

## Heritage Rank Status Factors

**Elcode** NF000TRHE7  
**Gname** TREMISCUS HELVELLOIDES  
**Gcomname**

### Number of Occurrences

E = >300

**Comments** The translucent watermelon pink to salmon orange petal-like firm-gelatinous fruiting bodies arise from the forest floor and are easy to spot against their usual background of deep mosses. The species was described from Europe and is widespread in cool coniferous forests of north temperate regions including the Nordic countries (Hansen et al. 1997) and Japan (Imazeki et al. 1998). However, it is often considered to be rare. It is on the red lists for Norway with a DC rating and 83 collections (Bendiksen et al. n.d.), and Finland with a VU rating (Rassi et al. 2001). Regionally it is known from at least 4 sites in British Columbia, (Callan et al. n. d.), and has been reported from Alaska, Washington, and Idaho (Farr et al. N.d.) and Washington, Oregon, and California (Fogel n.d., ISMS data base). An accurate count of the number of occurrences in the ISMS data could not be made. According to the ISMS summary of locations 218 sites for this species were located within the region of the northern spotted owl; however, in the list of collections only about half that number of collections are listed and relatively few collections are on the MICH, OSC, or FSL web sites.

### Number of Occurrences with Good Viability

C = Few (4-12) occurrences with good viability

D = Some (13-40) occurrences with good viability

**Comments** This number is the number of protected sites on Buffer/Survey/Manage spread sheet--the ones with the least chance of having their habitat destroyed and thus their viability.

### Population Size

U = Unknown

**Comments** This can not be determined; records reflect only species presence.

### Range Extent

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

**Comments** Probably occurs in cool coniferous north temperate to montane forests throughout the Northern Hemisphere, but with relatively low frequency in many areas.

### Area of Occupancy

U = Unknown

LU = Unknown

**Comments** Short of using molecular tools there is no way to evaluate occupancy.

### 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** insufficient data to address these concerns

### **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** insufficient data to address these concerns

### **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.)

<b>Scope</b>	Insignificant	<b>Severity</b>	Moderate	<b>Immediacy</b>	Low
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**Comments** The ISMS data summary does not reflect the reality of the ISMS complete list of collections. On a global basis this species is typically found in mature, mesic, coniferous forests where the humidity is high and the moss layer well-developed; it is seldom abundant. It may fruit in the same spot, or nearly so, for at least two years in a row but how long-lived a mycelium can be is not known. The main threats are logging, development, and other activities that change the environment in the forest or destroy the forest.

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

C = Several (4-12) occurrences appropriately protected and managed

D = Many (13-40) occurrences appropriately protected and managed

**Comments** Within the range of the northern spotted owl 12 sites are protected at the G1/2 level, 11 are in LSRs of which only 8 are currently protected; 28 are in Matrix lands and not protected.

### **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** This is a species of mature coniferous forests and such habitats are often targets for logging and development. If the habitat is altered beyond a certain point it may take decades for it to recover to the point the fungus will be established and able to fruit.

### **Environmental Specificity**

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

**Comments** This species is found in a variety of cool, moist coniferous forests around the world.

### **Other Considerations**

NRANK - N4.

**Edition** 11/21/2001      **Edauthor** Nancy S. Weber

## Greasons

The translucent watermelon pink to salmon orange petal-like firm-gelatinous fruiting bodies arise from the forest floor and are easy to spot against their usual background of deep mosses. While widely distributed in the North Temperate zone, the species seldom fruits in abundance. The range of the northern spotted owl may be one of the areas of greatest abundance within the range of the species. However, the amount of suitable habitat is declining in large part due to human exploitation of forest resources.

## BCD Sources

### New Sources

Bendiksen, E., Hoiland, K., Brandrud, T.E., and Jorda, J.B. n.d. Red List of Threatened Fungi in Norway. Retrieved 2002.11. from <http://www.toyen.uio.no/botanisk/bot-mus/sopp/>

Callan, B., Dennis, J., Thomson, A., Bahl, and Crawford, C. n.d. Pacific Forestry Centre's Forest Pathology Herbarium (DAVFP) Collections Database. Retrieved 2002.11.12 from [http://www.pfc.forestry.ca/biodiversity/herbarium/voucher\\_specimens\\_e.html](http://www.pfc.forestry.ca/biodiversity/herbarium/voucher_specimens_e.html).

Farr, D.F., Rossman, A.Y., Palm, M.E., and McCray, E.B. n.d. Fungal Databases, Systematic Botany & Mycology Laboratory, ARS, USDA. Retrieved 2002.11. from <http://nt.ars-grin.gov/fungaldatabases/>

Fogel, R. n.d. MICH Fungal Bioinformatics Project. Retrieved 2002.11 from <http://www.herb.lsa.umich.edu/Bioinformatics.htm>.

Hansen, L. and Knudsen, H., eds. 1997. Nordic Macromycetes. Vol. 3. Heterobasidioid, Aphylophoroid and Gastromycetoid Basidiomycetes Copenhagen: Nordsvamp. 444 pp.

Imazeki, R., Otani, Y. and Hongo, T. 1988. Fungi of Japan. Tokyo: Yama-key Publishers Co., Ltd.

Rassi, P., Alanen, A., Kanerva, T., and Mannerkoski, E. (eds.). 2001. The 2000 Red List of Finnish species. Net version updated 30 November 2001. Retrieved 2002.11. from <http://.vyh.fi/eng/environ/naturcon/threat/2000/2000.htm>.