

# California Status Factors

**Elcode** NF000HEEL6  
**Gname** HELVELLA ELASTICA  
**Gcomname**

## Number of Occurrences

A = 1 - 5

**Comments** A smooth cream colored stalk that is circular in cross section and supports a saddle-shaped head with the lobes curved toward the stalk are field characters for the species; the "saddle" is often tilted with one lobe pointing the sky and the other toward the ground. This species fruits in late summer to fall at low to high elevations below tree line. For California the ISMS has data on one site within the region of the northern spotted owl; Weber (1995) reported two additional localities. One collection from the 1960s is on file at BPI (Farr et al. N.d.)

## Number of Occurrences with Good Viability

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

**Comments** None of the known sites are in protected areas although one is in a State Park which probably provides some protection.

## Population Size

U = Unknown

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

## Range Extent

C = 250-1,000 km<sup>2</sup> (about 100-400 square miles)

**Comments** Known in California from Humboldt Co. (ISMS, Weber 1995) and Mendocino Co. (Farr et al. N.d.)

## 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 data

## 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 data

## 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** Moderate **Immediacy** Moderate

**Comments** Anthropogenic activities resulting in decline or removal (e.g., logging) of forested areas (particularly of coniferous forests) are the greatest threats on the state level. The species can tolerate mild, small disturbances such as that which occur along trails.

## Number of Appropriately Protected and Managed Occurrences

**Comments** The ISMS site, reportedly in a National Park, is not tallied as occurring in G1/2 area on the Buffer spread sheet. The other two collections cited by Weber (1995) are not in protected areas nor is the one known from Mendocino Co.

## 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** In my experience this species is usually associated with mature conifers, esp. members of the Pinaceae although the trees may be scattered in park-like settings as well as in dense stands, thus changes that impact the trees are likely to impact this species as well. The species apparently has a limited range in California, primarily in the moist coast forests which are of interest to timber harvesters.

## Environmental Specificity

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

**Comments** The records from California indicate the species has a narrow range which likely is in part a reflection of a high degree of environmental specificity. Given the broad world distribution the paucity of collections from northern California is puzzling.

## Other Considerations

In many parts of North America this species approaches "weed" status in the fall months. One of the interesting observations that has come from the ROD surveys is the relative paucity of specimens in the range of the northern spotted owl which includes a lot of apparently prime areas for this species. Population biology studies at the molecular level might yield some insights on what is going on with this species in this region.

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**Grank** S2 **Grank Date** 11/23/2002

## Reasons

The restricted range (two counties, four collections) of this species in northern California is surprising in view of the fact that the fruiting bodies are relatively easy to find and at first glance abundant suitable habitat is present

in the region. Targeted field work might reveal additional populations but given the amount of collecting in this region, it appears that this species is truly rare.

## **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/>

Weber, N.S. 1995. Report on FEMAT Strategy 1 Epigeous discomycetes. Submitted to the the USDA Forest Service. 252 pp.