

# Oregon Status Factors

**Elcode** NF000DEFU2  
**Gname** DESTUNTZIA FUSCA  
**Gcomname**

## Number of Occurrences

A = 1 - 5

**Comments** Truffles have been studied in western North America for over a hundred years; however, fewer than a dozen collections have been made of this species. Compared to other truffles, this one is rare. In Oregon only a single collection is known of it. The collection was made in 1983 (OSC n.d.) and is within the range of the northern spotted owl (Castellano et al. 1999, OSC n.d.).

## Number of Occurrences with Good Viability

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

**Comments** No sites are protected; repeated visits have been made to the general locality where this species was found, but apparently without finding it; however, many fungi fruit sporadically and detection is always a problem with truffles. The species has not been collected and identified from Oregon since 1983 in spite of massive truffling in the state.

## Population Size

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

## Range Extent

A = <100 km<sup>2</sup> (less than about 40 square miles)

**Comments** The only Oregon location is in the H.J. Andrews Experimental Forest in Lane Co., OR.

## Area of Occupancy

**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** impossible to evaluate with a single data point.

## 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** impossible to evaluate with a single data point.

### 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** Most truffles are thought to be mycorrhizal, depended on photosynthetic vascular plants for engery sources and other compounds this events and activities that reduce the vigor or eliminate the vascular plant partner(s) will have a negative impact on these fungi. Furthermore the spores of many/most truffles are dispersed by small mammals, arthropods, snails, slugs, etc. so again activites that impact these organisms will impact the fungi. Logging and development are the principle threats; however, scientific experiments are also a factor to take into consideration since the only known collection was made in an experimental forest.

### Number of Appropriately Protected and Managed Occurrences

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

**Comments** One site (Trappe collection #7750) is within a "control" area of the H.J. Andrews Experimental Forest (OSC n.d.)-- located in the Willamette National Forest in Oregon--and therefore is afforded a nominal level of protection.

### 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** A fungus that is rare within its range and known from a single, well-studied area is, very vulnerable.

### Environmental Specificity

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

**Comments** The known site is in an area of moist forests with many areas of mature to old trees on the west side of the Cascades.

### Other Considerations

ORNHIC List 3. This genus is known so far only from North America; four of five species occur in western North America and two of those species occur within the range of the northern spotted owl. However, in spite of many years of truffling, very few specimens of either species have been found.

**Edition** 11/19/2002 **Edauthor** Nancy S. Weber

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### Greasons

This truffle is endemic to California and Oregon. Although it fruits in a wide variety of habitats it has been collected very rarely. Only one site is known for it in Oregon in spite of a lot of activity by truffle-hunting mycologists in that area in the 19 years since the collection was found. The species needs to be watched in

Oregon and, if found, the population needs to be conserved.

## **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.

Fogel, R., and Trappe, J.M. 1985. *Destuntzia*, a new genus in the Hymenogastraceae (Basidiomycotina). *Mycologia* 77: 732- 742.

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