

Washington Status Factors

Elcode NLEEC1C050
Gname NEPHROMA OCCULTUM
Gcomname

Number of Occurrences

A = 1 - 5

Comments 4-5 populations in WA.

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

B = 50-250 individuals

Comments Estimate 50 individuals in WA.

Range Extent

E = 5,000-20,000 km² (about 2,000-8,000 square miles)

Comments Occurs west of the Cascades. Range in WA is about 5,000 square miles.

Area of Occupancy

B = 0.4-4 km² (about 100-1,000 acres)

LB = 4-40 km (about 2.5-25 miles)

Comments

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 Described in 1980; entire range still unknown.

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

Comments Presumably declining as old-growth areas and other old forests decline.

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 Moderate

Comments Logging of old-growth forests is a very major threat (Goward 1994). Management should focus on populations and habitat needs rather than on individuals. Calculations in a study area in southwestern Oregon show that cutting with retention of individual trees surrounded by small buffers could result in the eventual loss of *N. occultum* (Rosso et al. 2000).

Number of Appropriately Protected and Managed Occurrences

B = Few (1-3) occurrences appropriately protected and managed

Comments Five protected occurrences in Washington. Riparian zones are not adequate protection for this species: it does not survive on edges.

Intrinsic Vulnerability

U = Unknown

Comments Occurs mainly in old-growth trees, which are in the highest demand. Does not succeed on edges. Reproductive capacity and speed unknown.

Environmental Specificity

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

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

Comments Although the requirement appears to be stable, fairly old forest, apparently appropriate microenvironments occur only in a subset of these forests in the Pacific Northwest.

Other Considerations

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

Grank S1 **Grank Date** 11/30/2002

Reasons

Known from only 4-5 Washington sites.

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.

Goward, T. 1994. Status report on the cryptic paw lichen, *NEPHROMA OCCULTUM*. Committee on the status of endangered wildlife in Canada, Ottawa. 32 pp. Rosso A, McCune B, Rambo T, 2000. Ecology and conservation of a rare, old-growth-associated canopy lichen in a silvicultural landscape. *Bryologist* 103(1): 117-127.

Wetmore, CM. 1980. *Nephroma occultum*, new species from North America. *Bryologist* 83(2): 2443-247.