Washington Status Factors

Elcode NBHEP15010

Gname DIPLOPHYLLUM ALBICANS

Gcomname LIVERWORT

Number of Occurrences

C = 21- 80 Comments About 53 occurrences are known in Washington.

Number of Occurrences with Good Viability

D =Some (13-40) occurrences with good viability

Comments Estimated 40 occurrences in Washington with good viability.

Population Size

E = 2,500-10,000 individuals

Comments Estimated 20,000 individuals in Washington.

Range Extent

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

Comments Estimated range is 20,000 square miles in Washington. Known from the Cascade Range, southwestern Washington, Olympic Peninsula.

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 100 acres in Washington.

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

 $E = Relatively Stable (\pm 25\% change)$

Comments Long-term trend is relatively stable. In some regions, the species has possibly increased, because of ability to grow on disturbed soil.

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 is stable.

Threats

H = Unthreatened. Threats if any, when considered in comparison with natural fluctuation and change, are minimal or very localized, not leading to significant loss or degradation of populations, occurrences, or area even over a few decades' time. (Severity, scope, and/or immediacy of threat considered Insignificant.)

Scope Insignificant Severity Insignificant Immediacy Insignificant

Comments Unthreatened, as far as is known. Local threats from logging. In addition to forest habitat, this species also grows on road cuts and is not dependent on old growth forests. This species is likely to persist as long as there are shady, cool, moist habitats.

Number of Appropriately Protected and Managed Occurrences

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

Comments Five protected occurrences in Washington.

Intrinsic Vulnerability

C = Not Intrinsically 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 Five protected occurrences in Washington. 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

- C = Moderate. Generalist or community with some key requirements scarce.
- Comments Narrow to generalist environmental specificity. Located on rotting logs, bark, wet rocks and mineral soil, mostly in maritime regions. Also found in organic substrates in late successional forests and on soil on streambanks and road cuts.

Other Considerations

Edition	2/20/2003	Edauthor	John A. Christy
Grank	S4	Grank Date	11/21/2002

Greasons

About 53 occurrences are known in Washington. Estimated 40 occurrences in Washington with good viability. Estimated 20,000 individuals in Washington. Estimated range is 20,000 square miles in Washington. Estimated area of occupancy is 100 acres in Washington. Long-term and short-term trends are relatively stable. Unthreatened, as far as is known. Five protected occurrences in Washington. Not intrinsically vulnerable. Narrow to generalist environmental specificity.

BCD Sources

Hong, W.S. 1980. A study of the distribution of Diplophyllum in western North America. The Bryologist 83(4):497-504.

Schuster, R.M. 1974. The Hepaticae and Anthocerotae of North America East of the Hundredth Meridian. Volume III. Columbia University, New York.

Schuster, R.M. 1988. The Hepaticae of South Greenland. J. Cramer. Berlin and Stuttgart, Germany. 255 pp.

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.

University of Alberta. 2002. Devonian Botanic Garden bryophyte database. Edmonton, Alberta. http://www.devonian.ualberta.ca/devonian/bryosearch.cfm.