# **Heritage Rank Status Factors**

Elcode NLLEC363G0

Gname CLADONIA NORVEGICA

Gcomname

## **Number of Occurrences**

D = 81 - 300E = >300

Comments About 30 Pacific Northwest populations. Also known from western Europe, Japan, Russia and

other locales.

# **Number of Occurrences with Good Viability**

Comments

# **Population Size**

Comments Impossible to know what constitutes an 'individual.'

# **Range Extent**

H = > 2,500,000 km 2 (greater than 1,000,000 square miles)

Comments

In North America this species ranges from Alaska to Oregon and inland to southern British Columbia (McCune and Geiser 1997), also extending into Alberta. In Germany it is found in montane and high montane areas (Wirth 1995). New discovered in Sweden, where it was found in a ravine that is a site of great lichen diversity and the habitat of several rare or threatened forest species (Muhr 1987). Also newly found in Switzerland in a sub-oceanic montane climate where extensive woodland management and relatively low levels of air pollution are considered to be responsible for the very high number of species (Dietrich 1991). Recently discovered in Central Europe, in the northern Black Forest (Schindler 1991), and in Japan (Stenroos and Ahti 1994). This species is thought to be quite common in northwestern Europe and is also found in the Alps, southern-most South America, western North America, Japan (only 1 locality according to Tonsberg and Goward (1992), Russia (Dudoreva 1995), and Austria (Berger et al. 2000).

## **Area of Occupancy**

H = >20,000 km2 (greater than 5,000,000 acres)

LH = >200,000 km (greater than 125,000 miles)

Comments

# 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

# 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

#### **Threats**

U = Unknown. The available information is not sufficient to assign degree of threat as above. (Severity, scope, and immediacy are all unknown, or mostly [two of three] unknown or not assessed [null].)

Scope Unknown Severity Unknown Immediacy Unknown

Comments

# **Number of Appropriately Protected and Managed Occurrences**

D = Many (13-40) occurrences appropriately protected and managed E = Very many (>40) occurrences appropriately protected and managed

Comments In the Pacific Northwest there are 19 protected sites.

# **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 This is a ground-growing species, so it is not as vulnerable to air pollution as epiphytes. In general Cladonia species grow quickly (5-10 years to maturity).

## **Environmental Specificity**

C = Moderate. Generalist or community with some key requirements scarce.

Comments Suboceanic.

## **Other Considerations**

NRANK - N2N3. Described in 1984.

Edition 2/20/2003 Edauthor Daphne Stone

**Grank** G4G5 **Grank Date** 12/18/2002

### **Greasons**

This species is known primarily from the Pacific Northwest of North America and from Europe, but it has also been found in Japan, Russia, and southernmost South America. Population sizes are not known but this species is possibly common in parts of northwestern Europe. Twenty-nine populations are currently known in the Pacific Northwest of North America.

### **BCD Sources**

## **New Sources**

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.

Wirth, V. 1995. Die Flechten Baden-Württembergs. Teil 1 & 2. Ulmer GmBH. Stuttgart.

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Muhr, L-E. 1987. The lichen flora of Gravbacksravinen Varmland Sweden. Svenks Botanisk Tidsrift 81(1): 17-36

Dietrich M. 1991. The lichen flora of the Merli Forest Giswil OW Central Switzerland. Botanica Helvetica 101(2): 167-182.

Schindler H. 1991. The higher lichens of Northern Black Forest SW Germany 6. Cladonia norwegica. Carolinea 49: 123-124.

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Berger F, Priemetzhofer F. 2000. New and rare lichens and lichenicolous fungi from Upper Austria III. Herzogia 14: 59-84.