

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

COMMON GARTER SNAKE

Thamnophis sirtalis

Family: NATRICIDAE
R061

Order: SQUAMATA

Class: REPTILIA

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Wide-ranging and locally very abundant, the common garter snake is absent only from Alpine Co. southward (east of the Sierra crest), the southern desert regions, and coastally from northern San Diego Co. south to the Mexican border. Associated with permanent or semi-permanent bodies of water in a variety of habitats. Elevation sea level to 2400 m (8000 ft). The Endangered San Francisco garter snake (*T. s. tetrataenia*) is extremely scarce and occurs only in the vicinity of ponds and reservoirs in San Mateo Co. (Barry 1975).

SPECIFIC HABITAT REQUIREMENTS

Feeding: The common garter snake forages on land or in quiet pools, generally avoiding swift water. Studying this species in the Sierra Nevada, White and Kolb (1974) found that they consumed treefrogs, fish, mice, leeches, earthworms, and toads in order of importance. A wide variety of vertebrate prey including small mammals, birds, lizards, and amphibians have been reported as among the food items commonly taken. Fitch (1941) listed slugs, earthworms and leeches as the favorite invertebrate prey.

Cover: The preferred nocturnal retreats of this active diurnal snake are thought to be holes, especially small mammal burrows, crevices, and surface objects. During the day common garter snakes often bask in the open near shelter (Stewart 1965). In cold areas, garter snakes often winter, aggregated, sometimes with other species, in fissures in rocky accumulations or in mammal burrows. In milder areas mammal burrows and surface objects such as flat rocks and rotting logs serve as winter refuges.

Reproduction: Courtship and mating normally occur soon after spring emergence in the immediate vicinity of winter dens. Young are born alive, usually in secluded sites such as under the loose bark of a rotting log or in dense vegetation near a pond or stream margin.

Water: No information on water requirements. This species is normally found near permanent or semi-permanent sources of water.

Pattern: Associated with permanent or semi-permanent bodies of water in a variety of habitats.

SPECIES LIFE HISTORY

Activity Patterns: An active diurnal snake. During the warm days of summer most activity occurs during morning and late afternoon. During the cooler weather of spring and fall, and at higher elevations, snakes restrict their activity to the warm afternoons. On warm days during winter garter snakes have been observed to emerge and bask in the sun at the entrances of hibernacula.

Seasonal Movements/Migration: In cold northern climates red-sided garter snakes (*T. s. parietalis*) are known to migrate to and from hibernacula where up to 10,000 individuals remain aggregated throughout the fall, winter and early spring (Aleksiuk 1977). It is probable that common garter snakes in California make similar migrations at inland, montane localities. Elsewhere in the state, migration is not expected.

Home Range: The nature of the home range of garter snakes in California is not well known. There is likely considerable overlap in the home ranges of garter snakes during the period of summer activity. Individuals can be located every few meters along the suitable shorelines. Nussbaum et al. (1983) report finding over 150 common garter snakes in an hour of searching along the Willamette River in Oregon.

Territory: Not thought to be territorial, common garter snakes often remain aggregated in large numbers from fall through early spring.

Reproduction: Courtship and mating normally occur in early spring soon after emergence from hibernation. During the mating season several males often attempt to mate with a single female (Gardner 1957, Aleksiuk and Gregory 1974). Three to 20 live young (larger litters have been reported) are born from July to August.

Niche: Common garter snakes are taken as prey mammals, birds and other snakes despite the release of a repulsive musk from the postanal glands of disturbed individuals. Their competitive relationships with other snakes (especially other garter snakes) are not well understood. The range, habitats, and food habits of this species and the western terrestrial garter snake, and western aquatic garter snake, overlap considerably.

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