Conservation Status Assessment

Scientific Name: **Hygrophorus vernalis**
Classification: Fungus
Assessment area: Global
Heritage Rank: G1G2
Rank Date: 11/28/2016

Assigned Rank Comments: None.
Rank Adjustment Notes: Without the Threat impact score The rating would be G1, With a medium (or high) threat score the rating is G2.

Range Extent: \( F = 20,000-200,000 \text{ sq km} \approx 8,000-80,000 \text{ sq mi} \)

Comments: The Global range is 28,428 sq. km and includes sites Near Vancouver, B.C. Canada, In Olympic national park and Northern California. There are three herbarium collections of this species by W.B.Cooke with Panther creek as a location. One is from 1951, has GPS coordinates and is recorded as occurring at Panther creek / Squaw Valley Meadows in Siskiyou county, CA (in WSU herbarium). The other two (UC Berkley and Mich. State Herbariums) have no GPS coordinates, are from 1941 and are recorded as been collected from Panther creek in Washington State. All three sites have a recorded elevation of 2438 m. It is likely that all three are from the panther creek area on the southeast slope of Mount Shasta CA which is at the right altitude. If there actually is another site in a Panther Creek in Washington that could double the range if it was in the cascades or increase it even more if it was in Northeast Washington.

Population Size: Not assessed

Comments: None

Number of Occurrences: \( A = 1 - 5 \)

Comments: There are 3 occurrences in the global range. If there are in fact 2 Panther creek sites there would be 4 occurrences

Area of Occupancy: \( C = 3-5 \text{ 4-km}^2 \text{ grid cells} \)

Comments: This species occupies 3 grid squares across its global range. If there are 2 panther creek sites there are 4 grid squares occupied

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

Comments: One known site is within Olympic National Park

Environmental Sensitivity: \( B = \text{Narrow. Specialist or community with key requirements common} \)

Comments: A likely mycorrhizal, "snowbank" species of high elevation conifer forest.

Short Term Trends: Not Evaluated

Comments: None
Long Term Trends: Not Evaluated

Comments: None

Threat Impact: C = Medium

Comments:
Only one occurrence is in a permanently protected area. If the other two sites were logged on a 40 year rotation 16% of the sites would be impacted over 10 years and around 67% of the sites would be impacted over 100 years.

Intrinsic Vulnerability: Not Evaluated

Comments: None

Calculated Rank: G2

Rank Author: Michael Russell
Rank Reviewer: Michael Russell

References:
No additional references listed.

Definitions and Resources:

<table>
<thead>
<tr>
<th>Rank Prefixes</th>
<th>Global rank, applied to taxon’s full geographic range</th>
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<tr>
<td>S</td>
<td>State rank, applied to taxon’s range within the designated state</td>
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<table>
<thead>
<tr>
<th>Rank Values</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Critically imperiled</td>
</tr>
<tr>
<td>2</td>
<td>Imperiled</td>
</tr>
<tr>
<td>3</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>4</td>
<td>Apparently secure, uncommon but not rare</td>
</tr>
<tr>
<td>5</td>
<td>Secure, common, abundant, and widespread</td>
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Suggested citation:

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