

Washington Status Factors

Elcode PDFUM03046
Gname CORYDALIS CASEANA SSP. AQUAE-GELIDAE
Gcomname

Number of Occurrences

C = 21- 80

Comments 39 extant occurrences.

Number of Occurrences with Good Viability

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

Comments

Population Size

E = 2,500-10,000 individuals

Comments A little over 2500 individuals.

Range Extent

C = 250-1,000 km² (about 100-400 square miles)

Comments Occurs in two counties but primarily in Skamania County.

Area of Occupancy

B = 0.4-4 km² (about 100-1,000 acres)

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

Comments Small population, mostly along linear creeks.

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 This area has been subject to heavy timber harvest in the last 60 years, including riparian corridors, and it is known that the taxon does not compete well with early successional species, so presumably some populations have declined or disappeared.

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 Few populations have been revisited in the last 10 years. Populations in areas that had been harvested showed signs of decline in the early 1990's.

Threats

E = Localized substantial threat. Threat is moderate to severe for a small but significant proportion of the population, occurrences, or area. Ecological community occurrences are directly impacted over a small area, or in a small portion of their range, but threats require a long-term recovery.

Scope Low

Severity Moderate

Immediacy Low

Comments Populations in areas that were harvested in the late 1980's (or which are opened to harvest) are at risk due to increased competition in riparian areas and other changes to riparian corridors.

Number of Appropriately Protected and Managed Occurrences

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

Comments Most occurrences on the Gifford Pinchot National Forest are covered under a species management guide, but these protections are subject to political or policy changes.

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).

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5-20 years or 2-5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecological community occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10-100 years).

Comments Plants produce many seeds, and adults are long-lived, but seedlings appear to have a narrower range of potential habitat than adults, and there are not known instances of colonization of previously unoccupied habitats.

Environmental Specificity

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

Comments Occurs in a narrow band along streams (often spring-fed) at mid-elevations, generally under some forest canopy on cobble or gravel bars or even within the stream.

Other Considerations

Previously called *Corydalis aquae-gelidae*.

Edition 11/26/2002 **Edauthor** Florence Caplow, Washington Natural Heritage Program

Grank S2S3 **Grank Date** 11/26/2002

Reasons

More than 30 relatively protected occurrences, although the protection could be reversed, and many occurrences are quite small. Taxon is also endemic to a small area of Washington and Oregon. If the management plan does not continue to be implemented, the Srank should return to S2.

BCD Sources

New Sources

Gifford Pinchot National Forest. 1983. Species Management Guide for *Corydalis aquae-gelidae*. USDA Forest Service, Gifford Pinchot NF. 15 pp.