

Oregon Status Factors

Elcode NLLEC3B060
Gname PSEUDOCYPHELLARIA RAINIERENSIS
Gcomname

Number of Occurrences

C = 21- 80

Comments 59 occurrences.

Number of Occurrences with Good Viability

D = Some (13-40) occurrences with good viability
E = Many (41-125) occurrences with good viability

Comments

Population Size

Comments Estimated 590 individuals in Oregon.

Range Extent

F = 20,000-200,000 km² (about 8,000-80,000 square miles)

Comments Found west of the Cascades (McCune & Geiser 1997). Range is about 14,000 square miles in Oregon.

Area of Occupancy

G = 2,000-20,000 km² (500,000-5,000,000 acres)

LG = 20,000-200,000 km (about 12,500-125,000 miles)

Comments About 2,100 square miles.

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

U = Unknown. Long-term trend in population, range, area occupied, or number or condition of occurrences unknown

Comments

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

E = Stable. Population, range, area occupied, and/or number or condition of occurrences unchanged or remaining within $\pm 10\%$ fluctuation

Comments

Threats

F = Widespread, low-severity threat. Threat is of low severity but affects (or would affect) most or a significant portion of the population, occurrences, or area. Ecological community occurrences are not threatened severely, with changes reversible and recovery moderately rapid.

Scope Moderate

Severity Low

Immediacy Moderate

Comments In the Willamette Forest of Oregon, less than 1/4 of land is covered by old-growth forest, and less than 1/3 of this area persists as an interior forest (Sillett 1994).

Number of Appropriately Protected and Managed Occurrences

D = Many (13-40) occurrences appropriately protected and managed

Comments In OR, 25 sites are protected. Riparian reserves not viable protection.

Intrinsic Vulnerability

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5-20 years or 2-5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecological community occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10-100 years).

Comments Although it reproduces at a good rate, reproduction is by isidia and lobules - heavy propagules that may be slow to disperse (D. Stone, pers. comm.). This species grows just as well in young forests as it does in old growth, but it cannot survive in clearcuts. Its absence from young forests is probably attributable to slow rates of dispersal and/or establishment. (Sillett, unpublished paper).

Environmental Specificity

B = Narrow. Specialist or community with key requirements common.

Comments Sensitive to edge effect, so edges and wetland reserves are not appropriate. "In the Willamette Forest of Oregon, less than 1/4 of land is covered by old-growth forest, and less than 1/3 of this area persists as an interior forest" (Sillett 1994).

Other Considerations

ORNHIC - List 4. Edge effect important.

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Grank S3 **Grank Date** 11/30/2002

Reasons

Known from 59 sites in Oregon. Threatened by logging. Does not withstand clearcuts and vulnerable to edge effect. Riparian reserves not viable protection. Heavy propagules may limit dispersal to appropriate habitats.

BCD Sources

New Sources

Sillett S. 1994. Growth rates of two epiphytic cyanolichen species at the edge and in the interior of a 200-year-old Douglas fir forest in the west Cascades of OR. *Bryologist* 97(3) 321-324.
McCune, B. and L. Geiser. 1997. *Macrolichens of the Pacific Northwest*. Oregon State University Press, Corvallis, Oregon. A co-publication with the U.S. Department of Agriculture Forest Service. 386 pp.

Sillett, SC. 1997. Distribution and ecology of *Pseudocyphellaria rainierensis*, an epiphytic cyanolichen endemic to the Pacific Northwest. Pp. 254-260 in: Kaye, T.N, A. Liston, R.M. Love, D.L. Luoma, R.J. Meinke & M.V. Wilson (eds.). Conservation and management of native plants and fungi. Native Plant Society of Oregon, Corvallis.