

Heritage Rank Status Factors

Elcode NLTEST7930

Gname LOBARIA LINITA

Gcomname

Number of Occurrences

E = >300

Comments

Number of Occurrences with Good Viability

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

Comments

Population Size

Comments Circumpolar.

Range Extent

H = > 2,500,000 km² (greater than 1,000,000 square miles)

Comments An arctic-alpine species with circumpolar distribution (Jordan 1973). Known from all of Alaska, across arctic Canada, most of British Columbia, south along the west coast into northwestern Oregon in the Cascades (Brodo et al. 2001). Also occurs inland to western Montana (McCune & Geiser 1997). One population is known in California. Also known from Japan (Krog 1968, Czezug and Yoshida 1991) and Europe (Pisut 1971, Czezug and Olech 1990).

Area of Occupancy

H = >20,000 km² (greater than 5,000,000 acres)

LH = >200,000 km (greater than 125,000 miles)

Comments Estimated to occupy 25,000 square miles in the lower 48 states; circumpolar arctic/alpine species.

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

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

Comments

Threats

H = Unthreatened. Threats if any, when considered in comparison with natural fluctuation and change, are minimal or very localized, not leading to significant loss or degradation of populations, occurrences, or area even over a few decades' time. (Severity, scope, and/or immediacy of threat considered Insignificant.)

Scope Insignificant Severity Insignificant Immediacy Insignificant

Comments Sensitive to air pollution (McCune & Geiser 1997).

Number of Appropriately Protected and Managed Occurrences

Comments No protected occurrences in Oregon or California. In Washington, there are 80 protected sites. Circumpolar; probably protected elsewhere.

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 Reproduction is by spores. Arctic and alpine specimens are usually sterile (Brodo et al. 2001).

Environmental Specificity

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

Comments In the Pacific Northwest, this species is found in moist habitats with coastal influence (McCune & Geiser 1997). In the arctic, it is found in pine sod (Brodo et al. 2001).

Other Considerations

NRANK - N3. The extant of this species in the arctic is unclear.

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Grank G4G5 **Grank Date** 11/30/2002

Reasons

An arctic-alpine circumpolar species. Sensitivity to air pollution could impact the species, especially the more southern populations.

BCD Sources

New Sources

Brodo, Irwin M., Sharnoff, Sylvia D. and Stephen Sharnoff. 2001. Lichens of North America. Yale University Press. New Haven and London. 795 pp.

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

Czczuga B, Yoshida K. 1991. Carotenoids in certain lichens from the Chichibu Mountains, central Japan. Feddes Repertoriu, 102(7-8): 661-666.

Czczuga B, Olech M. 1990. Investigations on carotenoids in lichens XXV. Studies of carotenoids i lichens from Spitsbergen. Phytion (Horn) 30(2): 235-245.

Pisut I. 1971. Geographic distribution of the lichen genus *Lobaria* in Slovakia. Zbornik Slovenskeho Narodneho Muzeo Prirodne Vedy. 17(1): 105-130. Jordan WP. 1973. The genus *Lobaria* in North America north of Mexico. Bryologist 76(2): 225-251
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.