

Heritage Rank Status Factors

Elcode AAAAD12180
Gname PLETHODON STORMI
Gcomname SISKIYOU MOUNTAINS SALAMANDER

Number of Occurrences

C = 21- 80

Comments Small number of occurrences, probably less than 40 worldwide. The range of the species has been split between Northern and Southern Groups, approximately coincident with the crest of the Siskiyou Mountains.

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments

Population Size

G = 100,000-1,000,000 individuals

H = >1,000,000 individuals

Comments Locally abundant.

Range Extent

D = 1,000-5,000 km² (about 400-2,000 square miles)

Comments Restricted to an area of about 1600 sq km in the Siskiyou Mountains in southern Oregon (mostly upper Applegate River drainage, Josephine and Jackson Counties) and northern California (Siskiyou County: near Hutton Guard Station, the Cook and Green Guard Stations, along Joe and Dutch creeks in upper Applegate River drainage and along Seiad and Horse creeks in Klamath River drainage) (California Department of Fish and Game 1990). In Oregon, found at elevations from 490-1,463 feet (Leonard et al. 1993).

Area of Occupancy

E = 100-500 km² (about 25,000-125,000 acres)

LE = 1,000-5,000 km (about 620-3,000 miles)

Comments Ollivier et al. (2001) found a reduced occupancy rate in southern sites and patchier habitat conditions south of the Siskiyou crest.

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

E = Relatively Stable ($\pm 25\%$ change)

Comments Likely relatively stable in extent of occurrence, probably less than 25% decline in population size, area of occurrence, and number/condition of occurrences.

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

E = Stable. Population, range, area occupied, and/or number or condition of occurrences unchanged or remaining within $\pm 10\%$ fluctuation

Comments Likely stable in extent of occurrence; uncertain trend in population size.

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 Moderate Immediacy Moderate

Comments Most serious threat appears to be gradual destruction of overstory vegetation by clear-cutting in areas of rock outcrops and talus slopes, which eliminates the required moist microhabitat (California Department of Fish and Game 1990). In addition, the filling of Applegate Reservoir in the mid 1970's flooded a small portion of the species' range within Oregon.

Number of Appropriately Protected and Managed Occurrences

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

Comments Most sites are on federal lands. Only a limited amount of high quality habitat occurs in large scale reserves and is probably inadequate to maintain species persistence. Less than 10% of the Northern Group's habitat is within reserves. Riparian reserves may only provide incidental benefits to species.

Intrinsic Vulnerability

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 Reasonably well distributed within the Northern Group; uncertain in the Southern Group. There are no small population effects expected in the Northern Group; however, this is uncertain in the Southern Group.

Environmental Specificity

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

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

Comments Significant association with conditions found in older, undisturbed forest with a closed canopy, moist microclimate, and rocky substrates dominated by cobble-sized pieces (Ollivier et al. 2001).

Other Considerations

NRANK: N2N3

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Reasons

Smallest range of any western Plethodon salamander. Small number of occurrences within a restricted range, with very few protected.

BCD Sources

California Department of Fish and Game. 1990. 1989 annual report on the status of California's state listed threatened and endangered plants and animals. 188 pp.

Leonard, W. P., H. A. Brown, L. L. C. Jones, K. R. McAllister, and R. M. Storm. 1993. Amphibians of Washington and Oregon. Seattle Audubon Society, Seattle, Washington. viii + 168 pp.

Nussbaum, R.A. 1974. Distributional ecology & life history of the Siskiyou Mt. salamander, *Plethodon stormi* in relation to the potential impact of the proposed Applegate Reservoir on this species. Unpub. Rt.. U.S. Army Corps, Portland, OR.

New Sources

Ollivier, L., H.H. Welsh, and D. Clayton. 2001. Habitat correlates of the Siskiyou Mountains salamander *PLETHODON STORMI* (Caudata: Plethodontidae). Report to the California Department of Fish & Game, USDI Bureau of Land Management, Medford District, and USDA Forest Service, Rogue River National Forest.