   | 2  | 1 | Immediate coast; old dunes; <i>Pinus</i> -shrubs; on ericaceous shrubs and conifers  |
| <i>Leptogium insigne</i><br>(formerly included under <i>L. brebissonii</i> ) | 1,3   | - | -   | -  | 1 | Immediate coast, conifers and hardwoods  |
| <i>Leptogium burnetiae</i>   | 4     | A | 1   | 1  | - | = <i>L. burnetiae</i> var. <i>hirsutum</i> ; = <i>L. hirsutum</i> ; questionable records from OR or WA; present in coastal AK to inland BC   |
| <i>Leptogium cyanescens</i>  | 4     | A | 1   | 4  | 1 | On trees in humid forests; widely scattered  |
| <i>Leptogium pseudofurfuraceum</i>   | -     | - | -   | -  | 2 | On trees and mossy rock; common in S OR, less common in N to rare in BC  |
| <i>Leptogium platynum</i>  | -     | - | 1-2 | -  | 2 | Usually on soil or rock near seeps or areas wet some of the year. According to Goward on mossy rock in coastal Douglas fir zone in BC. Apparently rare in Oregon.  |
| <i>Leptogium plicatile</i>   |       |   | 1   |    |   | Moist, calcareous rocks or soil. In Oregon, it has been found on non-calcareous rocks with seeps providing lime to the rock surface.   |
| <i>Leptogium polycarpum</i>  | -     | - | -   | -  | 1 | Deciduous trees, rare in coastal BC but common in valleys and foothills in Oregon  |
| <i>Leptogium rivale</i>  | 1,3   | B | -   | 2  | - | Aquatic; mountain streams; common according to Glavich & Geiser (2007, <i>Evansia</i> 24:6-9).   |
| <i>Leptogium siskiyouensis</i>   | -     | - | 1   | -  | - | On trees, sw Oregon and n Cal  |
| <i>Leptogium teretiusculum</i>   | 4     | E | 2?  | 4  | - | On hardwoods (esp. <i>Populus</i> and <i>Quercus</i> ) and conifers; widespread  |
| <i>Lobaria linita</i>  | 1,2,3 | A | 2   | 4  | - | Montane to subalpine rock; conifers; central OR and north; common in coastal AK  |
| <i>Lobaria retigera</i>  | -     | - | -   | -  | 2 | old growth in coastal AK and BC  |
| <i>Nephroma isidiosum</i>  | 3     | E | -   | -  | - | AK and BC only?  |
| <i>Nephroma occultum</i>   | 1,3   | B | 3   | 1  | - | OR and WA Cascades, suboceanic north interior BC; old-growth   |

|                                       |       |   |     |    |   |  |
|---------------------------------------|-------|---|-----|----|---|--|
|                                       |       |   |     |    |   | conifers   |
| <i>Lobaria silvae-veteris</i>         | -     | - | -   | -  | 1 | = <i>Nephroma silvae-veteris</i> = the blue-green photomorph of <i>Lobaria oregana</i> , therefore not a valid species. These are synonyms of <i>Lobaria oregana</i> .   |
| <i>Niebla cephalota</i>               | 1,3   | A | 2   | 1  | 1 | Immediate coast; conifers  |
| <i>Pannaria rubiginella</i>           | -     | - | 1   | 1* | - | Formerly misidentified as <i>P. malmei</i> . On bark and wood in cool, moist habitats along the Pacific coast.   |
| <i>Pannaria rubiginosa</i>            | 1,3   | E | 2   | 4  | 2 | West side; wetlands and riparian on the immediate coast; mainly hardwoods; some previously known PNW records are <i>P. rubiginella</i>   |
| <i>Parmotrema chinense</i>            | -     | - | -   | -  | 1 | Conifers, hardwoods, and rocks on the coast; common in Oregon, rare in BC  |
| <i>Parmotrema crinitum</i>            | -     | - | -   | -  | 2 | Conifers, hardwoods, and rocks on the coast; common in Oregon, rare in BC  |
| <i>Peltigera gowardii</i>             | 1,3   | - | -   | 3  | 2 | (= the western version of <i>Hydrothyria venosa</i> = <i>Peltigera hydrothyria</i> ) Aquatic, in spring-fed streams that never flood   |
| <i>Peltula euploca</i>                | -     | - | 1-2 | -  | - | Noncalcareous rock, in exposed, dry, or shaded and damp habitats. In southwestern Oregon it occurs on basalt in dry <i>Quercus</i> and <i>Pinus ponderosa</i> associations, and on at edges of vernal pools on Table Rocks. In central Oregon it occurs on basalt in <i>Juniperus occidentalis</i> woodland and <i>Pseudoroegneria spicata</i> or <i>Festuca idahoensis</i> grassland. |
| <i>Phaeophyscia ciliata</i>           | -     | - | -   | -  | 2 | On hardwoods; rare in BC   |
| <i>Physcia semipinnata</i>            | -     | - | -   | -  | 1 | On trees; reported from w BC and w MT  |
| <i>Pilophorus nigricaulis</i>         | 1,3   | - | 2   | 3  | 1 | West side and Columbia Gorge; cool, N-facing rock outcrops and talus   |
| <i>Pilophorus vegae</i>               | -     | - | -   | -  | 1 | On rock in open; coastal BC  |
| <i>Platismatia lacunosa</i>           | 4     | C | -   | -  | - | On hardwoods, esp. <i>Alnus</i> , less often conifers, rarely rock; west side only   |
| <i>Pseudocyphellaria mallota</i>      | -     | - | 2   | -  | - | West side; old-growth, mixed age, or edge of second growth; esp. on <i>Rhododendron</i>  |
| <i>Pseudocyphellaria perpetua</i>     | 1,3   | B | 3   | 1  | - | Coastal conifers and hardwoods in <i>Picea sitchensis</i> zone; W OR to AK   |
| <i>Pseudocyphellaria rainierensis</i> | 1,2,3 | A | 3   | 4  | 1 | West side; old-growth conifers   |
| <i>Punctelia jeckeri</i>              | -     | - | -   | -  | 2 | Rare natural populations on trees, rocks, and shrubs in Gulf Islands and Channel Islands of BC and WA; apparently a air-pollution tolerant invader in suburban and agricultural areas in Willamette Valley, OR; need to re-evaluate for closely related species. Formerly lumped with <i>P. subrudecta</i> or <i>P. perreticulata</i> .  |
| <i>Ramalina pollinaria</i>            | 3     | E | 1-2 | 4  | - | Taxonomic problems; distribution and habitat uncertain; perhaps inland only  |
| <i>Ramalina subleptocarpha</i>        | -     | - | -   | -  | 1 | On hardwoods and conifers, common in OR, rare in BC, plus rare disjuncts in ID and MT.   |
| <i>Ramalina thrausta</i>              | 4     | A | -   | 1  | - | On conifers, common in OR Coast Range; apparently rare in WA; frequent in BC   |
| <i>Solorina saccata</i>               | -     | - | -   | 4  | - | Moist calcareous sites; arctic-alpine to SD and BC   |
| <i>Solorina spongiosa</i>             | -     | - | 1   | -  | - | Moist calcareous sites, montane; widespread in w N Am  |
| <i>Stereocaulon myriocarpum</i>       | -     | - | -   | 4  | - | Soil, humus, or soil over rock. AK to CA and NM, rare in OR and WA   |
| <i>Stereocaulon spathuliferum</i>     | -     | - | 2   | -  | - | Cascades; cool N-facing talus slopes and rock outcrops   |
| <i>Sticta arctica</i>                 | 1,3   | - | 1   | -  | - | Very rare; coastal mountaintops; mossy rock; AK to WA, and NW OR   |
| <i>Sticta weigelii</i>                |       |   | 2-3 | -  |   | Cool, moist old-growth conifer forests at middle elevations, AK to CA W of Cascades  |
| <i>Sticta wrightii</i>                | -     | - | -   | -  | 1 | On trees in Robson Valley and coastal AK   |
| <i>Sulcaria badia</i>                 | -     | - | 3   | 6  | - | West side, valley fringe; rare on coast; usually on hardwoods  |

|   |     |     |   |    |   |  |
|---|-----|-----|---|----|---|--|
|   |     |     |   |    |   | ( <i>Quercus</i> , <i>Arbutus</i> , <i>Arctostaphylos</i> ), sometimes on conifers; apparently extirpated in WA; not present in BC   |
| <i>Teloschistes flavicans</i>                 | 1,3 | A   | 1 | -  | - | Coastal, <i>Picea sitchensis</i> zone; conifers; OR and south  |
| <i>Tholurna dissimilis</i>                    | 1,3 | B   | 2 | 3  | - | Cascades south to OR; also inland in BC; exposed, dwarfed subalpine conifers   |
| <i>Umbilicaria decussata</i>                  |     |     | - | 4  |   | arctic-alpine to subalpine and steppe; occasional in PNW   |
| <i>Umbilicaria hirsuta</i>                    |     |     | 1 | 1* |   | In NE N Am; scattered in the Rocky Mountains and Pacific coast ranges. In the PNW, AK to CA and MT. The single known population in Oregon occurs on the vertical face of an igneous rock outcrop (noncalcareous) with an intermittent seep, in partial shade |
| <i>Umbilicaria lambii</i>                     | -   | -   | - | 1  | - |  |
| <i>Umbilicaria lyngei</i>                     |     |     | - | 4  |   | arctic with rare alpine disjuncts in OR and WA   |
| <i>Umbilicaria nylanderiana</i>               |     |     | - | 2  |   | widespread but rare  |
| <i>Umbilicaria phaea</i> var. <i>coccinea</i> |     |     | 2 | 1  |   | Exposed to shaded rock outcrops, boulders and talus; low to middle elevations. Locally common near Yreka, the Shasta River, and adjoining OR, more rare near Klamath Falls OR and even more rare in central OR and central WA                                |
| <i>Umbilicaria rigida</i>                     |     |     | - | 4  |   | arctic-alpine to Olympic Peninsula, OR Cascades, and Alberta   |
| <i>Umbilicaria scholanderi</i>                |     |     | - | 4  |   | AK to Olympic Peninsula  |
| <i>Usnea schadenbergiana</i>                  |     |     | 3 | 4  |   | Formerly called <i>Usnea hesperina</i> and <i>U. subgracilis</i> . Coast Range and immediate coast; conifers. In 2010 Oregon RT&E list as <i>U. subgracilis</i>  |
| <i>Usnea lambii</i>                           | -   | -   | 1 | 1  | - | Frequent on stable subalpine rock on flanks of major volcanoes in Cascades. Formerly called <i>U. sphacelata</i> .   |
| <i>Usnea longissima</i>                       | 4   | A/F | - | 4  | - | In amended ROD: A for CA and SW OR, F for remainder of OR and WA; trees and shrubs, low to mid elevation west side only  |
| <i>Usnea nidulans</i>                         |     |     | 1 | -  |   | BC to OR on the immediate coast and in the Coast Ranges  |
| <i>Usnea quasirigida</i>                      |     |     | - | 4  |   | Formerly called <i>U. rigida</i> Motyka  |
| <i>Usnea rubicunda</i>                        | -   | -   | 2 | -  | - | Immediate coast; hardwoods   |
| <i>Vulpicida tilesii</i>                      | -   | -   | - | 2  | - | On alpine sod; Olympic Peninsula; more common in Rockies   |

## *Definitions of Categories*

**1 ROD=Record of Decision**, FS and BLM forest management in range of the Northern Spotted Owl. Only Strategy 1, 2, and 3 species included unless listed in other columns. Survey strategies:

- 1** = manage known sites
- 2** = survey prior to activities and manage sites
- 3** = conduct extensive surveys and manage sites
- 4** = conduct general regional surveys

**Reference:** U. S. Department of Agriculture and U. S. Department of Interior. 1994. Record of decision for amendments to Forest Service and Bureau of Land Management planning documents within the range of the Northern Spotted Owl. Attachment A: Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl. U. S. Government Printing Office, 1994-589-11/0001, Washington, D. C.

**2 Amended ROD** -- Revised status under the Northwest Forest Plan (2001).

- A** = Rare, pre-disturbance surveys practical
- B** = Rare, pre-disturbance surveys not practical
- C** = Uncommon, pre-disturbance surveys practical
- D** = Uncommon, pre-disturbance surveys not practical or not necessary
- E** = Rare, status undetermined
- F** = Uncommon or concern for persistence unknown; status undetermined

**Reference:** U. S. Department of Agriculture and U. S. Department of Interior. 2001. Record of decision and standards and guidelines for amendments to the survey and manage, protection buffer, and other mitigation measures standards and guidelines. U. S. D. A. Forest Service, Portland. 86 pages.

### **3 Oregon Natural Heritage Program**

The list for Oregon includes state and global ranks, along with "ORBIC" list number. State ranks are given below.

- 1** = Critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction.
- 2** = Imperiled because of rarity (6-20 occurrences), or because of other factors demonstrably making it very vulnerable to extinction throughout its range.
- 3** = Either very rare and local throughout its range, or found locally (even abundantly at some of its locations) in a restricted range, or vulnerable to extinction throughout its range because of other factors; in the range of 21-100 occurrences.
- 4** = Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.

**Reference:** Oregon Natural Heritage Program. 2010. Rare, threatened and endangered species of Oregon. Oregon Biodiversity Information Center, Institute for Natural Resources, Portland State University, Portland, Oregon. 105 pages.

### **4 Washington Natural Heritage Program.**

The codes listed for Washington are based on a March 2011 draft revision by a committee of NW Lichenologists. These have not been formally adopted. Only ratings 1,2,3 and 6 are given in the list above, unless the species is listed by another state or province. Species suggested for listing by the NWL committee, but not yet on the WA NHP list are given an asterisk (\*).

- 1. Potentially Endangered lichens in Washington.
- 2. Potentially Threatened lichens in Washington.
- 3. Potentially Sensitive lichens in Washington.
- 4. Recommended to be monitored for rarity in Washington.
- 5. Species with taxonomic questions.

## 6. Extirpated in Washington.

Ultimately, these should be assigned state ranks, in accordance with the Washington Natural Heritage Program:

- 1 = Suggested for rank 1: critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction.
- 2 = Suggested for rank 2: imperiled because of rarity (6-20 occurrences), or because of other factors demonstrably making it very vulnerable to extinction throughout its range.
- 3 = Suggested for rank 3: either very rare and local throughout its range, or found locally (even abundantly at some of its locations) in a restricted range, or vulnerable to extinction throughout its range because of other factors; in the range of 21-100 occurrences.
- 4 = Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.

**Reference:** Draft revised list posted as a Google Group: Washington Rare Lichens Committee.

**Previous reference:** Washington Natural Heritage Program. 2009. Washington Natural Heritage Program Former list of Rare Lichens. Washington State Department of Natural Resources, Olympia.

<http://www1.dnr.wa.gov/nhp/refdesk/lists/lichens>

Accessed 25 Aug 2009.

## 5 British Columbia

- 1 = Critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extirpation or extinction.
- 2 = Imperiled because of rarity (6 to 20 extant occurrences or very few remaining individuals), or because of other factors demonstrably making it vulnerable to extirpation or extinction.

**Reference:** 1999 list by Trevor Goward. More recent list not available?