# **Heritage Rank Status Factors**

Elcode AAAAD12100

Gname PLETHODON LARSELLI

Gcomname LARCH MOUNTAIN SALAMANDER

### **Number of Occurrences**

C = 21 - 80

Comments

Washington Department of Fish and Wildlife had 67 unique records for this species as of 1997 (Dvornich et al. 1997). Most of these sites are expected to be extant, though some of them may be combined into single occurrences. There are approximately 17 populations in Oregon (ORNHIC 2002).

## **Number of Occurrences with Good Viability**

U = Unknown what number of occurrences with good viability

Comments

# **Population Size**

U = Unknown

Comments Total adult population size is unknown.

## Range Extent

E = 5,000-20,000 km2 (about 2,000-8,000 square miles)

Comments

Columbia River Gorge in Washington and Oregon, with additional, isolated populations to the north in the Washington Cascades; to elevations of 3400 ft (1036 m) (Leonard et al. 1993). Patchily distributed away from Columbia River Gorge.

## **Area of Occupancy**

U = Unknown

LU = Unknown

Comments Population distribution within the range is patchy.

# 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 ±10% fluctuation

Comments

Populations appear stable; new populations are being discovered in Washington (Lisa Hallock, pers. comm., 1998).

#### **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 Moderate Immediacy High

Comments

Threatened by logging (changes microclimate and resources of talus slopes) and by use of talus for road construction (Pfrender 1993, Leonard et al. 1993). Any ground-disturbing activity or land use that changes the moisture regimes and permeability of inhabited rocky substrates, such as overstory tree removal and gravel removal, may threaten populations. Chemical applications (i.e., herbicides, pesticides, fertilizers) may affect Larch Mountain Salamanders directly due to toxicity or indirectly due to loss of prey-base (Hallock and McAllister 2002).

# **Number of Appropriately Protected and Managed Occurrences**

C = Several (4-12) occurrences appropriately protected and managed

Comments Most habitat is protected within the Columbia River National Scenic Area (Leonard et al. 1993). Habitat on national forest land may not be adequately protected.

## **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

Sites support high abundance and small population effects are not expected to influence persistence.

## **Environmental Specificity**

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

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

Comments

Associated with talus, scree, gravelly soils and other areas of accumulated rock where interstitial spaces exist between the rock and soil. Steep slopes are also an important habitat feature. In all of these habitats, important microhabitats include woody debris, leaf litter and rocks (Hallock and McAllister 2002).

## **Other Considerations**

NRANK: N3

**Edition** 11/18/2002 **Edauthor** Scheuering, E. and E. Gaines

**Grank** G3 **Grank Date** 11/18/2002

### Greasons

Small range in Oregon and Washington. New populations are being discovered in Washington. Several occurrences protected, but moderate threats exist elsewhere.

#### **BCD Sources**

Dvornich, K.M., K.R. McAllister, and K.B. Aubry. 1997. Amphibians and reptiles of Washington State: Location data and predicted distributions, Vol. 2 IN Washington State Gap Analysis - Final Report, (K.M. Cassidy, C.E. Grue, M.R. Smith and K.M. Dvornich, eds.), Washington Cooperative Fish and Wildlife Research Unit, University of Washington, Seattle, 146 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. Pfrender, Mike. 1993. Conservation status and biology of the Larch Mountain salamander (PLETHODON LARSELLI Burns). Unpublished report. 16 pp.

# **New Sources**

Hallock, L.A. and McAllister, K.R. 2002. Larch Mountain Salamander. Washington Herp Atlas. http://www.wa.gov/dnr/htdocs/fr/nhp/refdesk/herp/