

Oregon Status Factors

Elcode NBHEP1Q040
Gname KURZIA MAKINOANA
Gcomname LIVERWORT

Number of Occurrences

A = 1 - 5

Comments One occurrence has been reported from Oregon. The ISMS database has no record for Oregon.

Number of Occurrences with Good Viability

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

Comments One occurrence with good viability in Oregon.

Population Size

U = Unknown

Comments Population size unknown.

Range Extent

D = 1,000-5,000 km² (about 400-2,000 square miles)

Comments Estimated range is 1000 square miles in Oregon, based on proximity to coast and distance to nearest population in Washington.

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 1 acre in Oregon.

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. This species is tiny and not well collected, and may just be rare throughout its range.

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 $\pm 10\%$ fluctuation

Comments Short-term trend is stable, for reasons cited above.

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 in Oregon. Single population could be wiped out by natural or other causes. More populations need to be located to mitigate threat.

Number of Appropriately Protected and Managed Occurrences

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

Comments One protected occurrence in Oregon.

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, but reproduce readily by spores, gemmae, and fragmentation of gametophytes. They are limited by their dependence on wood substrate of various decay classes and diameters that have become scarce in managed forests.

Environmental Specificity

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

Comments Narrow to moderate environmental specificity. Located on wet rocks, cliffs, bark, humus, peat, mucky soil, and rotten wood in shady, moist sites.

Other Considerations

ORNHIC - List 2. There is disagreement as to whether records from the Pacific Northwest are *Kurzia makinoana*, an Asian species, or the more widespread *K. sylvatica*. Hong (1988) called it *K. sylvatica*. Whatever its identity may be, it is very rare in Oregon.

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Grank S1 **Grank Date** 11/22/2002

Reasons

One occurrence has been reported from Oregon. One occurrence with good viability in Oregon. Moderately vulnerable. Narrow to moderate environmental specificity. Population size unknown. Estimated range is 1000 square miles in Oregon. Estimated area of occupancy is 1 acre in Oregon. Long-term and short-term trends are relatively stable. Substantial, imminent threat in Oregon. One protected occurrence in Oregon. Moderately vulnerable. Narrow to moderate 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.

Hong, W.S. 1988. The family Lepidoziaceae in North America west of the hundredth meridian. *Bryologist* 91: 326-333.