Oregon Status Factors

Elcode NBMUS7B010

Gname TETRAPHIS GENICULATA

Gcomname MOSS

Number of Occurrences

A = 1 - 5

Comments Four occurrences are known in Oregon. The ISMS database contains 4 records for the state, representing 4 sites. Plants are usually intermixed with much more common Tetraphis pellucida, and presumably this species is somewhat more widespread than numbers indicate.

Number of Occurrences with Good Viability

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

Comments Estimated 3 occurrences in Oregon with good viability.

Population Size

C = 250-1,000 individuals

Comments Estimated 500 individuals in Oregon.

Range Extent

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

Comments Estimated range is about 10,000 square miles in Oregon. Known from 2 sites in the northern Cascade Range and 2 sites in the Coast Range.

Area of Occupancy

B = 0.4-4 km2 (about 100-1,000 acres)

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

Comments Estimated area of occupancy is about 100 acres in Oregon.

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

D = Moderate Decline (decline of 25-50%)

Comments Long-term trend is a moderate decline of 25-50%. Logging and subsequent drying of the understory, coupled with long-term loss of large woody debris in various decay classes and diameters, has reduced the abundance of this species and other more common taxa associated with rotting wood.

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 Short-term decline of 10-30% of population may be ongoing, because of reasons cited above.

Threats

D = Moderate, non-imminent threat. Threat is moderate to severe but not imminent for a significant portion of the population, occurrences, or area.

Scope Moderate Severity Moderate Immediacy Low

Comments Moderate, non-imminent threat. Logging and subsequent drying of the understory, coupled with long-term loss of large woody debris in various decay classes and diameters, has reduced the abundance of this species and other more common taxa associated with rotting wood.

Number of Appropriately Protected and Managed Occurrences

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

Comments One occurrences protected in Oregon and managed accordingly.

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 Moderately vulnerable. Plants are small, but reproduce readily by spores, gemmae, and fragmentation of gametophytes. They are limited by their dependence on wood substrate of various decay classes and diameters that have become scarce in managed forests.

Environmental Specificity

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

Comments Narrow environmental specificity. Habitat is well-rotted stumps and logs (rarely on rocks) in shaded, humid locations at low to middle elevations. It is almost always associated with the common Tetraphis pellucida. Associated bryophyte species are typical of rotting wood in cool, shaded and moist habitats, especially on stream terraces and floodplains. It is likely that they have mycorrhizal associations with decomposer fungi in the rotting wood, and play a key role in nutrient cycling in forest ecosystems.

Other Considerations

ORNHIC - List 2. Plants are usually intermixed with much more common Tetraphis pellucida, and presumably this species is somewhat more widespread than numbers indicate.

Edition 2/20/2003 **Edauthor** John A. Christy

Grank S1 **Grank Date** 11/19/2002

Greasons

Four occurrences are known in Oregon. Estimated 3 occurrences in Oregon with good viability. Estimated 500 individuals in Oregon. Estimated range is about 10,000 square miles in Oregon. Estimated area of occupancy is about 100 acres in Oregon. Long-term trend moderate decline of 25-50%. Short-term decline of 10-30%. Moderate, non-imminent threat. One occurrences protected in Oregon. Moderately vulnerable. Narrow environmental specificity.

BCD Sources

New Sources

Christy, J.A. & D.H. Wagner. 1996. Guide for the identification of rare, threatened or sensitive bryophytes in the range of the northern spotted owl, western Washington, western Oregon, and northwestern California. USDI Bureau of Land Management. 200 pp.
Crum, H. & L.E. Anderson. 1981. Mosses of Eastern North America. 2 vols. Columbia University Press, New York. 1328 pp.
USDA Forest Service, USDI Bureau of Land Management, USDI Fish and Wildlife Service. 2002. Interagency Species Management System [ISMS] database. Portland, Oregon.
University of Alberta. 2002. Devonian Botanic Garden bryophyte database. Edmonton, Alberta. <http://www.devonian.ualberta.ca/devonian/bryosearch.cfm>.
New York Botanical Garden. 2002. Catalog of American bryophytes database. New York, NY. <http://www.nybg.org/bsci/hcol/bryo>