

California 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, among truffles in general this species is not common although it may be more abundant than data indicates. It is said to be a California endemic by Castellano et al. (1999). Within the range of the northern spotted owl it is known from five sites in California (Castellano et al. 1999, Fogel and Trappe 1985); two more occurrences (one in Santa Cruz Co., one in Sierra Co.) have been reported from California outside the range of the northern spotted owl (Fogel and Trappe 1985). ISMS data includes 3 sites from California, I don't know if they overlap with the ones mentioned above.

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.

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 Range includes the coastal counties in California of Santa Cruz, Marin, Mendocino, Humboldt and Del Norte and, in the interior, Sierra County. Two (historic) collections by Harkness were made in Marin Co.

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 insufficient information

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 information

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

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

Comments Of the ISMS sites reported from California, neither is protected.

Intrinsic Vulnerability

Comments More information is needed before this factor can be evaluated.

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

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 may be extinct in Oregon. Much of the range is within the range of the northern spotted owl .

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Reasons

Reported only from California and Oregon and known from about 8-10 sites. Specimens of this species were collected as early as the late 1800s. However, this species does not appear to have been abundant at any time or in any place. Further study is needed; known sites should be considered for protection.

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.