

Oregon Status Factors

Elcode NBMUS99010
Gname IWATSUKIELLA LEUCOTRICHA
Gcomname MOSS

Number of Occurrences

A = 1 - 5

Comments Two occurrences are known in Oregon, from Saddle Mountain State Park and Onion Peak Preserve. The ISMS database has 7 records representing the Saddle Mountain site. It is likely that Iwatsukiella also occurs on a few nearby peaks in Clatsop County.

Number of Occurrences with Good Viability

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

Comments The 2 known sites in Oregon have good viability.

Population Size

A = 1-50 individuals

Comments Estimated less than 50 individuals in Oregon.

Range Extent

A = <100 km² (less than about 40 square miles)

Comments Estimated range is about 40 square miles in Oregon. Based on known sites, suitable habitat is restricted to the tall basalt peaks near the Pacific Ocean in Clatsop and Tillamook counties.

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 is less than 100 acres in Oregon. Based on known sites, habitat is restricted to small areas around peak summits.

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

C = Substantial Decline (decline of 50-75%)

Comments Substantial long-term decline of 50-75%, caused by widespread logging of peaks near the ocean.

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

C = Rapidly Declining. Decline of 30-50% in population, range, area occupied, and/or number or condition of occurrences

Comments Rapid short-term decline of 30-50%.

Threats

B = Moderate and imminent threat. Threat is moderate to severe and imminent for a significant proportion (20-60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a moderate area, either causing irreversible damage or requiring a long-term recovery.

Scope Moderate **Severity** Moderate **Immediacy** Moderate

Comments Moderate and imminent threat. Two known sites protected, but new logging is anticipated for some potential sites in 5-20 years.

Number of Appropriately Protected and Managed Occurrences

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

Comments Two sites protected, one each in Saddle Mountain State Park and Onion Peak Preserve.

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 fragmentation of gametophytes. Their epiphytic habit makes them vulnerable to logging. Sporophytes are unknown for most North American populations.

Environmental Specificity

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

Comments Narrow environmental specificity. Forms thin mats on twigs and bark of conifers, cottonwoods, and alders, often along ridges subject to fog penetration, mostly along the immediate coast. At the southern end of its range in Washington and Oregon, it is restricted to silver fir forests at or above 3000 feet elevation.

Other Considerations

ORNHIC - List 2.

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Grank S1 **Grank Date** 1/13/2003

Reasons

Two occurrences are known in Oregon. The 2 known sites in Oregon have good viability. Estimated less than 50 individuals in Oregon. Estimated range is about 40 square miles in Oregon. Estimated area of occupancy is less than 100 acres in Oregon. Substantial long-term decline of 50-75%. Rapid short-term decline of 30-50%. Moderate and imminent threat. Two sites protected. 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.

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.