

Conservation Status Assessment

Scientific Name: *Phaeocollybia oregonensis*

Classification: Fungus

Assessment area: Global

Heritage Rank: **G2**

Rank Date: 3/9/2017

Rank Reasons: RPB2 & ITS sequence analyses of 19 PHOR collections support a cohesive species concept. To date only 33 collections have been identified from the 12 known sites in British Columbia (2), Oregon (9) & WA (1) from 1947–2013. See Norvell & Exeter (2008: 125–129) for full treatment and references and Norvell & al. (2010) for molecular data. The 2007 assigned global ranking seems appropriate. Multigene sequence analyses by Matheny & al. (2006) support *Phaeocollybia* in the Hymenogastraceae (not Cortinariaceae). ((Matheny PG, Curtis JM, Hofstetter V, Aime MC, Moncalvo JM, Ge ZW, Yang ZL, Slot JC, Ammirati JF, Baroni TJ, Bougher NL, Hughes KW, Lodge DJ, Kerrigan RW, Seidl MT, Aanen DK, DeNitis M, Daniel GM, Desjardin DE, Kropp BR, Norvell LL, Parker A, Vellinga EC, Vilgalys R, Hibbett DS. 2006. Major clades of Agaricales: a multilocus phylogenetic overview. *Mycologia* 98: 982-995. ; Norvell, Lorelei L.; Exeter, Ronald L.; Gordon, Matthew; Redhead. 2010. Species concepts in a molecular age: the *Phaeocollybia waltz*. Abstract in IMC9: The biology of fungi; Oxford abstract on disc given to 1750 IMC9 delegates. [poster available online via Lorelei Norvell—Research Gate] ; Norvell, Lorelei L.; Exeter, Ronald L. 2009 (“2008”). *Phaeocollybia* of Pacific Northwest North America. USDI-BLM/OR/WA/GI-08/100-1792, Salem, Oregon 228 p. *Phaeocollybia* [available online via Lorelei Norvell—Research Gate]))

Range Extent: F = 20,000-200,000 sq km (~8,000-80,000 sq mi)

Comments: This species includes specimens which have been considered 2 species, *P. oregonensis* and *P. carmanahensis*. Mycoportal.org has the *P. carmanahensis* collection listed under that species, but a recent treatment (Norvell, L. and R. Exeter 2008. *Phaeocollybia* of Pacific Northwest North America USDI-BLM/OR/WA/GI-08/100-1792, Salem, Oregon 228 p.) has them lumped as a single species with *P. oregonensis* as the correct name. The range including the *P. carmanahensis* sites in British Columbia (southwest Vancouver island, and in Mount Seymour on the mainland near Vancouver) is 90,477 sq. km. The 2002 ranking by I. Norvell also mentions a population on the west slopes of Mt. Adams, which is within the polygon of the BC to Oregon Range. The sites in the agency databases and under *P. oregonensis* in the Mycoportal database are all in Oregon. They include sites in the Coast, west Cascade, and Siskiyou Mountains. The range of *P. oregonensis* sites in mycoportal.org and the agency databases is restricted to Oregon and is 28,095 sq. km.

Population Size: Not assessed

Comments: None

Number of Occurrences: B = 6 - 20

Comments: There are 15 occurrences with precise coordinate location data in the agency or mycoportal.org database. There are three additional occurrences mentioned in the 2002 ranking by L. Norvell.

Area of Occupancy: D = 6-25 4-km² grid cells

Comments: This species occupies 21 - 24 grid squares.

Good Viability: B = Very few (1-3) occurrences with excellent or good viability or ecological integrity

Comments: There are 3 sites in Provincial Parks or in the Columbia River Gorge National Scenic Area.

Environmental Sensitivity: B = Narrow. Specialist or community with key requirements common

Comments: A mycorrhizal species of relatively high elevation conifer forests of the Tsuga heterophylla zone.

Short Term Trends: Not Evaluated

Comments: None

Long Term Trends: Not Evaluated

Comments: None

Threat Impact: C = Medium

Comments:
15 of the 18 known sites are not in permanently protected areas. If those sites are logged on a 40 year rotation, around 22% of sites would be impacted over 10 years, and around 88% of sites would be impacted over 100 years.

Intrinsic Vulnerability: Not Evaluated

Comments: None

Calculated Rank: G2

Rank Author: Michael Russell

Rank Reviewer: Lorelei Norvell

References:
No additional references listed.

Definitions and Resources:

Rank Prefixes	
G	Global rank, applied to taxon's full geographic range
S	State rank, applied to taxon's range within the designated state
Rank Values	
1	Critically imperiled
2	Imperiled
3	Vulnerable
4	Apparently secure, uncommon but not rare
5	Secure, common, abundant, and widespread

Suggested citation:
Oregon Biodiversity Information Center. 2017. Fungi Conservation Status Assessments. Institute for Natural Resources, Portland State University and Oregon State University. Portland, Oregon and Corvallis, Oregon.

More assessments available at <http://inr.oregonstate.edu/orbic/rare-species/ranking-documentation>

Element rank calculator resources at <http://www.natureserve.org/conservation-tools/conservation-rank-calculator>

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