

## Oregon Status Factors

**Elcode** NLSM000008

**Gname** LEPTOGIUM RIVALE

**Gcomname**

### Number of Occurrences

C = 21- 80

**Comments** 44 occurrences.

### Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

**Comments**

### Population Size

**Comments** Estimated 440 individuals, minimum.

### Range Extent

G = 200,000-2,500,000 km<sup>2</sup> (about 80,000-1,000,000 square miles)

**Comments** Mountain streams in the Cascades.

### Area of Occupancy

G = 2,000-20,000 km<sup>2</sup> (500,000-5,000,000 acres)

LG = 20,000-200,000 km (about 12,500-125,000 miles)

**Comments**

### 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**

### 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**

## 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**    Change in water level and water pollution are threats, including acid rain and eutrophication. The species' mountain habitat probably makes it less susceptible to threats than lowland species.

## Number of Appropriately Protected and Managed Occurrences

U = Unknown whether any occurrences are appropriately protected and managed

**Comments**    OR has 6 protected sites.

## Intrinsic Vulnerability

A = Highly Vulnerable. Species is slow to mature, reproduces infrequently, and/or has low fecundity such that populations are very slow (> 20 years or 5 generations) to recover from decreases in abundance; or species has low dispersal capability such that extirpated populations are unlikely to become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are highly susceptible to changes in composition and structure that rarely if ever are reversed through natural processes even over substantial time periods (> 100 years).

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**    Slow growers.

## Environmental Specificity

A = Very Narrow. Specialist or community with key requirements scarce.

**Comments**    More-or-less submerged in cold, clear mountain streams or lakes. This specialized habitat certainly accounts for the few collections (Jorgensen 1994).

## Other Considerations

ORNHIC - List 4. Water pollution a threat

**Edition**      2/20/2003      **Edauthor**      Daphne Stone

**Grank**      S3      **Grank Date**      11/30/2002

## Reasons

Known from 44 sites in Oregon, but the species is restricted to mountain streams and lakes on the western slope of the Cascades.

## BCD Sources

## New Sources

Brodo, Irwin M., Sharnoff, Sylvia D. and Stephen Sharnoff. 2001. Lichens of North America. Yale University Press. New Haven and London. 795 pp.

McCune, B. and L. Geiser. 1997. *Macrolichens of the Pacific Northwest*. Oregon State University Press, Corvallis, Oregon. A co-publication with the U.S. Department of Agriculture Forest Service. 386 pp.