

Oregon Status Factors

Elcode NF000HYIN8
Gname HYDNOTRYA INORDINATA

Gcomname

Number of Occurrences

A = 1 - 5
B = 6 - 20

Comments Although finding truffles can be challenging many are sufficiently common to be known from hundreds of collections. However, fewer than a half dozen collections of this species have been documented. The species was described from Oregon (Trappe and Castellano 2000); they stated the species was known only from only cite collections from the Mt. Jefferson Wilderness in the Willamette National Forest . Castellano et al. (1999) list four sites from Oregon for this species; the BufferSurveyManage table includes two sites from Oregon and the ISMS list of collections includes two sites in Oregon. From the data at hand I could not figure out how many sites there are in Oregon, but depending on the sources 1, 2, or 4 sites are known from Oregon. The ISMS tables do not include the site in the Deschutes National Forest or one of the sites in the Willamette National Forest but do include the one from the Mt. Hood National Forest. I did not find any data on the California site other than that in ISMS. Confused? So am I. Did the authors have second thoughts on their identificaitons?

Number of Occurrences with Good Viability

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

Comments this estimate is based on the number of collections from protected sites e.g., G1/2 sites, the site in the Mt. Jefferson Wilderness Area.

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 This species has a range that extends south from Clackamas Co., OR along the Cascades of Oregon into the Willamette National Forest.

Area of Occupancy

U = Unknown

LC = 40-200 km (about 25-125 miles)
LD = 200-1,000 km (about 125-620 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 information to evaluate these factors

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 to evaluate these factors

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** High **Immediacy** High

Comments This truffle may form mycorrhizae with various conifers and if so any factors that diminish the vitality of the trees or result in substantial alterations to the site, e.g., logging, development, also threaten this species. Changes in land management practices could have a negative impact on this species.

Number of Appropriately Protected and Managed Occurrences

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

Comments The ISMS data shows one site on Matrix land in Oregon and which is not protected and one protected site at the G1/2 level. No information was available as to the status of the other sites mentioned in publications and on the WWW (FSL n.d.).

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 is probably dependent on mature to old trees and with few protected sites, the area of suitable habitat could be severely reduced, perhaps to a level where the species can not survive. .

Environmental Specificity

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

Comments This species is known primarily from mesic coniferous forests on sites between 1000 and 2000 m in elevation.

Other Considerations

ORNHIC List 3.

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Grank S2 **Grank Date** 11/19/2002

Greasons

This species is rare for a truffle and known only from the Oregon Cascades and one site in northern California about which little information was made available. It occurs in mountainous areas, in Oregon between about 1100 and 2000 m in elevation, a zone that is slower to recover from disturbance than are the lower elevations. If sites other than the Mt. Jefferson Wilderness site are eliminated, then the rank might better be S1.

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. N.d. USDA Forest Service Forest Mycology Team Databases. Retrieved 2002.11. from <http://www.fs.fed.us/pnw/mycology/publications/data.html>.

Trappe, J.M., and Castellano, M.A. 2000. New sequestrate Ascomycota and Basidiomycota covered by the Northwest Forest Plan. *Mycotaxon* 75: 153-179.