Heritage Rank Status Factors

Elcode NF0000DERU

Gname DESTUNTZIA RUBRA

Gcomname

Number of Occurrences

B = 6 - 20

Comments Truffles have been studied in western North America for over a hundred years. However, relative to other truffles this species is not common. Fogel and Trappe (1985) cited specimens from four counties (Marin, Mendocino, Santa Cruz, and Sierra Cos.) in California of which two sites in Marin Co. (one, the type collection, was collected in the late 1800s) and the two in Mendocino Co. are probably or definitely within the range of the northern spotted owl; one historic site (1934) was cited from Linn Co., Oregon. Castellano et al. (1999) listed the two sites in Mendocino Co, one in Del Norte Co., and one in Humbolt Co. ISMS data apparently includes only the sites mentioned by Castellano et al.

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments No repeat collections from any sites in later years were reported. No sites are listed as protected.

Population Size

U = Unknown

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

Range Extent

G = 200,000-2,500,000 km2 (about 80,000-1,000,000 square miles)

Comments Range includes the coastal counties in California of Santa Cruz, Marin, Mendocino, Humboldt and Del Norte and, in the interior, Sierra County; one historic collection, the only known for Oregon, was made in Linn Co., OR

Area of Occupancy

U = Unknown

LU = Unknown

Comments Short of using molecular tools there is no way to evaluate occupancy.

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 Too little data to draw any conclusions, if the species has become extinct in Oregon and not just overlooked that could be interesting.

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 Too little data to draw any conclusions

Threats

D = Moderate, non-imminent threat. Threat is moderate to severe but not imminent for a significant portion of the population, occurrences, or area.

Scope	Moderate	Severity	Moderate	Immediacy	Low

Comments Logging, fire, and development are the principal threats likely to impact this species. Although few sites are known for it, they are sufficiently separated that it is unlikely that all known sites will become unfit for the species simultaneously.

Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

Comments No sites are protected.

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 No sites are protected, thus the prognosis for the future of the species is not good. Most sites are in coastal forests; such habitats are often targeted for logging or development.

Environmental Specificity

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

Comments Any fungus that occurs in the coastal fog belt and in the Sierras is not narrowly confined by gross ecological factors but what microsite factors determine its survival remain to be discovered.

Other Considerations

NRANK - N2. This truffle has been found relatively few times in over 100 years of study of western truffles although it is no more inconspicuous than many species with a much broader range and that fruit in greater abundance. It is distinctive microscopically. It is known only from California and, fromerly, from Oregon. Much of the range is within the range of the northern spotted owl .

Edition	11/15/2002	**Edauthor**	Nancy S. Weber
Grank	G2	**Grank Date**	11/26/2002

Greasons

Endemic to California and Oregon and known from about 10 sites and perhaps 11 or 12 collections. Specimens of this species were collected as early as the late 1800s and as recently as the last 10 years. Note that this species was not considered by the Oregon Natural Heritage Program (OHNP 2001) because it was

thought not to occur in Oregon. It now appears the species may have become extinct in Oregon. More sites are known for this species than for D. fusca so the species is not in quite as perilous situation. The species needs to be watched, and known populations 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.
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.
Fogel, R., and Trappe, J.M. 1985. Destuntzia, a new genus in the Hymenogastraceae (Basidiomycotina). Mycologia 77: 732- 742.
(ONHP) Oregon Natural Heritage Program. 2001. Rare, Threatened and Endangered Plants and Animals of Oregon. Portland, Oregon: Oregon Natural Heritage Program 94 pp.

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