# **California Status Factors**

Elcode NFSM000004

Gname ALBATRELLUS ELLISII

Gcomname Greening Goat's Foot

#### **Number of Occurrences**

A = 1 - 5

Comments Known collections in northern spotted owl region in CA = 5 [USDA-I ISMS database 2002].

#### Number of Occurrences with Good Viability

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

C = Few (4-12) occurrences with good viability

Comments One occurrence lies within a permanently protected area. At least 3 sites appear to occur on landsthat are unprotected and thus subject to development, heavy logging, or fire. Additional occurrences may be located if fungal surveys continue.

### **Population Size**

U = Unknown

Comments Genets of ectomycorrhizal fungi cannot be delimited without DNA sampling.

#### **Range Extent**

F = 20,000-200,000 km2 (about 8,000-80,000 square miles)

Comments Distribution is disjunct, with 3 populations verified from Klamath National Forest in nCalifornia and 2 populations near Mendocino in a more central location.

## **Area of Occupancy**

U = Unknown

LU = Unknown

Comments Cannot estimate area occupancy from fruitbodies as vegetative organism is underground and has unknown ecological requirements that determine how and when ectomycorrhizal associations are formed with coniferous host trees.

# Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

D = Moderate Decline (decline of 25-50%)

Comments 3 of the 5 known sites occur onlands subject to development and logging. All sites can be threatened by fire. Ectomycorrhizal fungal stability tied to the stability of the coniferous host trees.

# Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

D = Declining. Decline of 10-30% in population, range, area occupied, and/or number or condition of occurrences

Comments Logging, fire hazards, and development will diminish known sites. It is possible that additional sites in unexplored forests will be found, but rarely collected in California (Arora 1986).

#### 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 California occurrences are rare, and thus could be threatened by development, hot fires, and forest clearcutting or heavy thinning (probably not by low thinning). Only one site is protected from heavy logging and/or development., All sites are threatened by fire.. Depending on what happens to the forest, the scope of the threat could be moderate and the severity also moderate.

#### Number of Appropriately Protected and Managed Occurrences

- B = Few (1-3) occurrences appropriately protected and managed
- Comments Only one site lies within a permanently protected area. The other known occurrences are not protected and thus not managed. Additional fungal surveys may reveal new sites.

#### **Intrinsic Vulnerability**

C = Not Intrinsically Vulnerable. Species matures quickly, reproduces frequently, and/or has high fecundity such that populations recover quickly (< 5 years or 2 generations) from decreases in abundance; or species has high dispersal capability such that extirpated populations soon become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are resilient or resistant to irreversible changes in composition and structure and quickly recover (within 10 years).

Comments Life span of fungus is not known, but believed to be long-lived. Slow-growing and slow reproductive rate inferred, but not demonstrated. Generally slower-growing fungi require several years of growth to establish a viable population/community,

#### **Environmental Specificity**

- B = Narrow. Specialist or community with key requirements common.
- C = Moderate. Generalist or community with some key requirements scarce.
- Comments Dependent upon health of associated host trees (Pinaceae). Biologicall requirements unknown.

#### **Other Considerations**

The species is uncommon to rare in California, where it is perhaps at the southern limit of its range. More fruitbodies -- large and conspicuous for fungi and relatively long-lasting -- should have been collected during the recent surveys. However, as many conifer species are inferred mycorrhizal hosts, additional occurrences may be found in forested areas. Previously known as Polyporus ellisii and Scutiger ellisii.

Edition	11/18/2002	Edauthor	Lorelei L Norvell

Grank	S2?	Grank Date	11/18/2002
-------	-----	------------	------------

#### Greasons

Only 4 occurrences known in northwestern California, of which only one is in a protected area. The North American endemic has been collected only sproadically throughout its range since 1870. The forests are not well inventoried and more collections are antcipated. Dependent upon health and preservation of associate trees (Pinaceae) which are valuable timber targets; occurrencesare also threatened by development and other human factors. Cultural characteristics and sexuality unknown. Uncommon. Regarded as rare along the California coastal area, and more common in the Sierra Nevada region (Arora 1986), but this is not

documented, so the S2 rank was given.

## **BCD Sources**

#### **New Sources**

Ginns, J. 1997. The taxonomy and distribution of rare or uncommon species of Albatrellus in western North America. Canad. J. Bot. 75: 261-273. ALSO Gilbertson & Ryvarden. 1986. North American Polypores. Vol. 1. Fungi Flora. Oslo. ALSO OSU collections data: http://ocid.nacse.org/research/herbarium/myco/index.html Also Arora. 1986. Mushrooms Demystified. Ten Speed Press: Berkeley.