

Heritage Rank Status Factors

Elcode NLTEST5420
Gname BRYORIA PSEUDOCAPILLARIS

Gcomname

Number of Occurrences

C = 21- 80

Comments Known from only about 10 locations, with few new localities expected (see Thor 1996).

Number of Occurrences with Good Viability

B = Very few (1-3) occurrences with good viability

C = Few (4-12) occurrences with good viability

Comments

Population Size

D = 1,000-2,500 individuals

Comments Total area of suitable habitat is likely to be less than 100 square kilometers (Thor 1996).

Range Extent

D = 1,000-5,000 km² (about 400-2,000 square miles)

Comments Found at one site in Washington (Deception Pass; D. Glavich, unpublished), and along the Oregon and California coasts from Lane County, Oregon to San Luis Obispo County, California (Riefner 1995).

Area of Occupancy

C = 4-20 km² (about 1,000-5,000 acres)

D = 20-100 km² (about 5,000-25,000 acres)

LC = 40-200 km (about 25-125 miles)

LD = 200-1,000 km (about 125-620 miles)

Comments Maximum estimate is 5,750 acres, but a square mile per site is generous. The total area of suitable habitat is likely to be less than 100 square kilometers (Thor 1996).

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 Species was described in 1977, so trends not known. Still working on range. (Glavich, 2002 unpublished).

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

U = Unknown. Short-term trend in population, range, area occupied, and number and condition of occurrences

unknown.

Comments

Threats

B = Moderate and imminent threat. Threat is moderate to severe and imminent for a significant proportion (20-60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a moderate area, either causing irreversible damage or requiring a long-term recovery.

Scope Moderate Severity Moderate Immediacy Moderate

Comments Threats include destruction of habitat due to building activities and/or recreation, mass movement of sand dunes, climate change (global warming) and the severely fragmented distribution pattern (Thor 1996). The population is so small that removal of even one site would decrease the total population significantly.

Number of Appropriately Protected and Managed Occurrences

C = Several (4-12) occurrences appropriately protected and managed

Comments There are at least 3 protected sites in CA, 1 in OR and 1 in WA. If State Parks are not considered protected, there are only 3 protected sites total.

Intrinsic Vulnerability

A = Highly Vulnerable. Species is slow to mature, reproduces infrequently, and/or has low fecundity such that populations are very slow (> 20 years or 5 generations) to recover from decreases in abundance; or species has low dispersal capability such that extirpated populations are unlikely to become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are highly susceptible to changes in composition and structure that rarely if ever are reversed through natural processes even over substantial time periods (> 100 years).

Comments The habitat is along dunes that cover and kill the trees at a pretty good rate.

Environmental Specificity

A = Very Narrow. Specialist or community with key requirements scarce.

Comments Found exclusively on the branches of *Picea sitchensis*, either on exposed headlands or stabilized dunes. The minimum December temperature and the amount of precipitation from fog are important habitat factors. Hypermaritime, 2000-year old forests.

Other Considerations

NRANK - N1N2.

Edition 2/20/2003 **Edauthor** Gries, D., rev. Daphne Stone (2002)

Grank G1G2 **Grank Date** 11/30/2002

Reasons

Bryoria pseudocapillaris is known from approximately ten locations along the Oregon and California coasts. This very rare lichen is found exclusively on trees on exposed headlands or stabilized dunes. Specific temperature and moisture requirements (zone of high precipitation from fog) are necessary and the total area of suitable habitat is likely to be less than 100 square kilometers. Threats to the species are destruction of habitat due to building activities and/or recreation, mass movement of sand dunes, climate change, and the severely fragmented distribution pattern.

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.
- Thor, G. 1996. September 10-last update. Swedish threatened species unit: Guest: ICCL. Online. Available: <http://www.dha.slu.se/guest/global3.htm#start>. Accessed 1998, December 16.
- Riefner, R.E., Jr., P.A. Bowler, and B.D. Ryan. 1995. New and interesting records of lichens from California. Bulletin of the California Lichen Society 2(2), Winter 1995. Online. Available: http://ucjeps.herb.berkeley.edu/r/moe/cals2_2.html. Accessed 1999, January 25.
- Brodo IM and DL Hawksworth. 1977. Alectoria and allied genera in North America. Opera Botanica 42: 1-164
- Glavich, D, Geiser LH, and Mikulun A. 2002 unpubl. Assessment of the old-growth forest association and habitat requirements of federally listed coastal lichens from northern California, Oregon and Washington, USA. USDA-Forest Service