Heritage Rank Status Factors

Elcode NFSM000002

Gname ALBATRELLUS AVELLANEUS

Gcomname

Number of Occurrences

B = 6 - 20

Comments

Endemic to the coastal lowlands in the northern spotted owl region. Only 11 collections known (8 historical, 3 recent) from WA (4), OR (2), and CA (1, type locality) [Norvell 1995, Castellano et al 1999]. One [unverified] collection reported in "Spore Prints" (2001) is now curated in WTU. Only 3 occurrences are verified in the ISMS (2002) database.

Number of Occurrences with Good Viability

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

Comments

Historical sites occurred within the Olympic National Park (3), Prairie Creek Redwoods State Park (1), and Honeyman SP (1), of which the latter is thought to be extant; the 3 most recently sampled occurrences are also thought to be extant.

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

Known from Washington south to Humboldt County, California along the Pacific coast of North America (Norvell 1995; ISMS-ONH 2002 database & GIS map for ALAV).

Area of Occupancy

U = Unknown

LU = Unknown

Comments

Cannot estimate area occupancy for mycorrhizal fungi as vegetative organism is underground and has unknown ecological requirements that determine how and when ectomycorrhizal associations are formed with host trees. Generally patchy and apparently restricted to Picea sitchensis.

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

The few occurrences and the fact that none have been resampled suggests that ALAV may be in decline. The overall range is narrow and the possible reduction of LSOG spruce forest reserves also suggests a decline over the long-term.

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, 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

The spotty distribution tied to Picea sitchensis forests complicates prediction for the entire northern spotted owl region. Over the short term and with the recent discovery of 3 occurrences, the populations are thought to be relatively stable.

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

At least 3-6 historical sites could have sufficiently been altered that the populations have been extirpated from those sites.. Populations will be threatened by hot fires, road construction, development, and clearcutting or heavy thinning. Only 3 occurrences are verified in the northwest spotted owl region of the species since 1985.

Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

Comments

Of the 11 known occurrences, only one lies in a protected area, a late-successional reserve. If LSR management policies change , there will be no protected occurrences. No site is specifically managed for ALAV at this time,

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

Slow-growing and slow reproductive rate inferred, but not demonstrated. Most biological requirements unknown. Threatened by clearcutting, heavy thinning, or hot fires; probably not affected by low to moderate thinning. Logging is active (or anticipated to be active) in some areas, but not at most sites.

Environmental Specificity

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

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

Comments

Precise requirements are not known; however location (in the coastal lowlands), apparent preference for Picea sitchensis, and late-successional forests suggest narrow environment specificity.

Other Considerations

NRANK - N2. The patchy distribution suggests that this fungus has as yet unexplained biological requirements that dictate preservation of all known sites. Appears dependent upon Sitka spruce. Only 11 occurrences verified since 1956 and only 3 collections made since 1985. The species is rare throughout its range. This fungus has already been ranked as G2 (S1 for Oregon) by the Oregon Natural Heritage Program.

Edition 11/18/2002 Edauthor Lorelei L Norvell

Grank G2 **Grank Date** 11/18/2002

Greasons

Known sites are few, and the fruitbody is sufficiently long-lasting and large that more collections should have been made during the recent fungal surveys. While only 8 -- possibly 9 -- sites are known, it is still possible that more collections will be found in other Sitka spruce stands.

BCD Sources

New Sources

Castellano et al. 1999. Handbook to Strategy 1 Fungal species in the Northwest Forest Plan. USDA-FS PNW-Res. Stn. General technical report: PNW-GTR-476. Gilbertson & Ryvarden. 1986. North American Polypores. Vol. 1. Fungi Flora. Oslo. Norvell. 1995. ROD: Strategy 1 Fungal Species Evaluation (30 gilled and non-gilled Basidiomycete Strategy 1 species). Unpubl. report on file in the Regional Mycology Lab, Corvallis, Oregon. Spore Prints 2001: www.psms.org/sporepr/sp377.pdf;

Oregon Natural Heritage Program. 2001. Rare, threatened and endangered plants and animals of Oregon. ISMS-ONH 2002 database & GIS map for ALAV.