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

LARGE-BLOTCHED ENSATINA *Ensatina eschscholtzii klauberi*
Family: PLETHODONTIDAE Order: CAUDATA Class: AMPHIBIA
A012b

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The large-blotched ensatina is found on the coastal mountain ranges of south California, from the Los Angeles and San Bernardino to San Diego Counties. Most common in redwood habitats, but also found in a variety of other coniferous habitats including ponderosa pine, Douglas fir and mixed conifer as well as in montane hardwood and hardwood-conifer habitats and mixed chaparral. Elevation ranges from sea level to over 3050 m. (10,000 ft.) on Mt. San Gorgonio in the San Bernardino Mts. The taxonomy for the ensatina is controversial; some researchers recognize this sub-species at the full species level, *E. klauberi* (Nafis 2018).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Most feeding appears to occur at night during wet periods. Food consists primarily of spiders, insects (especially collembolans, coleopterans, camel crickets, termites, and ants), millipedes, centipedes, and sowbugs (Stebbins 1954).

Cover: During the moist periods of fall, winter, and spring precipitation, individuals seek cover under surface objects such as logs and boards, rocks, and to a lesser extent, moist leaf litter. Salamanders retreat to rodent burrows or other moist places underground as surface moisture declines in summer. They may also retreat from the surface in winter at higher elevations (Stebbins 1954), although individuals have been collected mid-winter in the Sierra at 1,472 m. (4,770 ft.) under logs covered by 30 cm (12 in) of snow.

Reproduction: Eggs are usually found on moist surfaces under or within decaying logs, under pieces of bark, or in moist rock fissures (Stebbins 1954). One egg cluster was found inside the nest chamber of a mountain beaver (Storer 1925).

Water: This species prefers moist, but not saturated, soils and loses body water rapidly on dry substrates (Cohen 1952). Periods of surface activity are strongly correlated with fall, winter, and spring precipitation.

Pattern: No additional information.

SPECIES LIFE HISTORY

Activity Patterns: Nocturnal surface activity during periods of fall, winter and spring precipitation.

Seasonal Movements/Migration: Retreats to rodent burrows or other subterranean cover in summer, and possibly during the cooler periods of winter at higher elevations.

Home Range: Marked individuals have been found to move less than 60 m. (195 ft.) from the point of initial capture. Males appear to have home ranges about twice as large as females (Stebbins 1954). It is assumed that the area of surface activity occurs over, or in proximity to, the area of subterranean activity. Subterranean activity is probably minimal.

Territory: Males are not known to be territorial. Females brood eggs and may defend an area in the immediate vicinity of the eggs from some types of predators (Stebbins 1954).

Reproduction: Sexual activity extends over most of the period of surface activity. This species has an elaborate courtship (Stebbins 1949). Eggs are usually laid near the end of the period of surface activity. Clutch size varies from 3 to 25 (Stebbins 1954 and references therein). Females brood eggs and may help keep them moist with mucous secretions from the skin. Males are occasionally found near brooding females.

Niche: Pacific giant salamanders, red-legged frogs, garter snakes, rubber boas, and Steller's jays have all been observed to kill ensatinas. Stebbins (1954) listed the following "probable" predators: beetle larvae, Jerusalem crickets, arboreal salamanders, ringneck snakes, sharp-tailed snakes, white-footed mice, shrews, raccoons, and bears. Ensatinas (especially juveniles) may compete for food resources with slender salamanders wherever their ranges overlap.

REFERENCES

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