Oregon Status Factors

Elcode NF000ELAN4

Gname ELAPHOMYCES ANTHRACINUS

Gcomname

Number of Occurrences

A = 1 - 5

Comments A truffle with black, hypogeous fruiting bodies about 2-3 cm broad. In spite of over 100 years of work on truffles of western North America only two collections are known. Reported from one site within the range of the northern spotted owl in Jefferson Co., Oregon (Castellano et al. 1999).

Number of Occurrences with Good Viability

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

Comments One site, the Riverside Campground in the Deschutes National Forest is apparently in an LSR, at least one LSR site is on the Buffer Summary. LSRs at present are protected in Oregon. It may be viable. Given the spotty distribution of the species and the fact that the fruiting bodies are hypogeous and black, it is unlikely that there will be good information on the viability of this species in the near future.

Population Size

U = Unknown

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

Range Extent

A = <100 km2 (less than about 40 square miles)

Comments Known from a single site in Oregon.

Area of Occupancy

U = Unknown

LA = <4 km (less than about 2.5 miles)

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 insufficient data 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 insufficient data 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	Moderate	Immediacy	Moderate

Comments Reported from a single site in Oregon that is in an area of moderate foot traffic (a campground). Care needs to be taken to ensure that the area where the truffle occurs is not paved over or otherwise severely distrubed.

Number of Appropriately Protected and Managed Occurrences

U = Unknown whether any occurrences are appropriately protected and managed

Comments One site, the Riverside Campground in the Deschutes National Forest is apparently in an LSR, at least one LSR site is on the Buffer Summary. LSRs at present are protected in Oregon but may not be in the future and a campground does not seem to me to be a protected site.

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).

Comments This species appears to be rare throughout its range and, with one collection known from Oregon, certainly is vulnerable in this State.

Environmental Specificity

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

Comments Unidentified environmental parameters may be important in maintaining the spotty distribution of this species; if it were a generalist and tolerant of a wide range of conditions, it seems likely that more collections of it would be on record.

Other Considerations

ORNHIC List 3. With only one record of this truffle from Oregon this species is truly rare in the state as well as being challenging to find.

Edition 11/13/2002 **Edauthor** Nancy S. Weber

Grank S1 **Grank Date** 11/24/2002

Greasons

Oregon and Idaho are the two states in which this species is known to occur; apparently only one collection of it has been made from each state. The species is apparently rare over its entire range. The North American sites are separated by thousands of miles from the European sites and thus are likely genetically isolated from them. It is entirely possible that cryptic species, detectable at the molecular level, are arising in this species, and the Oregon material likely is or will become distinct.

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.