

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

CHECKERED GARTERSNAKE

Thamnophis marcianus

Family: NATRICIDAE

Order: SQUAMATA

Class: REPTILIA

R065

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The checkered gartersnake is distributed in the Colorado Desert from the eastern slopes of the Peninsular Ranges to the eastern border of the state. It is found in association with lacustrine and riverine habitats and irrigation canals in lowland areas from sea level to 150 m (500 ft) elevation. The extensive irrigation of the Imperial Valley has probably done much to increase the available habitat for this species. This species can be active any month of the year when temperatures are mild to warm, but peaks in activity occur in spring and summer (Mittleman 1949, Woodin 1950 Stebbins 1954).

SPECIFIC HABITAT REQUIREMENTS

Feeding: This species is reported to feed on toads and frogs, lizards (*Holbrookia*), fish, invertebrates, recently metamorphosed toads and frogs, and tadpoles (*Bufo* and *Scaphiopus*). Probably eats carrion as well. Most prey items are aquatic or are associated with water (Woodin 1950, Stebbins 1954).

Cover: This species takes cover in vegetation along the edge of ponds or water courses or in the water. Cover items near the water are also used.

Reproduction: Young are born live, so protected areas are required. Undisturbed edges of ponds and water courses probably provide all of the requirements for reproduction.

Water: Permanent water seems to be required, although individuals may wander up to a mile or more from water (Stebbins 1954).

Pattern: These snakes are found in natural and relatively undisturbed human-made habitats with permanent fresh water. They feed on aquatic organisms or those often associated with water.

SPECIES LIFE HISTORY

Activity Patterns: Checkered gartersnakes have been reported as nocturnal in Arizona (Woodin 1950) and crepuscular in California. During mild weather they are probably active during the day, as is typical of gartersnakes, and they probably restrict activity to mornings and evenings, and eventually nights, as temperatures rise.

Seasonal Movements/Migration: One individual of this species was found in a mudhole a mile or more from a river, but this probably represents dispersal rather than migration. This species probably does not migrate (Stebbins 1954).

Home Range: No data.

Territory: No data.

Reproduction: Births have been recorded in June and July (Stebbins 1954). The young are born live in broods ranging from 6 to 18.

Niche: The checkered gartersnake is probably eaten by large predatory fish, turtles, northern harriers, other avian predators, kingsnakes and mammalian predators. Weather conditions that would result in the drying of ponds or water courses would undoubtedly severely reduce or eliminate populations. The common practice of clearing streamside vegetation mechanically or with herbicides is highly damaging to this gartersnake.

REFERENCES

- Mittleman, M. B. 1949. Geographic variation in Marcy's garter snake *Thamnophis marcianus* (Baird and Girard). *Bull. Chicago Acad. Sci.* 8:235-249.
- Stebbins, R. C. 1954. *Amphibians and reptiles of western North America*. McGraw-Hill, New York. 536pp.
- Woodin, W. H. 1950. Notes on Arizona species of *Thamnophis*. *Herpetologica* 6:39-40.

R065

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.