Washington Status Factors

Elcode: NBHEP3C050
Gname: TRITOMARIA QUINQUEDENTATA
Gcomname: LIVERWORT

Number of Occurrences
A = 1 - 5
Comments: The ISMS database contains records for about 5 sites in Washington. Hong (1994) mapped 7 localities for this species in Washington, but did not cite specific collection data.

Number of Occurrences with Good Viability
B = Very few (1-3) occurrences with good viability
Comments: Estimated 3 occurrences in Washington with good viability.

Population Size
B = 50-250 individuals
Comments: Estimated 250 individuals in Washington.

Range Extent
F = 20,000-200,000 km2 (about 8,000-80,000 square miles)
Comments: Estimated range is about 10,000 square miles in Washington. Known from the Cascade Range. Hong (1994) mapped 7 localities for this species in Washington, but did not cite specific collection data.

Area of Occupancy
A = <0.4 km2 (less than about 100 acres)
LA = <4 km (less than about 2.5 miles)
Comments: Estimated area of occupancy is 5 acres in Washington.

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences
D = Moderate Decline (decline of 25-50%)
Comments: Moderate long-term decline of 25-50% in Washington. Habitats are cool, moist refugia that are less abundant now than in previous times. Dispersal is thus inhibited and less likely over time. Long term viability is dependent on the longevity of populations at established sites.

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, 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  Short-term decline of 10-30% in Washington, for reasons cited above.

Threats  
F = Widespread, low-severity threat. Threat is of low severity but affects (or would affect) most or a significant portion of the population, occurrences, or area. Ecological community occurrences are not threatened severely, with changes reversible and recovery moderately rapid.

Scope Moderate  Severity Low  Immediacy Moderate

Comments  Widespread, low-severity threat at southern edge of range, but secure farther north. Logging and stream degradation ongoing threats. Acid rain and climate change are potential threats.

Number of Appropriately Protected and Managed Occurrences  
B = Few (1-3) occurrences appropriately protected and managed

Comments  Three protected occurrences in Washington.

Intrinsic Vulnerability  
C = Not Intrinsically Vulnerable. Species matures quickly, reproduces frequently, and/or has high fecundity such that populations recover quickly (< 5 years or 2 generations) from decreases in abundance; or species has high dispersal capability such that extirpated populations soon become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are resilient or resistant to irreversible changes in composition and structure and quickly recover (within 10 years).

Comments  Not intrinsically vulnerable. Plants are small and fragile, but reproduce readily by spores and fragmentation of gametophytes. Plants will recolonize sites when suitable habitat and substrate are present, but this depends on the availability of inoculum from nearby populations.

Environmental Specificity  
B = Narrow. Specialist or community with key requirements common.

Comments  Narrow environmental specificity. Restricted to organic substrates where perpetually shady, cool and moist. Located on shaded cliffs, wet soil over rock, and decaying wood.

Other Considerations

Edition 2/20/2003  Edauthor John A. Christy

Grank S1  Grank Date 11/25/2002

Greasons

BCD Sources

New Sources
Hong, W.S. 1994. ———