

# California Status Factors

**Elcode** NF0000GYCA  
**Gname** GYROMITRA CALIFORNICA  
**Gcomname**

## Number of Occurrences

B = 6 - 20  
C = 21 - 80

**Comments** This species produces handsome medium to large (the size of a man's head) fruiting bodies with a strongly fluted, cream-colored stalk sometimes with dull rose tints at the base, and a thin, irregularly convex, thin-fleshed head with a brownish gray/grayish brown upper (spore-producing) surface. From California one collection is listed in the ISMS data, Abbott and Currah (1997) cite three historic collections, the BPI data base (Farr et al.) includes about 15 collections from perhaps 10 sites (locality data scanty, specimens dating from the late 1870s to the 1960s with many undated).

## Number of Occurrences with Good Viability

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

**Comments** Within the range of the northern spotted owl, the single California collection is from Matrix land. It probably is not viable in the long term as the area may be logged.

## Population Size

U = Unknown

**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** A single collection from California is listed in the ISMS database. Several of the collections at BPI are from National Parks (Sequoia, Yosemite, Kings Canyon) and from near Mt. Shasta; but many of them not in the range of the northern spotted owl ((Farr et al. n.d.). With only one recent record, the current range can not be determined, but it undoubtedly larger. With some attention to habitat and time of fruiting additional sites no doubt could be located. The historic range of the species in California is quite large, but is primarily in the Sierra Nevadas and Mt. Shasta rather than the coastal mountains and northern California.

## 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** The available data in ISMS do not give dates when collections were made so one can not tell if multiple collections from the same site were made the same year or in different years.

### **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** The available data in ISMS do not give dates when collections were made so one can not tell if multiple collections from the same site were made the same year or in different years.

### **Threats**

E = Localized substantial threat. Threat is moderate to severe for a small but significant proportion of the population, occurrences, or area. Ecological community occurrences are directly impacted over a small area, or in a small portion of their range, but threats require a long-term recovery.

|              |     |                 |          |                  |          |
|--------------|-----|-----------------|----------|------------------|----------|
| <b>Scope</b> | Low | <b>Severity</b> | Moderate | <b>Immediacy</b> | Moderate |
|--------------|-----|-----------------|----------|------------------|----------|

**Comments** This species fruits in moist coniferous forests with a variety of mature trees. The specimens are often found on, or associated with, decaying wood, often in seeps or along small streams, or other very damp areas. Land management practices that result in greatly reducing the amount of coarse woody debris, that change the canopy such that the understory is significantly drier or that remove the trees completely could adversely impact this species. Logging and development are the main threats.

### **Number of Appropriately Protected and Managed Occurrences**

A = None. No occurrences appropriately protected and managed

**Comments** This is the number of protected sites in ISMS, others may be if historic sites are included.

### **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 fruits in sites with diverse mature trees and seeps and trickles or small streams where rotting wood is plentiful. If the trees are removed and the soil dries out and the humidity falls, the survival of this species is in doubt. Based on the ISMS data, this species appears to be in bad shape in California.

### **Environmental Specificity**

A = Very Narrow. Specialist or community with key requirements scarce.

**Comments** The relative paucity of specimens of this conspicuous fungus even from suitable habitats indicates it tolerates a very narrow set of environmental parameters.

### **Other Considerations**

The preferred name for this species is *Pseudorhizina californica* (W. Phillips) Harmaja as was suggested in Weber (2002). For discussions of the change and some of the reasoning behind recognizing *Pseudorhizina* consult Harmaja (1974), Abbott and Currah (1997), and O'Donnell et al. (1997).

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### Greasons

This species is known only from western North America. Only one collection of the species has been documented from California in recent years although historically quite a few were made in the region of Mt. Shasta. The species has been reported from the Sierra Nevadas but only a few in the range of the northern spotted owl. If the one site reported in ISMS has undergone aggressive land management activities the only known active individual mycelium in the state may no longer be extant.

### BCD Sources

### New Sources

Abbott, S.P., and Currah, R.S. 1997. The Helvellaceae: Systematic revision and occurrence in northern and northwestern North America. *Mycotaxon* 62: 1-125.

Farr, D.F., Rossman, A.Y., Palm, M.E., and McCray, E.B. n.d. Fungal Databases, Systematic Botany & Mycology Laboratory, ARS, USDA. Retrieved 2002.11. from <http://nt.ars-grin.gov/fungaldatabases/>

Harmaja, H. 1974. Two new families of the Pezizales: Karstenellaceae and Pseudorhizinaceae. *Karstenia* 14: 109-112.

O'Donnell, K.L., Cigelnik, E., Weber, N.S., Trappe, J.M. 1997. Phylogenetic relationships among ascomycetous truffles and the true and false morels inferred from 18S and 28S ribosomal DNA sequence analysis. *Mycologia* 89: 48-65.

Weber, N.S. 2002. Report on selected Pezizales and *Cudonia monticola* listed in the Record of Decision. Submitted to the US Forest Service. 492 pp.