

Conservation Status Assessment

Scientific Name: *Boletus subalpinus*

Classification: Fungus

Assessment area: Global

Heritage Rank: **G4**

Rank Date: 3/9/2017

Rank Reasons: Species is only from California and Oregon but there are a good number of collections in its range and a good number of them are in protected areas.

Range Extent: G = 200,000-2,500,000 sq km (~80,000-1,000,000 sq mi)

Comments: Low end of this range, right around 200,000 sq. km. Found only in California, Oregon, and Washington.

Population Size: Not assessed

Comments: None

Number of Occurrences: D = 81 - 300

Comments: Low end of this range, around 80-85 known occurrences, a fair number that are clusters of collections.

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

Comments: About 100 occupied grid cells. A few areas have clusters of collections, especially southern Oregon.

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

Comments: Around 25 or so of the occurrences are in protected areas including: Mount Hood Wilderness, Mount Washington Wilderness, Three Sisters Wilderness, Diamond Peak Wilderness, Crater Lake National Park, Sky Lakes Wilderness, 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 25 of 80 occurrences are in protected areas. If the unprotected occurrences were logged on a 40 year rotation, we might expect around 17% to be affected in 10 years and 68% 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 it the spore bank. However, nothing is known about the spore bank of this species."

Intrinsic Vulnerability: Not Evaluated

Comments: None

Calculated Rank: G4

Rank Author: Caitlin Lawrence
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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