

Oregon Status Factors

Elcode NF000BANI6

Gname BALSAMIA NIGRENS

Gcomname

Number of Occurrences

A = 1 - 5

Comments Truffles have been studied in western North America for over a hundred years. However, even among truffles in general this species is not common although it may be more abundant than data indicates. Castellano et al. (1999) report five sites in Oregon from within the range of the northern spotted owl, only four of them appear to be listed in ISMS.

Number of Occurrences with Good Viability

A = No (A- or B- ranked) occurrences with good viability

Comments Only specimens in protected areas are potentially viable. Only one site is protected at the G1/2 level.

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 Castellano et al. (1999) report one site in each of three Oregon counties (Benton, Jackson, and Yamhill) and two sites in Josephine Co. ISMS lists four collections as "Known Sites Data."

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 No records found to indicate that the species was collected repeatedly at any site.

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 No records found to indicate that the species was collected repeatedly at any site.

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 While these are guesses, the fungus is mycorrhizal and thus likely dependent on the survival of the surrounding trees for its survival. Fire, logging, and development that result in disturbance of the forest are definite threats over much of its range.

Number of Appropriately Protected and Managed Occurrences

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

Comments While several of the sites are on National Forest or BLM lands, only one is protected at the G1/2 level.

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 The fungus is mycorrhizal and thus likely dependent on the survival of the surrounding trees for its survival. Thus any factors affecting the health and persistence of the forest (e.g., fire, logging, and development) will impact this species. The fungus is likely associated with mature stands and is likely dispersed primarily by animals that consume fruiting bodies and deposit spores in their scat.

Environmental Specificity

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

Comments

Other Considerations

ORNHIC List 3. Has also been called *Balsamia nigra*. Not very well known but not seen often in spite of over 100 years of studies of western truffles. Can be mistaken for other black truffles in the field unless care is taken in observing the fruiting bodies; distinctive microscopically.

Edition 11/14/2002 **Edauthor** Nancy S. Weber, Jimmy Kagan, Efren Cazares

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Reasons

Truffles have been a group of interest to mycologists in Western North America for over 100 years. However, this species is known from only five sites in Oregon. I found no evidence that the species had been collected more than once at any site. Specimens are not easy to find because of their black color and relatively (to other truffles) small size. Threatened by logging and forest activities.

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.