California Status Factors

Elcode NF0000SORH

Gname SOWERBYELLA REHNANA

Gcomname

Number of Occurrences

B = 6 - 20

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. Eight sites are reported from California in the ISMS data sheet; at least some of the sites mentioned in Weber (1995) may be among the "Known sites data" in ISMS, otherwise the number of sites is slightly larger. I found no Web-based data or published data that indicates this species occurs much, if at all, outside the range of the northern spotted owl in California.

Number of Occurrences with Good Viability

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

Comments

Of the ISMS collections one locality is protected at the G1/2 level; other collections may well have been made in protected localities, but that can't be conclusively determined from the available information. Protected sites are the only ones that are potentially viable in the long term.

Population Size

U = Unknown

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

Range Extent

F = 20,000-200,000 km2 (about 8,000-80,000 square miles)

Comments

In California its range includes Del Norte Co., Humboldt Co., Mendocino Co., and Shasta Co. It has been collected several times in the Mendocino State Forest and Jedediah Smith Redwoods State Park.

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 1996) 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 one locality is protected at the G1/2 level; two additional collections are from unprotected LSRs.

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 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 known sites for 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. The Mendocino site is arguably the most reliable site for finding this species within the range of the northeren spotted owl.

Edition 11/23/2002 Edauthor Nancy S. Weber

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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. This species is patchy and irregular in its fruiting pattern. Several years may elapse between fruitings, a factor that makes surveying for it problematical at best. As suitable habitats are lost to logging, development, and other forest-altering or forest-removing activities the remaining populations will become increasingly isolated and vulnerable. Eight sites (one permanently protected) are known from California; The species needs to be watched in the state and more of the known populations need to be protected in some manner.

BCD Sources

New Sources

Weber, N.S. 1995. Report on FEMAT Strategy 1 epigeous Discomycetes. Submitted to the USDA Forest Service.