

Heritage Rank Status Factors

Elcode NBHEP15080
Gname DIPLOPHYLLUM PLICATUM
Gcomname LIVERWORT

Number of Occurrences

E = >300

Comments Estimated 500 occurrences worldwide. The University of Alberta database has the most complete listing, with 262 records worldwide. The ISMS database contains 56 records, representing about 31 sites.

Number of Occurrences with Good Viability

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

Comments Estimated 200 occurrences worldwide with good viability.

Population Size

F = 10,000-100,000 individuals

Comments Estimated 20,000 individuals worldwide.

Range Extent

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

Comments Estimated range is 200,000 square miles worldwide. Amphiberingian distribution, primarily maritime. Found in Japan, Alaska, British Columbia, Washington and Oregon.

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 500 acres worldwide.

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 Moderate long-term decline is 25-50% worldwide. Local impacts from logging.

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 0-30% worldwide, due to logging in coastal forests.

Threats

E = Localized substantial threat. Threat is moderate to severe for a small but significant proportion of the population, occurrences, or area. Ecological community occurrences are directly impacted over a small area, or in a small portion of their range, but threats require a long-term recovery.

Scope Low Severity Moderate Immediacy Moderate

Comments Localized substantial threat. Logging of coastal forests is primary threat.

Number of Appropriately Protected and Managed Occurrences

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

Comments Estimated 30-40 protected occurrences worldwide.

Intrinsic Vulnerability

C = Not Intrinsicly Vulnerable. Species matures quickly, reproduces frequently, and/or has high fecundity such that populations recover quickly (< 5 years or 2 generations) from decreases in abundance; or species has high dispersal capability such that extirpated populations soon become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are resilient or resistant to irreversible changes in composition and structure and quickly recover (within 10 years).

Comments Not intrinsically vulnerable. Plants are small and fragile, but reproduce readily by spores and fragmentation of gametophytes. Plants will recolonize sites when suitable habitat and substrate are present, but this depends on the availability of inoculum from nearby populations.

Environmental Specificity

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

Comments Narrow environmental specificity. Located on bark, rotting wood, humus, mineral soil, and rock. Requires high humidity and perennially cool temperatures.

Other Considerations

NRANK - N3. Ranked S2 in Washington and Oregon.

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

Grank G4 **Grank Date** 11/21/2002

Reasons

Estimated 500 occurrences worldwide. Estimated 200 occurrences worldwide with good viability. Estimated 20,000 individuals worldwide. Estimated range 200,000 square miles worldwide. Estimated area of occupancy 500 acres worldwide. Moderate long-term decline 25-50% worldwide. Short-term decline 10-30% worldwide. Localized substantial threat. Estimated 30-40 protected occurrences worldwide. Not intrinsically vulnerable. Narrow environmental specificity.

BCD Sources

New Sources

USDA Forest Service, USDI Bureau of Land Management, USDI Fish and Wildlife Service. 2002. Interagency Species Management System [ISMS] database. Portland, Oregon.
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.

