Washington Status Factors

Elcode  NLCAL00011
Gname  STENOCYBE CLAVATA
Gcomname  pacific stickpin

Number of Occurrences
Z  = 0 (zero)
Comments  Found in British Columbia and Oregon, and probably in WA, but not documented from there.

Number of Occurrences with Good Viability
U  = Unknown what number of occurrences with good viability
Comments

Population Size
U  = Unknown
Comments

Range Extent
G  = 200,000-2,500,000 km² (about 80,000-1,000,000 square miles)
Comments  Found in British Columbia and Oregon, and probably in WA, but not documented from there.

Area of Occupancy
A  < 0.4 km² (less than about 100 acres)
LA  < 4 km (less than about 2.5 miles)
Comments  Occupancy for epiphytic lichens and fungi can be difficult to estimate, particularly for calicioid species (including this species) which often occur as colonies covering only a few square centimeters on single tree trunk within a stand and then again several hundred meters away. The occupancy given above is roughly estimated as the total worldwide distribution of the species; the actual coverage of the species condensed so as to be continuous may not be much more than a few hectares.

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences
U  = Unknown. Long-term trend in population, range, area occupied, or number or condition of occurrences unknown
Comments  Most calicioid lichens and fungi inhabit aged bark or wood in sheltered locations protected from direct rain interception. This species is rather restricted to the bark of old conifer trees, though in coastal areas it is also frequent on late-successional Picea sitchensis; most known occurrences are on conifers > 200 years old, with occasional occurrences on Picea sitchensis trees as young as 100 years old. This species is endemic to the Pacific Northwest and has a very unusual, ecologically bimodal distribution with most occurrences in either humid (particularly coastal) forests, or dry southern Cascade forests, but is rare in intermediate forests (Peterson & McCune 2000). Removal of old forests in the Pacific Northwest has undoubtedly had severe impacts on
the number of populations, population sizes, and average dispersal distance necessary to colonize new substrates.

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

U = Unknown. Short-term trend in population, range, area occupied, and number and condition of occurrences unknown.

Comments With advances in conservation, the removal of old-growth forests throughout the species range is slowing, but has not stopped.

**Threats**

B = Moderate and imminent threat. Threat is moderate to severe and imminent for a significant proportion (20-60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a moderate area, either causing irreversible damage or requiring a long-term recovery.

Scope Moderate Severity High Immediacy High

Comments In the Pacific Northwest, due to logging, this species has gone through significant declines. However, the rate of loss in the Pacific Northwest has slowed. Although little is known about the reproductive and dispersal biology of this species, it is thought that the species can overcome some habitat fragmentation and, at this point, is secure from extirpation or extinction. However, given the general old-growth association of this species, it should not be ignored in conservation actions.

**Number of Appropriately Protected and Managed Occurrences**

U = Unknown whether any occurrences are appropriately protected and managed

Comments

**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 Given high vulnerability rank because it will not return to a forest for a century or more after a stand-initiating disturbance. Although the species is limited to substrates that are very slow to develop and the maturation time required between colonization and reproduction is unknown, the species does demonstrate a remarkable ability to disperse to appropriate substrates once they are available, even when those substrates are rather isolated. This may be due to use of a dispersal vector such as birds or arthropods which target similar habitats.

**Environmental Specificity**

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

Comments

**Other Considerations**

Edition 2/20/2003 Edauthor Eric B. Peterson
Greasons
Probably present, but not known.

BCD Sources

New Sources
Peterson, E. B. (Search of personal herbarium on 1 November, 2002) Address: Nevada Natural Heritage Program, 1550 E. College Parkway, Carson City, NV
Selva, S., 7 November 2002. Personal communication. Address: Division of Natural and Behavioral Sciences, University of Maine at Fort Kent, Fort Kent, ME.