

## FIVE YEAR STATUS REPORT

I. COMMON NAME: Siskiyou Mountain Salamander  
SCIENTIFIC NAME: Plethodon stormi  
CURRENT CLASSIFICATION: Threatened

II. RECOMMENDED ACTION:

Retain Threatened classification.

III. SUMMARY OF REASONS FOR RECOMMENDED ACTION:

Very little is known about the distribution or abundance or the Siskiyou Mountain Salamander (SMS). Threats include the destruction of habitat by clear-cut logging practices, development projects within SMS habitat, and the cumulative impact of other human activities. In addition, there is some question as to the taxonomic status of this animal. Until the taxonomic issue is settled, and adequate distribution and abundance information are available, designation as Threatened is warranted.

### SUPPORTING INFORMATION

IV. NATURE AND DEGREE OF THREAT:

The most serious threat to the SMS appears to be the gradual destruction of overstory vegetation within its range by clear-cutting in areas of rock outcrops and talus slopes. This practice alters the habitat by eliminating the moist microhabitat necessary for species survival (Nussbaum 1974).

The recently developed Applegate Reservoir in Oregon covered 1.06 percent of the known range. As the actual range is undoubtedly larger, this project destroyed only a small portion of the range. An additional threat, which is considered to be minor, is the increased recreational use of the areas surrounding the Lake (Nussbaum 1974).

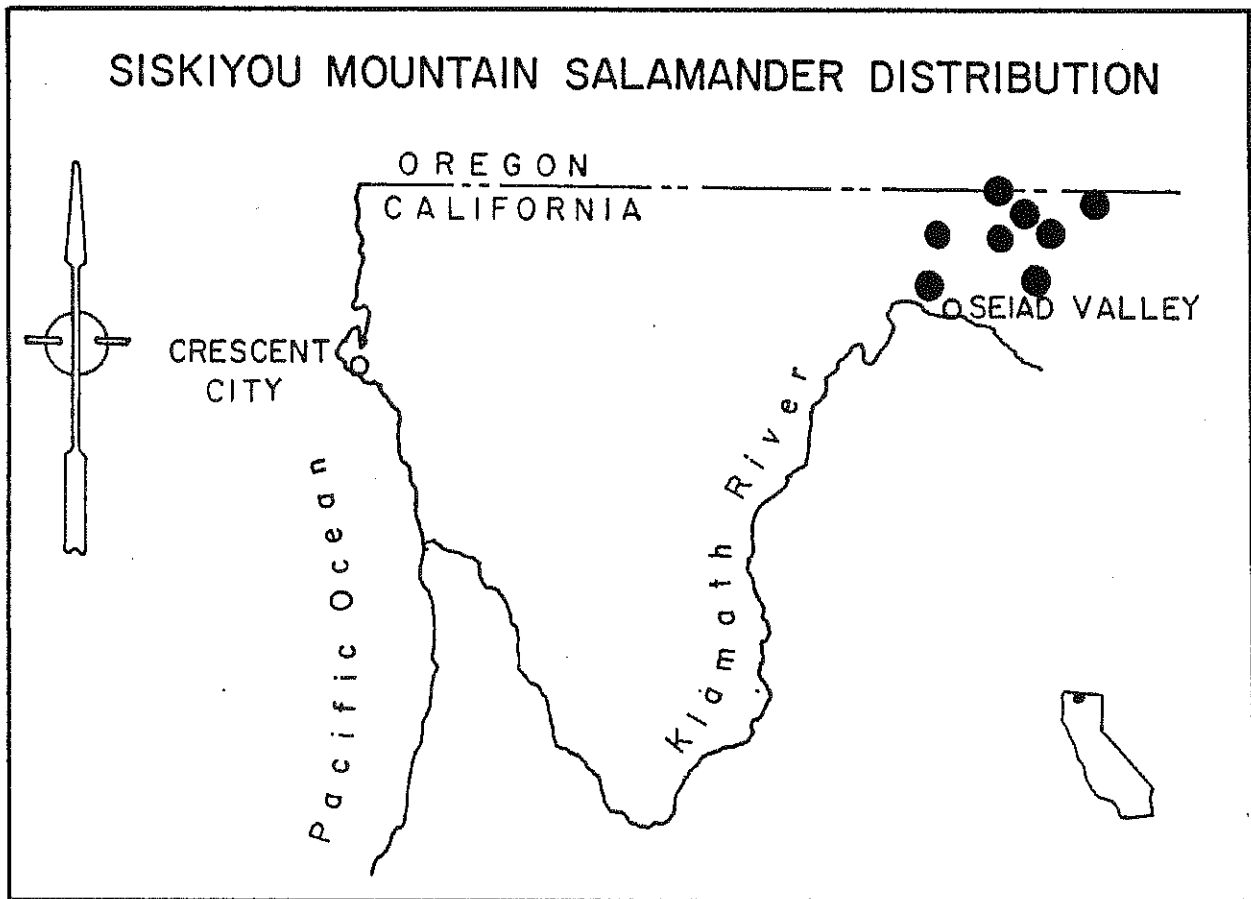
V. HISTORIC AND CURRENT DISTRIBUTION:

Historic

No information available.

Current

The complete distribution of the SMS is not known. The SMS is known from 37 sites in the Applegate River and Thompson Creek drainages in Oregon, Seiad Creek drainage in Oregon and California, and and Horse Creek drainage in California (Nussbaum 1974) (Figure 1). It is likely that additional population sites exist in nearby drainages (Kesner 1977). The highest elevation record for the SMS is 3536 ft, although



At The Crossroads, 1980. Calif. Dep. of Fish and Game.

(July 1983)

most of the sites are below 3280 ft. This may be due to the fact that most surveys have been done at relatively low elevations.

#### VI. HISTORIC AND CURRENT ABUNDANCE:

No information available.

#### VII. SPECIES DESCRIPTION AND BIOLOGY:

The SMS is a slim-bodied animal with short legs. The color is dull brown to chocolate brown on the dorsal surface and sides, often profusely speckled with white or yellowish flecks. The ventral surface is purplish gray. Adults grow to 4-6 in total length (California Department of Fish and Game 1974).

The SMS is a fully terrestrial salamander which has abandoned the functionally aquatic stage. It deposits its eggs in moist, protected subterranean sites. By the time of hatching, the eggs have already metamorphosed into fully terrestrial juvenile salamanders. Although the SMS has abandoned the aquatic stage, it remains highly dependent on moist microhabitats for survival. Because of this, it is usually active only at night when temperatures are low and humidity high. During the day the animal hides under surface objects. In the spring and fall when the soil is wet, the SMS is often close to the surface, but during the summer and winter it retreats to escape drought, heat or freezing (Kesner 1977, Nussbaum 1974).

From an analysis of the stomach contents of SMS, it is apparent that spiders, pseudoscorpions, mites, ants, collembolans and beetles are the major food. Ants are the most important food in spring, but not apparent in fall samples. No millipedes were taken in spring, but were found in larger animals in the fall (Nussbaum 1974).

Highton and Brame (1965) recognized that P. stormi and the Del Norte salamander, P. elongatus, are closely related. Because they are allopatric, they may represent two geographic variants of one species (Nussbaum 1974). Bury (1973) collected individuals in Seiad Valley which appeared to be intergrades with P. elongatus. Nussbaum (1974) collected animals in the same area, and remains unconvinced that they are intergrades. Stebbins (1985) lists the SMS as a subspecies, P. elongatus stormi. Brodie (1970) feels that the morphologic characteristics are distinct enough to justify their classification as separate species.

#### VIII. HABITAT REQUIREMENTS:

Populations of SMS are associated with talus deposits in drier inland areas where forest floor litter is thin or absent. The talus must be packed loosely enough to accommodate passage by

the animals so that they can follow moisture downward. During the wettest weather they are occasionally found under bark, limbs or logs near talus. Because the SMS needs moisture, stable talus in old-growth stands on N-, NE-, or NW-facing slopes provide optimal habitat (Cheyne 1973, Nussbaum 1974).

Habitat for the SMS is usually covered with some deciduous tree leaf litter or moss. They have been found in old clear-cuts, moss covered road cuts, near seepages and along streams (Cheyne 1973).

IX. CURRENT AND RECOMMENDED MANAGEMENT:

Currently, management of the SMS is limited to review of projects that may affect the animal or its habitat, and to an "Interim Management Direction" developed for activities within the Klamath National Forest. This direction provides for protection of most SMS populations by the use of normal streamcourse protection measures designed to maintain water quality and fisheries habitat (Kesner 1977).

At present the main question that needs to be resolved with respect to the SMS is the relationship of P. stormi to P. elongatus. In addition, both distribution and abundance data are needed. Until the taxonomic status is resolved and additional survey information is available, a thorough management plan for the species cannot be developed.

X. INFORMATION SOURCES:

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