California Wildlife Habitat Relationships System

California Department of Fish and Wildlife California Interagency Wildlife Task Group

GOPHERSNAKE Pituophis catenifer

Family: COLUBRIDAE Order: SQUAMATA Class: REPTILIA

R057

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The gophersnake is California's most widespread and common snake. Gophersnakes are found thoughout California, including the Channel Islands, and are absent only from the high mountains of the Sierra Nevada. They are found in all habitats and are generally absent only from densely forested habitat stages in the Sierra Nevada. Elevation range extends up to 2740 m (9000 ft) (Stebbins 1985).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Adults take chiefly mammals and birds while foraging in mammal burrows, on the ground, or in shrubs. Stebbins (1954) listed mice, kangaroo rats, gophers, ground squirrels, rabbits, quail and ducks and their eggs as among the food items reported for gopher snakes. Juveniles take young mice and small lizards. Prey is killed by constriction.

Cover: When inactive, gophersnakes seek cover in rodent burrows and under surface objects such as flat rocks, logs, and boards. At high elevations with long cold winters, individuals hibernate, often with other species of snakes, in rodent burrows and in deep rock fissures.

Reproduction: Eggs are normally laid below the surface in stable rock talus, in abandoned mammal burrows, and in loose moist soil.

Water: No information on water requirements. Gophersnakes are common in arid and semi-arid regions. Standing water is not an important habitat element.

Pattern: Prefer sparse and open grassy stages, less common or absent from denser forested habitat.

SPECIES LIFE HISTORY

Activity Patterns: Gophersnakes may be active on the surface whenever temperatures are favorable. During the cooler periods of spring and fall most activity occurs mid-day, but when summer days are hot most activity is restricted to early morning and late evening hours.

Seasonal Movements/Migration: Predictable seasonal movements have not been reported for the species in California. In Utah, however, gophersnakes make annual movements to and from known hibernacula (Parker and Brown 1973). It is probable that this also occurs at inland montane localities in California. Over much of the rest of their range in California, gophersnakes spend periods of winter inactivity in or near the areas of their warm-season activity.

Home Range: The nature of the home range of California gophersnakes is not well known.

In southern Idaho, Diller (1981) estimated gopher snake density at 1.3 snakes per ha (.52/ac).

Territory: The nature of territoriality in this species is unknown. "Combat" between males has been observed during the breeding season, sometimes in the presence of females (Hansen 1950, Shaw 1951).

Reproduction: Clutch sizes range from 3 to 18 and average about 7 or 8. Eggs are deposited in June and July after the courtship period, which extends from March to May. Communal nesting has been reported (Brodie et al. 1969). Hatchlings emerge in the fall and may not feed until the next spring.

Niche: Because of their activity patterns and abundance, gophersnakes are taken by a wide range of predators including mammals, predatory birds, especially hawks, and other snakes. The nature of the competitive interactions with other species of snakes is unknown. It has been suggested that the behaviors and color pattern of gophersnakes mimic those of rattlesnakes (Gordon 1939, Kardong 1980).

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