

Conservation Status Assessment

Scientific Name: *Boletus subalpinus*

Classification: Fungus

Assessment area: California

Heritage Rank: **S3?**

Rank Date: 3/9/2017

Rank Reasons: Around 33 known occurrences from California, just less than a third found in protected areas.

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

Comments: Range of around 68,000 sq. km.

Population Size: Not assessed

Comments: None

Number of Occurrences: C = 21 - 80

Comments: Around 33 occurrences in California

Area of Occupancy: E = 26-125 4-km² grid cells

Comments: Around 35 grid cells occupied.

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

Comments: Around 8 of the occurrences are in protected areas including Marble Mountain Wilderness, Mount Shasta Wilderness, Lassen Volcanic National Park, and Calaveres Big Trees State Park.

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 8 of 33 occurrences are in protected areas. If the unprotected occurrences were logged on a 40 year rotation, we might expect around 19% to be affected in 10 years and 75% 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: S3?

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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