Washington Status Factors

Elcode NF0000SORH

Gname SOWERBYELLA REHNANA

Gcomname

Number of Occurrences

A = 1 - 5

Comments

These brilliant orange stipitate cups may be as much as 30 mm in diameter and are formed in clusters each of which has a common point of origin below the surface of the ground. Look for this species in uneven aged stands with mature to old trees, a well-developed ground cover of mosses, and well-decayed wood in the soil or nearby. The ISMS data set includes a paltry three sites from Washington.

Number of Occurrences with Good Viability

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

Comments

Protected sites are the only ones that are potentially viable in the long term and only one site is protected in Washington at the G1/2 level.

Population Size

U = Unknown

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

Range Extent

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

Comments

For Washington, the ISMS map shows three sites one each in the Wenatchee and Gifford Pinchot National Forests and one site, probably hidden under "Known Sites Data" in the Olympic Peninsula.

Area of Occupancy

U = Unknown

LU = Unknown

Comments Short of using molecular tools there is no way to evaluate this factor.

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

The available data in ISMS does not give dates when collections were made so one can not tell if multiple collections from the same site were made the same year or not. However, label data on several collections at SFSU indicate that the species fruited at least eight years starting in 1962 and ending in 1992 (Weber 1995) in the Mendocino State Forest, an indication that the species may persist for some time in some habitats and localities.

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

The available data in ISMS does not give dates when collections were made so one can not tell if multiple collections from the same site were made the same year or not.

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

This species is found in moist coniferous forests with a variety of mature trees. The specimens are often found on, or associated with moss beds and decaying wood can often been found in the soil when one tries to excavate the bases. Land management practices that result in greatly reducing the amount of coarse woody debris, that change the canopy such that the understory is significantly drier, or that remove the trees completely could adversely impact this species. Logging and other ground-disturbing activities are the main activities that threaten it.

Number of Appropriately Protected and Managed Occurrences

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

Comments

Of the ISMS collections from Washington, one is from a protected (G1/2) area, and the remaining two are from unprotected 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

This species is most often found in sites with diverse mature trees, deep moss beds, and decaying bits of wood in the soil. If the trees are removed and the soil dries out and the humidity falls, the survival of this species is in doubt. There is no evidence that it can survive in situ the decades between land management activities and regrowth of the forest to a suitable stage.

Environmental Specificity

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

Comments The relative paucity of specimens of this conspicuous fungus even from suitable habitats indicates it tolerates a relatively narrow set of environmental parameters.

Other Considerations

Synonym: Aleuria rhenana. The Pacific Northwest appears to be one of the most densely populated areas on record for the species, but even it is far from common. Oregon leads the way with over 2 dozen known sites;

Washington trails even California, the exteme of the range, with only three known sites in spite of years of collecting in the state.

Edition 11/23/2002 **Edauthor** Nancy S. Weber

Grank S1 **Grank Date** 11/23/2002

Greasons

This species appears to be truly rare throughout its range; the fruiting bodies are eyecatching in their coloration and relatively easy to identify at least to genus so the observations on rarity should be taken seriously. The number of individuals can not be determined based on field observations, but this species is patchy in its fruiting pattern in the areas where it occurs. This species in a given locality fruits episodically, several years may elapse between fruitings, a factor that makes surveying for it problematical at best. As suitable habitats are lost to logging, developent, and other forest-altering or forest-removing activities the remaining populations will become increasingly isolated and vulnerable to elimination. More field work in suitable habitats is needed, and more sites found and protected before the species can be considered viable in the state.

BCD Sources

New Sources