

# Washington Status Factors

**Elcode** NFSM000129  
**Gname** PHAEOLLYBIA SIPEI  
**Gcomname**

## Number of Occurrences

**Comments** There is only one questionable occurrence of *Phaeocollybia sipei* in Washington, collected in the Hoh Valley of Olympic National Park. Continued fungal surveys may uncover more sites. (Norvell 1995, 1998ab, pers. Comm 2002; Castellano 1999; ISMS 2002 data). There are taxonomic anomalies which require additional collections to confirm.

## Number of Occurrences with Good Viability

A = No (A- or B- ranked) occurrences with good viability  
B = Very few (1-3) occurrences with good viability

**Comments** The single 1 dubious outlier is probably still extant: it has not been resampled since 1992. 2 lie within permanently protected areas, 7 lie within late-successional reserves and ~3-11 in riparian reserves and so are protected at the present time.

## Population Size

U = Unknown

**Comments** Records reflect only species occurrence, i.e. fruitbodies, not numbers of individuals. Genets of ectomycorrhizal fungi cannot be delimited without DNA sampling.

## Range Extent

**Comments** One taxonomically questionable outlying occurrence lies in the Hoh Valley in Washington state's Olympic National Park.

## Area of Occupancy

U = Unknown

LU = Unknown

**Comments** Occupancy is highly spotty and cannot be extrapolated for this organism, which appears restricted to fairly complex environments. There are large areas of unsuitable habitat within the overall range. Area of occupancy can only be roughly approximated from fungal fruitbodies as the vegetative organism is hidden from site within the substrate. *Phaeocollybia sipei* has unknown biological and ecological requirements that determine how and when symbiotic associations are formed with partners. (Norvell 1998ab).

## 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** If the sole occurrence represents *Phaeocollybia sipei*, then it is very limited in scope and lies well outside the known range, suggesting that it represents a refugium species that may not increase. As the collection is still under taxonomic evaluation, the long-term trend must be cited as unknown (Norvell 2002 pers comm).

### **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** See above.

### **Threats**

U = Unknown. The available information is not sufficient to assign degree of threat as above. (Severity, scope, and immediacy are all unknown, or mostly [two of three] unknown or not assessed [null].)

<b>Scope</b>	Unknown	<b>Severity</b>	Unknown	<b>Immediacy</b>	Unknown
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**Comments** Projections about the threats to the fungus in Washington should be withheld pending full taxonomic testing of the sole known occurrence. (Norvell 2002 pers comm).

### **Number of Appropriately Protected and Managed Occurrences**

A = None. No occurrences appropriately protected and managed

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

**Comments** The sole representative occurrence of *Phaeocollybia sipei* in Washington (Norvell 1998a) lies within Olympic National Park. See above.

### **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** Ectomycorrhizal fungal vulnerability is linked to that of the symbiotic partner (here conifer species). This fungus may be long-lived but also relatively slow-growing; therefore climax communities occur more commonly in older stands. (Norvell 1998ab, Norvell & Exeter 2003). It is vulnerable to anything that threatens the forest habitat, including hot fires, road construction and development, and clearcutting. It seems resilient to light to moderate thinning (Norvell & Exeter 2003).

### **Environmental Specificity**

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

**Comments** *Phaeocollybia sipei* is generally found in complex mid to late-successional or old growth coniferous rainforests where it forms symbiotic partnerships with *Picea*, *Tsuga*, and/or *Pseudotsuga*. Its precise biological and ecological requirements are unknown. It generally is found in moist coniferous forests up to 2000' in elevation (Norvell & Exeter 2003). Like all *Phaeocollybias*, it is extremely patchy in distribution. (Norvell 1998ab).

### **Other Considerations**

There are no known synonyms for *Phaeocollybia sipei*.

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### **Greasons**

Only one taxonomically dubious outlier population has been collected in Washington's Olympic National Park (Hoh Valley). The sole collection from Washington may or may not represent *Phaeocollybia sipei*. Until the identity of the species can be confirmed through better and additional collections, this should not be considered a target species in the state (Norvell pers comm 2002).

### **BCD Sources**

### **New Sources**

Norvell . 1995. ROD: Strategy 1 Fungal Species Evaluation (30 gilled and non-gilled Basidiomycete Strategy 1 species). Unpubl. report on file at the Regional Mycology Lab in in Corvallis, Oregon. ALSO Norvell. 1998a. The biology and taxonomy of Pacific Northwest species of *Phaeocollybia* Heim. 391 pp. ALSO Norvell. 1998b. Observations on the development, morphology, and biology of *Phaeocollybia*. *Mycological Research* 102:615-630. ALSO Norvell & Exeter. 2003 in press. Ectomycorrhizal epigeous basidiomycete diversity in Oregon's coast montane *Pseudotsuga menziesii* forests. *New York Botanical Memoirs*. ALSO Castellano et al. 1999. Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan. USDA-FS PNWRS PNW-GTR-476. ALSO ISMS 2002 database with GIS map for PHSI6.