

Conservation Status Assessment

Scientific Name: *Hebeloma olympianum*

Classification: Fungus

Assessment area: Global

Heritage Rank: **G3**

Rank Date: 3/9/2017

Rank Reasons: *Hebeloma olympianum* is known from the Olympic Peninsula, Washington. Hebelomas are now supported not in Cortinariaceae but Hymenogastraceae by multigene sequence analyses (Matheny & al. 2006; see also Matheny & al. 2005). The 2013 map available online shows three sites in ONP and one outside the park.

Range Extent: D = 1,000-5,000 sq km (~400-2,000 sq mi)

Comments: This species is hard to identify and there may be undiscovered populations that could expand the range. However it is currently considered to be restricted to Western Washington. The collections outside Washington are questionable according to the ranking on 2002 by N. Weber and a Forest service ISSSSP data sheet. The Washington populations have a range of about 3,000 sq. km. One of the reported sites is a collection in the UC Santa Cruz herbarium from Shasta County, CA. Another reported site is in Bonner county ID and is listed as the paratype (collected by A. H. Smith), The rest are in the Olympic or Kitsap peninsulas Including the A. H. Smith holotype. If the Idaho collection is included the range would be around 19,000 sq. km. Including the California site would increase the range to about 120,000 sq. km.

Population Size: Not assessed

Comments: None

Number of Occurrences: B = 6 - 20

Comments: There are 8 occurrences of this species in the Olympic and Kitsap Peninsulas. There are another two collections from Idaho and California that may not be correctly identified.

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

Comments: There are 8 grid squares occupied by this species in the Olympic and Kitsap peninsulas. There are another two collections from Idaho and California that may not be correctly identified.

Good Viability: C = Few (4-12) occurrences with excellent or good viability or ecological integrity

Comments: Five Occurrences are in Olympic national park. 2 more are in the Quinault Research Natural Area. Those occurrences are considered secure, the final one is apparently on private land and is not secure.

Environmental Sensitivity: AB = Very narrow to narrow

Comments: The 2002 rating by N. Weber cites a personal communication stating that the mushroom occurs in late seral - old growth habitats, and is mycorrhizally associated with *Picea* or *Tsuga* trees.

Short Term Trends: Not Evaluated

Comments: None

Long Term Trends: Not Evaluated

Comments: None

Threat Impact: D = Low

Comments: Only one site is not in a permanently protected area, but that site is apparently on private land that is close to suburban development.

Intrinsic Vulnerability: AB = Highly to moderately vulnerable

Comments: Scored by N. Weber as AB because it is a mycorrhizal species of late seral forest and would be susceptible to disturbance of the forest.

Calculated Rank: G3

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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