

Oregon Status Factors

Elcode NF000ELSU4
Gname ELAPHOMYCES SUBVISCIDUS
Gcomname

Number of Occurrences

A = 1 - 5

Comments Truffles have been studied in western North America for over a hundred years. This species is confirmed from one site in Oregon (FSL n.d.) An additional site (from Jackson Co., Oregon) cited in Castellano et al. 1999 was not backed up by a collection cited under this name in the web sites of either OSC (n.d.) or FSL (n.d.).

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments No repeat collections of this species from this site have been listed.

Population Size

U = Unknown

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

Range Extent

C = 250-1,000 km² (about 100-400 square miles)

Comments Known from the vicinity of Three Creeks Lake in Deschutes Co., Oregon and tentatively reported from near Prospect in Jackson Co.

Area of Occupancy

U = 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 There is too little information available on the species to evaluate this factor.

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 There is too little information available on the species to evaluate this factor.

Threats

A = Substantial, imminent threat. Threat is moderate to severe and imminent for most (> 60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a widespread area, either causing irreversible damage or requiring long term recovery

Scope High **Severity** High **Immediacy** Moderate

Comments With only two collections reported from the state, fires, logging, or, depending on the location, development, could wipe out the populations, one of which has not been pinpointed.

Number of Appropriately Protected and Managed Occurrences

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

Comments The type locality in Oregon is in a "HCDE" according to the label but I have no idea what that is, but because one site in Oregon is listed as protected at the G1/2 level, it is most likely this one.

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 With so few known sites in spite of intensive collecting of hypogeous macrofungi in the areas of the sites this species must be considered quite vulnerable. Ground disturbing activities (logging, development, etc.) could easily wipe out one or more the sites at any time.

Environmental Specificity

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

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

Comments With such limited data, this ranking is pure speculation, but the low number of sightings is suggestive of the species having some undetermined but narrow set of suitable environmental parameters

Other Considerations

ORNHIC List 3. As truffles go this one is relatively conspicuous so the low number of sites and collections is significant.

Edition 11/14/2002 **Edauthor** Nancy S. Weber

Grank S1S2 **Grank Date** 11/14/2002

Reasons

This species appears to be endemic to the Great Basin and neighboring areas, one of the few fungi I know of with this distribution although the region is known for endemism in other groups of organisms. It was described

from Oregon and is known from the type collection and a second collection that lacks good locality data. The fruiting bodies are light enough in color to be easily spotted by truffle hunters so detection is not the challenge for this species it is for some others. More information is needed to be certain about the status of the species

BCD Sources

New Sources

Castellano, M.A., Smith, J.A., O'Dell, T., Cazares, E., and Nugent, S. 1999. Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan. Portland, Oregon: USDA Forest Service, PNWRS PNW-GTR-476.

FSL Mycology Research Herbarium. Retrieved 2002.11 from <http://www.mgd.nacse.org/fsl>.

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

OSC n.d. Mycological Collections Oregon State University. Retrieved 2002.11. from <http://ocid.nacse.org/research/herbarium/myco/index.html>.