

Washington Status Factors

Elcode NFFUN0F010
Gname BRIDGEOPORUS NOBILISSIMUS
Gcomname Fuzzy Sandozi

Number of Occurrences

A = 1 - 5

Comments There were 5 historical sites from Washington that have been resampled during the current surveys.

Number of Occurrences with Good Viability

C = Few (4-12) occurrences with good viability

Comments The occurrences appear to be stable in Washington, although the fungus has disappeared from the Asahiel Curtis State Park. Only 4 occurrences, all from previously known sites, were reported during the recent surveys.

Population Size

U = Unknown

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

Range Extent

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

Comments Restricted to the Cascade and Coast ranges in Washington.

Area of Occupancy

B = 0.4-4 km² (about 100-1,000 acres)

LB = 4-40 km (about 2.5-25 miles)

Comments Occupation is spotty, but the populations present appear to be relatively large for fungi.

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

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

D = Moderate Decline (decline of 25-50%)

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. The disappearance of one population highlights the vulnerability to the fungus as the substrates disappear.

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

A = Substantial, imminent threat. Threat is moderate to severe and imminent for most (> 60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a widespread area, either causing irreversible damage or requiring long term recovery

Scope High **Severity** High **Immediacy** Moderate

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).

Number of Appropriately Protected and Managed Occurrences

B = Few (1-3) occurrences appropriately protected and managed

Comments A total of 2 occurrences are listed in the ISMS 2002 database as occurring in permanently protected reserves, and possibly one in a riparian reserve. The LSR and "RIP" sites may be imperiled if governmental management policies change.

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

Also known as *Oxyporus nobilissimus* and *Fomes nobilissimus*. The decline and disappearance of previously known occurrences (1, in Asahiel Curtis State Park) indicates that the slow-growing species are imperiled and should be protected and managed for.

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Reasons

A western North American endemic known from only 5 locations in Washington (Castellano et al. 1999, Burdsall et al 1996, Norvell 1995, ISMS 2002). The species is tied to old-growth *Abies procera*/*A. amabilis*, species that are not being managed for, but occurrence on two permanently protected reserves mediates the threat to some extent.

BCD Sources

New Sources

Gilbertson & Ryvarden. 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