Heritage Rank Status Factors

Elcode NFSM000004

Gname ALBATRELLUS ELLISII

Gcomname Greening Goat's Foot

Number of Occurrences

U = Unknown

Comments A widespread uncommon North American endemic known from 10 states [Ginns 1997, Gilbertson & Ryv 1986; Uppsala Sweden & BPI databases - 11/18/2002]. There are 29 known occurrences and 43 collections in the northern spotted owl region: [ISMS database 2002] include 2 (WA), 22 (OR), and 4 (CA) sites.

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments The status of the eastern collections is unknown. In northern spotted owl region, 6 collections remain on unprotected lands, 4 in permanent protected areas, 6 in late-successional reserves, and 12 either in riparian reserves or the unprotected matrix. Sites lying within Late-Successional Reserves may be imperiled if management regimes are altered in favor of logging or development.

Population Size

U = Unknown

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

Range Extent

G = 200,000-2,500,000 km2 (about 80,000-1,000,000 square miles)
H = > 2,500,000 km2 (greater than 1,000,000 square miles)

Comments Distribution is disjunct, with populations verified from New Jersey south to Alabama, and from Colorado west to BC down through northern California. Additional occurrences may be located if fungal surveys continue. Eastern North America collections include NJ, NC, AL, KY [Gilbertson & Ryv 1986, Uppsala Sweden & BPI databases). Western North America collections include AZ, CA, CO, ID, OR, WA [Ginns 1997].

Area of Occupancy

E = 100-500 km2 (about 25,000-125,000 acres)
F = 500-2,000 km2 (about 125,000-500,000 acres)

LE = 1,000-5,000 km (about 620-3,000 miles)
LF = 5,000-20,000 km (about 3,000-12,500 miles)

Comments Can only 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%)
E = Relatively Stable (±25% change)

Comments Status of eastern occurrences is unknown to this author. Around 20 western collections occur within protetcted or potentially protected habitats and another 6 definitely lie on unprotected lands. Ectomycorrhizal fungal stability tied to the stability of the coniferous host trees. Would be threatened by logging, fires, or development, but it is possible that continued fungal surveys would uncover additional sites.

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
E = Stable. Population, range, area occupied, and/or number or condition of occurrences unchanged or remaining within ±10% fluctuation

Comments Status of eastern occurrences is unknown to this author. The 33 recent occurrences are assumed to be stable, except for imperilment through logging and development on unprotected lands.

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 Threats and Protection status of eastern occurrences not investigated. Western occurrences are uncommon, and thus could be threatened by development, hot fires, and forest clearcutting or heavy thinning (probably not by low thinning). Logging is occurring in most western areas; eastern North American sites are (or have been) threatened by development and logging as well.

Number of Appropriately Protected and Managed Occurrences

U = Unknown whether any occurrences are appropriately protected and managed

Comments Within the northern spotted owl region of the United States, 10-23 occurrences lie within protected or potentially protected lands, but only 4 lie within lands that are currently being managed. If late-successional reserves and riparian reserves are not permanently protected, only 10 occurrences will lie in protected areas. (Eastern North American collections not included.)

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 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 the health of associated host trees (Pinaceae). Biological requirements unknown.

Other Considerations

The species is uncommon throughout its range in the northern spotted owl region of the United States, although less so in Oregon. As fruitbodies are large and conspicuous and relatively long-lasting, more should have been found in California and Washington. Many different conifers are the inferred mycorrhizal hosts, thus additional occurrences are to be expected in areas where forests are preserved. Previously known as Polyporus ellisii and Scutiger ellisii.

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Greasons

A widespread uncommon North American endemic known from 10 states. Distribution is disjunct, with populations verified from New Jersey south to Alabama, and from Colorado west to BC down through northern California. The fungus is somewhat sporadically collected throughout its range. Total estimated number of occurrences is <200. There are several protected western forest sites, and other localities may be protected depending on the outcome of the Northwest Forest Plan. More occurrences are antcipated if surveys continue. This mycorrhizal species depends on the health and preservation of its associated coniferous hosts, which are valuable timber targets. Other threats include fire, development, and other human factors. Uncommon.

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