

# Washington Status Factors

**Elcode** NFSM000003  
**Gname** ALBATRELLUS CAERULEOPORUS  
**Gcomname**

## Number of Occurrences

A = 1 - 5

**Comments** 4 known occurrences in Washington [ISMS July 2002; Norvell 1995; Castellano 1999]

## Number of Occurrences with Good Viability

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

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

**Comments** Of the 4 known sites, one occurs in protected habitat in Olympic National Park and the 3 other sites on private lands or national forests may be threatened by development, fire, or logging.

## Population Size

U = Unknown

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

## Range Extent

F = 20,000-200,000 km<sup>2</sup> (about 8,000-80,000 square miles)

**Comments** All known occurrences reported from a similar latitude in the northwest portion of the state (Clallam, Island, and Snohomish Counties).

## Area of Occupancy

D = 20-100 km<sup>2</sup> (about 5,000-25,000 acres)

LD = 200-1,000 km (about 125-620 miles)

**Comments** Very few individuals; difficult to estimate area of occupancy for ectomycorrhizal populations when vegetative mycelium is hidden below ground.

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

E = Relatively Stable ( $\pm 25\%$  change)

**Comments** At least 4 populations presumed stable due to its occurrence in protected national park. Ectomycorrhizal fungal stability tied to the stability of host *Tsuga heterophylla*, a valuable timber tree. Could be threatened in other areas by logging, fires, or development.

## 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  $\pm 10\%$  fluctuation

**Comments** Logging, fire hazards, and development can diminish known sites; 4 occurrences in protected areas presumed to be 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** Threatened by development, hot fires, and forest clearcutting or heavy thinning (probably not by low thinning). Logging is occurring in or predicted for some areas.

## Number of Appropriately Protected and Managed Occurrences

B = Few (1-3) occurrences appropriately protected and managed

**Comments** Anticipated additional protected occurrences in Olympic National Park and (possibly) Mt Rainier National Park..

## 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, although Ginns (1994) suggests that the organism or its community can be stable over at least 27 years. Generally long-lived but presumed slower-growing,

## Environmental Specificity

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

C = Moderate. Generalist or community with some key requirements scarce.

**Comments** Dependent upon healthy mycorrhizal host trees (primarily Tsuga). Other environmental requirements unknown.

## Other Considerations

Fruitbodies are striking enough in coloration and long-lasting enough that more than 4 collections should have been made in the state, particularly after implementation of Survey & Manage procedures. This species can be assumed to be rare in Washington. *Albatrellus caeruleoporus* (Peck) Pouzar; synonym = *Polyporus caeruleoporus* Peck.

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## Reasons

Only 4 collections are verified from Washington despite the unique coloration and relatively long-life of the fruitbody. 3 sites are currently in protected areas, although one may be questionable; should administration of Late Successional Reserve habitats change 2 sites may be threatened by logging or development. Other forests may provide suitable habitats and other fruiting localities may be found in the future. The species is closely allied to the health and preservation of associate trees (*Tsuga*) that are targeted economically as valuable timber, Fire that destroys the host tree may also destroy the fungus population. Cultural characteristics and sexuality

unknown. Can be assumed to be rare.

## **BCD Sources**

### **New Sources**

Castellano et al. 1999. Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan. USDA-FS PNWRS PNW-GTR-476. ALSO 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. ALSO 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 OSU collections data: <http://ocid.nacse.org/research/herbarium/myco/index.html> ALSO Ginns. 1994. *Albatrellus* (Fungi: Basidiomycota) in Michigan. *Michigan Botanist* 33: 74-90.