

Washington Status Factors

Elcode NLT0017450

Gname LOBARIA OREGANA

Gcomname

Number of Occurrences

E = >300

Comments Abundant in the Cascades of OR and southern WA. Close to 900kg/ha standing crop in Douglas fir forest in OR (Pike et al. 1972).

Number of Occurrences with Good Viability

F = Very many (>125) occurrences with good viability

Comments

Population Size

H = >1,000,000 individuals

Comments

Range Extent

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

Comments West of the Cascades. WA range is about 30,800 square miles.

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 WA occupancy is about 4,575 square miles.

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

E = Relatively Stable ($\pm 25\%$ change)

Comments

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

D = Declining. Decline of 10-30% in population, range, area occupied, 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

G = Slightly threatened. Threats, while recognizable, are of low severity, or affecting only a small portion of the population, occurrences, or area. Ecological community occurrences may be altered in minor parts of range or degree of alteration falls within the natural variation of the type.

Scope Low

Severity Low

Immediacy Low

Comments Fragmentation of old-growth is a threat; younger forests had a lower amount of *L. oregana* (Sillett 1994). Sensitive to air pollution (McCune & Geiser 1997). Riparian zones are not viable protection because this species is highly sensitive to edge effect.

Number of Appropriately Protected and Managed Occurrences

E = Very many (>40) occurrences appropriately protected and managed

Comments Matrix is not always viable protection for this species ---- the edge effect of forest fragmentation lowers populations.

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 Propagules large.

Environmental Specificity

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

C = Moderate. Generalist or community with some key requirements scarce.

Comments

Other Considerations

Edition 2/20/2003 **Edauthor** Daphne Stone

Grank S3S4 **Grank Date** 12/23/2002

Reasons

This species occupies a relatively small area in southern Washington, but is locally abundant. It is sensitive to air pollution and potentially threatened by forest fragmentation. Riparian zones are not viable protection because this species is highly sensitive to edge effect.

BCD Sources

New Sources

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.

Krog H. 1968. *The macrolichens of Alaska*. Norsk Polarinstitutt Skrifter Nr. 144. Oslo.

Jordan WP. 1973. *The genus Lobarina in North America north of Mexico*. *Bryologist* 76(2): 225-251

Pile LH, Sherwood MA, Tracy DM, and Nielson D. 1972. Estimates of biomass and fixed N of epiphytes from

oldgrowth Douglas fir. Pp 177-187 in: Proceedings, Research on coniferous Forest ecosystems, JF Franklin, LJ Dempster, and RH Waring (eds) USDA Forest Service, Portland, OR.

Sillett, S. 1994. Growth rates of two epiphytic cyanolichen species at the edge and in the interior of a 700-year-old Douglas fir forest in the western Cascades of Oregon. *Bryologist* 97(3): 321-324.