

Conservation Status Assessment

Scientific Name: *Bridgeoporus nobilissimus*

Classification: Fungus

Assessment area: Global

Heritage Rank: **G2G3**

Rank Date: 3/9/2017

Rank Reasons: Fair number of occurrences, but many clustered and risk may be higher than medium. No additional info to contradict assigned rank, but the dependence upon old *Abies procera* suggests threatened without replacement of host; Gordon & Norman (2015) note DNA probes suggest species more frequent than indicated by fruitbody abundance; Redberg & al. (2003) identified 6 populations in Oregon and Washington; and Zhou & al. (2016) still note that the genus/species remains unaligned (i.e., incertae sedis) at the ordinal level within the polypores. See also observations by Cowden (2002). (Gordon, Matthew; Van Norman, Kelli. 2015. *Bridgeoporus nobilissimus* is much more abundant than indicated by the presence of basidiocarps in forest stands. *North American Fungi* 10: 1–29. <http://pnwfungi.org> ; Redberg, Gail L., Hibbett, David S., Ammirati Jr, Joseph F.; Rodriguez, Russell J. 2003. Phylogeny and genetic diversity of *Bridgeoporus nobilissimus* inferred using mitochondrial and nuclear rDNA sequences. *Mycologia* 95: 836–845 ; Zhou, Li-Wei; Nakasone, Karen K.; Burdsall Jr., Harold H.; Ginns, James; Vlasák, Josef; Miettinen, Otto; Spirin, Viacheslav; Niemelä, Tuomo; Yuan, Hai-Sheng; He, Shuang-Hui; Cui, Bao-Kai; Xing, Jia-Hui; Dai, Yu-Cheng. 2016. Polypore diversity in North America with an annotated checklist, *Mycological Progress* 15: 771–790. ; Cowden, Margaret McAndrews. 2002. A study of the known range and habitat of Fuzzy Sandozi conks) *Bridgeoporus nobilissimus*) through Pacific Northwest forests. Master's Thesis, Oregon State University, Corvallis. 166 pp.)

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

Comments: Around 52,000 sq. km. Washington and Oregon, west side of the states. 2002 assessment list one occurrence from northern California that would extend this range slightly.

Population Size: Not assessed

Comments: None

Number of Occurrences: C = 21 - 80

Comments: Norvell in 2002 stated: "Data listed in the ISMS database citing 122 locations are suspect. Only 6-10 sites were known before recent surveys. There are only 3 collections listed as held in the OSU herbaria (11-18-02). The numbers may reflect collections that have not yet been verified by experts. In the ISMS 2002 location database, 1 collection is reported from California, 55 (representing ~22 distinct sites) from Oregon, and 5 sites from Washington." It does appear that there are a lot of collections that are very closely clustered and should not be counted as separate occurrences. This number is more close to 50-70 occurrences. Lots in Willamette National Forest, and a cluster just west of Mount Hood National Forest. A recent study (Gordon and Van Norman 2015) used molecular techniques to sample for this species in stumps and trees without visible conks (basidiocarps). The researchers found the fungal DNA in numerous trees that did not have basidiocarps. This suggests that this species may be more common than the presence of basidiocarps indicates. However all samples were taken from stands with visible basidiocarps on some trees so this study did not conclusively demonstrate that there are occurrences of this species that could not be located based on the presence of basidiocarps. (Gordon, M., K. Van Norman 2015. *Bridgeoporus nobilissimus* is much more abundant than indicated by the presence of basidiocarps in forest stands. *North American Fungi* 10 (3) : 1 - 28)

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

Comments: Around 65-70 grid cells. Many clustered occurrences.

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

Comments: A couple in Mount Rainier National Park.

Environmental Sensitivity: Not Evaluated

Comments: None

Short Term Trends: Not Evaluated

Comments: None

Long Term Trends: Not Evaluated

Comments: None

Threat Impact: BC = High - Medium

Comments:

Threats from logging threaten this species, and if you calculate the threat based on a 40 year logging rotation, the threat is medium. In 2002 Norvell ranked it as a high threat and said "Threats to *Bridgeoporus nobilissimus* are those actions that disrupt stand conditions necessary for its survival. These include activities that cause removal of host trees or modification of microclimatic conditions required for fruiting and survival, such as logging, road, trail, and campground construction (Hibler & O'Dell 1998)." Because many of the occurrences are clustered, the threat could be higher so it's been assigned the medium-high range.

Intrinsic Vulnerability: Not Evaluated

Comments: None

Calculated Rank: G2G3

Rank Author: Caitlin Lawrence

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>

Oregon Biodiversity Information Center, Institute for Natural Resources
Oregon State University and Portland State University

Mail Stop: INR, P.O. Box 751

Portland, OR 97207-0751

(503)-725-9950

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