## **California Wildlife Habitat Relationships System California Department of Fish and Wildlife California Interagency Wildlife Task Group**

CALIFORNIA SLENDER SALAMANDER Batrachoseps attenuatus Family: PLETHODONTIDAE Order: CAUDATA A014

Class: AMPHIBIA

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The California slender salamander is common over much of its range. It is found in the Coast Ranges from the northern border of the State to Monterey and San Benito cos. It also occurs in the Sierra foothills north to Butte Co. in the vicinity of Chico. This species inhabits a variety of low- to middle-elevation habitats, including valley-foothill hardwood, hardwood-conifer, riparian, mixed conifer, Douglas fir, redwood, and montane hardwood-conifer. Ranges from sea level to 1400 m (4600 ft).

## SPECIFIC HABITAT REQUIREMENTS

Feeding: Forages primarily under or within surface objects such as decaying logs, pieces of bark or flat rocks, in leaf litter, and in the open, near cover. May also enter and forage within termite tunnels and earthworm burrows. Primarily eats small arthropods such as spiders and mites, and insects (especially collembolans, coleopterans, and hymenopterans), as well as earthworms and snails (Cunningham 1960, Adams 1968).

Cover: From fall to spring this salamander seeks cover on moist substrates under or within surface objects such as decaying logs, leaf litter, pieces of bark, boards, and flat stones. As surface microhabitats dry in late spring, individuals retreat to rodent burrows, termite and earthworm tunnels, or other small openings.

Reproduction: Eggs have been found on moist substrates within and under decaying logs, under pieces of bark, boards, and other surface objects, but Stebbins (1951) suggested that these are exceptional sites and that eggs are more commonly laid underground.

Water: Periods of surface activity are strongly correlated with fall, winter, and spring precipitation.

Pattern: Prefers moist substrates with surface objects for cover.

## SPECIES LIFE HISTORY

Activity Patterns: Active on the surface during moist periods (usually October to May), usually at night. Aestivates during drier periods.

Seasonal Movements/Migration: Retreats to subterranean refuges during drier periods.

Home Range: Hendrickson (1954) reported th most recaptures were within 2 m (7 ft) of original capture. 59% of recaptures were under the original cover object.

Territory: Unknown. Individuals have not been observed to actively defend resources, but females are commonly found in the immediate vicinity of egg clusters.

Reproduction: Unlike most plethodontid salamanders of California, this species lays eggs early in the period of surface activity. Stebbins (1951) suggested that in the San Francisco Bay region most eggs are laid by December. Eggs are laid in clusters of 4 to 21, the average clutch size being about 12 (Stebbins 1951). Multiple females may utilize the same oviposition site resulting in egg clusters of up to 74 or more (Maslin 1939). Hatching occurs in the spring.

Niche: A semifossorial species able to enter termite tunnels, earthworm burrows and other small openings that are unavailable to other more robust salamanders. May compete for food resources with juvenile salamanders (especially Ensatina and Aneides) where their ranges overlap. Primary predators are probably small snakes such as the ringneck snake. Adults and juveniles may also be taken by predatory arthropods, diurnal birds (especially those that search through leaf litter) and small mammals.

## REFERENCES

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