

Oregon Status Factors

Elcode NFFUN0F010
Gname BRIDGEOPORUS NOBILISSIMUS
Gcomname Fuzzy Sandozi

Number of Occurrences

B = 6 - 20
C = 21 - 80

Comments The map and geographical coordinates of ISMS data reporting 55 occurrences suggest that there are between 14-22 separate localities where *B. nobilissimus* is found. The ISMS 2002 data are suspect, as only three known sites were known before the surveys and only 3 collections from 2 sites are cited in the OSU herbaria (11-18-02). It is probable that ISMS numbers reflect either unverified collections or repeat collections from known populations. Oregon is the center of the species range.

Number of Occurrences with Good Viability

C = Few (4-12) occurrences with good viability
D = Some (13-40) occurrences with good viability

Comments See comments above. The ISMS map shows approximately 14 sites as distinct, and comparison of the latitude /longitudes in the ISMS 2002 database suggests possibly 22 Oregon sites. Of those, none occur in permanently protected reserves, 3 in late-successional reserves, and ~10 in riparian reserves. The fungus is slow growing and linked to noble fir.

Population Size

U = Unknown

Comments Individuals and/or genets cannot be determined without recourse to molecular analysis.

Range Extent

E = 5,000-20,000 km² (about 2,000-8,000 square miles)
F = 20,000-200,000 km² (about 8,000-80,000 square miles)

Comments In Oregon, restricted to the west Cascade range except for one occurrence in the Siuslaw National Forest in the coast range.

Area of Occupancy

E = 100-500 km² (about 25,000-125,000 acres)
LE = 1,000-5,000 km (about 620-3,000 miles)

Comments Occupation is spotty, but the populations present appear to be relatively large for fungi. At the Snow Peak site in 1990, there were several large fruitbodies growing on 90+ year-old noble fir stumps in a new plantation and six other fruitbodies found in the Mt. Hood National Forest gorge area.

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

B = Large Decline (decline of 75-90%)

C = Substantial Decline (decline of 50-75%)

Comments Any eradication of old, large diameter dead *Abies* substrate would imperil the fungus; the fruitbodies are found on snags, stumps, or dead portions of decadent large, live trees. Many of the fruitbodies monitored in reserves have begun to disappear due to natural senescence. Unless *Abies* species are replanted, populations will begin to die off.

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

C = Rapidly Declining. Decline of 30-50% in population, range, area occupied, and/or number or condition of occurrences

D = Declining. Decline of 10-30% in population, range, area occupied, and/or number or condition of occurrences

Comments It is possible that removal of fruitbodies during the recent surveys may have threatened the viability of the fungus at those sites. See concerns above.

Threats

D = Moderate, non-imminent threat. Threat is moderate to severe but not imminent for a significant portion of the population, occurrences, or area.

Scope	Moderate	Severity	High	Immediacy	Low
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Comments 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). Most of the occurrences are in working National Forest lands and may be subject to eradication by removal of the existing timber.

Number of Appropriately Protected and Managed Occurrences

D = Many (13-40) occurrences appropriately protected and managed

Comments For Oregon, the ISMS 2002 database notes 3 occurrences in late-successional reserves, and ~10 in riparian reserves. The LSR and "RIP" sites may be imperiled if governmental management policies change. The rank would then change to A.

Intrinsic Vulnerability

A = Highly Vulnerable. Species is slow to mature, reproduces infrequently, and/or has low fecundity such that populations are very slow (> 20 years or 5 generations) to recover from decreases in abundance; or species has low dispersal capability such that extirpated populations are unlikely to become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are highly susceptible to changes in composition and structure that rarely if ever are reversed through natural processes even over substantial time periods (> 100 years).

Comments The fungus is believed to be very slow-growing. The populations may be larger than anticipated. It is not known how long it will take for an extirpated occurrence to re-establish itself (if ever).

Environmental Specificity

A = Very Narrow. Specialist or community with key requirements scarce.

Comments All of the known *Bridgeoporus nobilissimus* sites have old, large diameter dead *Abies procera* or *Abies amabilis* material as the substrate. Known sites are in a wide range of seral stages from a 60 year old stand (on old stumps) to old-growth forests. The conks are found on snags, stumps, or dead portions of decadent large, live trees. (Hibler & Odell 1998)

Other Considerations

ORNHIC - List 1. Also known as *Oxyporus nobilissimus* and *Fomes nobilissimus*. The 55 location records noted in the ISMS location database appear high. Coordinate comparisons suggest numerous samplings of known populations. The raw data are troubling and appear to inflate unduly locations for what appears to be an uncommon or rare species in Oregon.

Edition 11/18/2002 **Edauthor** Lorelei L Norvell

Grank S2? **Grank Date** 11/18/2002

Greasons

A western North American endemic known from only 3 states. Prior to 1998, only two sites were known from Oregon (Norvell 1995, Castellano 1999). A large number of the newly reported "sites" appear to reflect repeated samplings from same populations and are suspect. Only 2 collections are cited in the OSC herbarium, and only 1 (apparently part of one in the OSC herbarium) is cited in the OSU-FSL herbarium database. The species is tied to old-growth *Abies procera*/A. *amabilis*, species that are not being managed for. There is no question that the surveys have uncovered new sites, but the data need to be examined closely before altering the current rank on the Oregon Natural Heritage list: S2.

BCD Sources

New Sources

Gilbertson & Ryvardeen. 1986. North American Polypores. Vol. 1. Fungi Flora. Oslo. ALSO Burdsall, Volk & Ammirati. 1996. Mycotaxon 60:387-395. ALSO Norvell. 1995. ROD: Strategy 1 Fungal Species Evaluation (30 gilled and non-gilled Basidiomycete Strategy 1 species). Unpubl. report on file in the Regional Mycology Lab, Corvallis, Oregon. ALSO Castellano et al. 1999. Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan. USDA-FS PNWRS PNW-GTR-476. ALSO OSU Fungal collections database 11-18-02: <http://ocid.nacse.org/research/herbarium/myco/index.html> ALSO OSU Forestry Sciences Lab herbarium database 11-18-02 <http://mgd.nacse.org/cgi-bin/qml2.0> ALSO Hibler & O'Dell. 1998. Survey Protocols for *Bridgeoporus (=Oxyporus) nobilissimus*...FUNGI Version 2.0 May 13, 1998