

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

GREGARIOUS SLENDER SALAMANDER
Family: PLETHODONTIDAE
A064

Batrachoseps gregarius
Order: CAUDATA

Class: AMPHIBIA

Written by: CWHR Staff Jun. 2018

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Endemic to California, found from the western slope of the central and southern Sierra Nevada Mountains, extending from the southern boundary of Yosemite National Park to south near the Kern River (Jockusch et al. 1998, Nafis 2018). This species varies in habitat from mixed high elevation Sierran coniferous forests, open woodlands, oak woodlands, low elevation open grasslands, and hot and dry habitats at the southern extent of its range. The salamander occurs from below 100 m. up to 1800 m. elevation (330 to 5,900 ft.) (Jockusch et al. 1998).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Like other *Batrachoseps*, this species uses a projectile tongue to capture small invertebrates (Lannoo 2005). Little is known about feeding behaviors and activity for the salamander.

Cover: Defensively seeks cover when discovered (Lannoo 2005). Remains underground during extreme temperatures of summer and winter (Nafis 2018).

Reproduction: Eggs are laid underneath downed logs, bark slabs, rocks, and damp leaf litter associated adjacent surface water margins; found at low elevations in grassy pastures imbedded under rocks or high elevations in forested areas under surface objects (Lannoo 2005).

Water: The salamander requires damp environments to respire; do not inhabit bodies of water, but are capable for surviving for a brief time in water (Nafis 2018).

Pattern: Northern records for the species range in elevation from below 100 m. to up to about 1,800 m.; while the southern records generally occur below 900 m (Lannoo 2005).

SPECIES LIFE HISTORY

Activity Patterns: The species activity is related to soil moisture and temperature (Lannoo 2005). At lower elevations, surface activity begins with fall rains, October- November and continues through March-May. Activity may occur in all but the coldest months at higher elevations (> 1,200 m.).

Seasonal Movements/Migration: Unknown.

Home Range: Unknown.

Territory: No data.

Reproduction: Eggs are deposited in communal nests, which are abandoned afterwards; but juvenile and adult males have been found under cover alongside them. Clutch size ranges from <10 to 29 per a female, with >300 for community sites (Jockusch and Mahoney 1997, Lannoo 2005). Females from the northern end of the species range produce larger clutches and lay eggs with the onset of the rainy season (November to early January) while those in the southern end produce fewer eggs and deposit eggs later (late March to late April) (Jockusch 1997, Jockusch and Mahoney 1997).

Niche: As with other Plethodontid salamanders, this species does not breathe through lungs, respiration occurs through their skin and tissues lining the mouth (Nafis 2018). Ground movement only occurs during times of high humidity. Unpublished data from R.W.H. in Lannoo 2005 note that wild predation is not documented, but have been observed in the stomachs of night snakes and ring-necked snakes.

REFERENCES

- Jockusch, E.L. 1997. Geographic variation and phenotypic plasticity of number of trunk vertebrae in slender salamanders, *Batrachoseps* (Caudata: Plethodontidae). *Evolution* 51:1966–1982.
- Jockusch, E.L. and M.J. Mahoney. 1997. Communal oviposition and lack of parental care in *Batrachoseps nigriventris* (Caudata: Plethodontidae) with a discussion of the evolution of breeding behavior in plethodontid salamanders. *Copeia* 1997:697–705.
- Jockusch, E. L., Wake, D. B, Yanev, K. P. 1998. New Species of Slender Salamanders, *Batrachoseps* (Amphibia: Plethodontidae), From the Sierra Nevada of California. *Contributions in Science*. 472:1-17.
- Lannoo, M. 2005. Amphibian Declines, The Conservation Status of United States Species. University of California Press. 675-676.
- Nafis, G. 2018. California Herps – A Guide to the Amphibians and Reptiles of California. Accessed 4 June 2018.
<http://www.californiaherps.com/>.