

## Conservation Status Assessment

**Scientific Name:** *Boletus subalpinus*

**Classification:** Fungus

**Assessment area:** Oregon

**Heritage Rank:** **S3S4**

**Rank Date:** 3/9/2017

Rank Reasons: Around 50 occurrences, a good number of collections and around a third in protected areas.

**Range Extent:** E = 5,000-20,000 sq km (~2,000-8,000 sq mi)

Comments: Around 12,000 sq. km range. Found throughout the Cascade range.

**Population Size:** Not assessed

Comments: None

**Number of Occurrences:** C = 21 - 80

Comments: Around 50 occurrences in Oregon.

**Area of Occupancy:** E = 26-125 4-km<sup>2</sup> grid cells

Comments: Around 67 occupied grid cells. A few clusters of collections in southern Oregon.

**Good Viability:** D = Some (13-40) occurrences with excellent or good viability or ecological integrity

Comments: Around 18 of the occurrences are in protected areas including: Mount Hood Wilderness, Mount Washington Wilderness, Three Sisters Wilderness, Diamond Peak Wilderness, Crater Lake National Park, and Sky Lakes Wilderness

**Environmental Sensitivity:** Not Evaluated

Comments: None

**Short Term Trends:** Not Evaluated

Comments: None

**Long Term Trends:** Not Evaluated

Comments: None

**Threat Impact:** CD = Medium - Low

Comments:

Around 18 of 50 occurrences are in protected areas. If the unprotected occurrences were logged on a 40 year rotation, we might expect around 16% to be affected in 10 years and 64% in 100 years. Camacho said in 2002 assessment: "This is a mycorrhizal species it is dependent on a host tree for its carbohydrates. Studies have shown that if the tree is killed the mycorrhizal fungi die shortly after. The one possibly saving feature of this species is the spore bank. However, nothing is known about the spore bank of this species."

**Intrinsic Vulnerability:** Not Evaluated

Comments: None

**Calculated Rank:** S3S4

**Rank Author:** Caitlin Lawrence; Lindsey Wise

**Rank Reviewer:** Scot Loring

**References:**

Nuhn, M.; Binder, M.; Taylor, A.F.S.; Halling, R.E.; Hibbett, D.S. 2013. Phylogenetic Overview of the Boletineae. *Fungal Biology*. 117:7-8:479-511.

**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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