

Washington Status Factors

Elcode NBMUS2M031
Gname ENCALYPTA BREVICOLLA VAR CRUMIANA
Gcomname MOSS

Number of Occurrences

A = 1 - 5

Comments Known from only 1 locality in Washington, and not relocated since 1931. The ISMS database contains 2 records, representing the single Washington site.

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments Viability of Washington population unknown. Not seen since since 1931.

Population Size

U = Unknown

Comments Size of Washington population unknown. Not seen since since 1931.

Range Extent

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

Comments Estimated range is 5,000 square miles in Washington, based on geographic spread of two known points between Mount Rainier and southwestern Oregon. Endemic to the Pacific Northwest.

Area of Occupancy

U = Unknown

LU = Unknown

Comments Area of occupancy of Washington population unknown. Not seen since since 1931.

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 Long-term trend of Washington population unknown. Not seen since since 1931.

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

U = Unknown. Short-term trend in population, range, area occupied, and number and condition of occurrences unknown.

Comments Short-term trend of Washington population unknown. Not seen since since 1931.

Threats

A = Substantial, imminent threat. Threat is moderate to severe and imminent for most (> 60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a widespread area, either causing irreversible damage or requiring long term recovery

Scope High Severity High Immediacy High

Comments Substantial, imminent threat from fire, road construction, quarrying, air pollution, and overcollecting. Overcollecting may have caused the estimated decline of 50% in the Oregon population between 1978-2002 (Christy 2002).

Number of Appropriately Protected and Managed Occurrences

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

Comments The historic population in Mount Rainier National Park, if still extant, is presumably protected and appropriately managed.

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. Most species of Encalypta have spotty distributions and populations are scanty when they occur. 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. Habitat at the Oregon site is a dry, north-facing igneous outcrop, where the species grows in crevices, horizontal shelves, vertical faces, and overhanging ledges, many with partial shade. The outcrop is situated at the top of an open, exposed saddle at the head of a valley that may funnel moist marine air into the saddle.

Other Considerations

Ranked S1 in Oregon.

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

Grank SH **Grank Date** 1/18/2003

Reasons

Known from only 1 locality in Washington, not relocated since 1931. Viability of Washington population unknown. Size of Washington population unknown. Estimated range is 5,000 square miles in Washington. Area of occupancy of Washington population is unknown. Long-term trend of Washington population unknown. Short-term trend of Washington population unknown. Substantial, imminent threat. The historic population in Mount Rainier National Park, if still extant, is presumably protected and appropriately managed. Moderately vulnerable. Narrow environmental specificity.

BCD 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.

New Sources

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

Horton, D.G. 1983. A revision of the Encalyptaceae (Musci), with particular reference to the North American taxa. Part II. *Journal of the Hattori Botanical Laboratory* 54: 353-532.

Christy, J.A. 2002. Survey for *Encalypta brevicolla* var. *crumiana*, Siskiyou National Forest, Oregon. Report to USDA Forest Service, Gifford Pinchot National Forest. Oregon Natural Heritage Information Center, Oregon State University. 12 pp. + appendices.