

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

STRIPED RACER

Coluber lateralis

Family: COLUBRIDAE
R053

Order: SQUAMATA

Class: REPTILIA

Written by: S. Morey, H. Basey

Reviewed by: T. Papenfuss

Edited by: R. Duke

Updated by: CWHR Program Staff, September 1999

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The striped racer (formerly known as California whipsnake) is uncommon to common in suitable habitats the length of the Sierra, north to the vicinity of Shasta Lake, and in the Coast Ranges south from Trinity County, the entire length of the state. Also found in the southern California interior west of the deserts. In the Central Valley, present only in the northern portion. Found from sea level to 1835 m (6020 ft). Prefers mixed chaparral, chamise-redshank chaparral and valley-foothill riparian habitats. Also occurs in a variety of other habitats, including valley-foothill hardwood and hardwood-conifer as well as various coniferous habitats. The threatened subspecies Alameda striped racer (*M. I. euryxanthus*) occurs in the Coast Ranges from just north of San Francisco Bay to the vicinity of Monterey.

SPECIFIC HABITAT REQUIREMENTS

Feeding: This species feeds on a wide variety of vertebrate prey including frogs, lizards, nestling birds, and rodents (Grinnell and Storer 1924, Stebbins 1954, Hammerson 1978).

Cover: This snake forages actively on the surface and occasionally climbs in shrubby vegetation or small trees. During periods of inactivity individuals seek cover under surface objects or in crevices of rock outcrops.

Reproduction: Little information on specific habitat requirements for breeding or egg laying. Probably lays eggs in loose soil or under surface objects such as logs or rocks.

Water: No data on water needs.

Pattern: Prefers open-canopy stands with woody debris and rock outcrops on south facing slopes (USDI Fish and Wildlife Service 1997).

SPECIES LIFE HISTORY

Activity Patterns: Active diurnally March to November (period of activity more restricted in cooler regions). Inactive during the remainder of the year. Males may emerge earlier and be more active during spring than females (Bennion and Parker 1976, Hammerson 1978).

Seasonal Movements/Migration: Non-migratory

Home Range: Little known, but may be extensive for this active species. Data suggests that *M. i. euryxanthus* can occupy home ranges in size from 1.9 to 8.7 ha, and overlap. Some individuals were reported to have traveled 1.8 km across their home ranges (USDI Fish and Wildlife Service 1997).

Territory: Males may defend an area around the female for a period long enough to achieve

copulation (Bennion and Parker 1976, Hammerson 1978).

Reproduction: Captive snakes have been observed to copulate in early April (Perkins 1943). Snakes held a semi-natural enclosure in the vicinity of San Francisco Bay exhibited courtship behavior including copulation throughout the month of May (Hammerson 1978). Clutch size 6 to 11 (Cunningham 1959, Goldberg 1975).

Niche: Adults and young may be taken by a variety of diurnal predators, especially hawks. Eggs may occasionally be taken by nocturnal mammals.

REFERENCES

- Bennion, R. S., and W. S. Parker. 1976. Field observations on courtship and aggressive behavior in desert striped whipsnakes, *Masticophis t. taeniatus*. *Herpetologica* 32:30-35.
- Cunningham, J. D. 1959. Reproduction and food of some California snakes. *Herpetologica* 15:17-19.
- Goldberg, S. R. 1975. Reproduction in the striped racer, *Masticophis lateralis* (Colubridae). *J. Herpetol.* 9:361-363.
- Grinnell, J., and T. I. Storer. 1924. *Animal life in the Yosemite*. Univ. California Press, Berkeley. 752pp.
- Hammerson, G. A. 1978. Observations on the reproduction, courtship, and aggressive behavior of the striped racer, *Masticophis lateralis euryxanthus* (Reptilia, Serpentes, Colubridae). *J. Herpetol.* 12:253-255.
- Jennings, M. R. 1983. *Masticophis lateralis*. *Cat. Amer. Amphibians and Reptiles* 343.
- Jennings, M. R. 1983. An annotated checklist of the amphibians and reptiles of California. *Calif. Fish and Game* 69:151-171.
- Perkins, C. B. 1943. Notes on captive-bred snakes. *Copeia* 1943:108-112.
- Reimer, W. J. 1954. A new subspecies of the snake *Masticophis lateralis* from California. *Copeia* 1954:45-48.
- Stebbins, R. C. 1954. *Amphibians and reptiles of western North America*. McGraw-Hill, New York. 536pp.
- USDI, Fish and Wildlife Service. 1997. Endangered and threatened wildlife and plants: determination of endangered status for the callippe butterfly and behren's silverspot butterfly and threatened status for the Alameda whipsnake. *Federal Register*, Dec. 5, 62(234): 64308. Cornell Univ. Press, New York. 640pp.
- Pacific Northwest. Univ. Press of Idaho. 332pp.

R053

Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. *California's Wildlife*. Vol. I-III. California Department of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.