Heritage Rank Status Factors

Elcode NBMUS9Q040

Gname RHIZOMNIUM NUDUM

Gcomname MOSS

Number of Occurrences

E = >300

Comments Estimated more than 300 occurrences worldwide. The University of Alberta database has the most complete listing with 97 records, mostly from Alaska and British Columbia. The ISMS database has 190 records, representing 127sites.

Number of Occurrences with Good Viability

E = Many (41-125) occurrences with good viability

Comments Estimated 100 occurrences worldwide with good viability.

Population Size

F = 10,000-100,000 individuals

Comments Estimated 25,000 individuals worldwide.

Range Extent

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

Comments Estimated range 10,000 square miles worldwide. Amphiberingian distribution. Russian Far East, Japan, Alaska, British Columbia, Alberta, Washington, Idaho, Montana, Oregon. Records from northern California reportedly based on misidentifications.

Area of Occupancy

A = <0.4 km2 (less than about 100 acres)

LA = <4 km (less than about 2.5 miles)

Comments Estimated area of occupancy 100 acres worldwide.

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

E = Relatively Stable (±25% change)

Comments Long-term trend worldwide relatively stable. There may be some declines near the southern end of its range where it is affected by logging.

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 ±10% fluctuation

Comments Short-term trend worldwide stable for reasons cited above.

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 Slightly threatened worldwide. Logging and trampling by hikers, horses and cows at stream crossings and watering holes could endanger some populations.

Number of Appropriately Protected and Managed Occurrences

D = Many (13-40) occurrences appropriately protected and managed

Comments Estimated 40 sites protected worldwide. Presumably protected adequately by stream and wetland buffers, or in designated wilderness areas.

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 and fragile, but reproduce readily by spores and fragmentation of gametophytes.

Environmental Specificity

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

Comments Narrow environmental specificity. Located on moist (but not wet) organic soil, rocks, or rotten logs in damp shaded sites, sometimes along streams or by late-persisting snow beds.

Other Considerations

NRANK - N4. Ranked S2 in Alberta.

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

Grank G4 **Grank Date** 11/22/2002

Greasons

Estimated more than 300 occurrences worldwide. Estimated 100 occurrences worldwide with good viability. Estimated 25,000 individuals worldwide. Estimated range is 10,000 square miles worldwide. Estimated area of occupancy is 100 acres worldwide. Long-term and short-term trends relatively stable. Slightly threatened worldwide. Estimated 40 sites protected worldwide. Moderately vulnerable. Narrow environmental specificity.

BCD Sources

Noguchi, A. 1987. Illustrated Moss Flora of Japan. Part 1. The Hattori Botanical Laboratory, Hiroshima, Japan. 242 pp.

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.
University of Alberta. 2002. Devonian Botanic Garden bryophyte database. Edmonton, Alberta. <http://www.devonian.ualberta.ca/devonian/bryosearch.cfm>.
USDA Forest Service, USDI Bureau of Land Management, USDI Fish and Wildlife Service. 2002. Interagency Species Management System [ISMS] database. Portland, Oregon.