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

CALIFORNIA KINGSNAKE Family: COLUBRIDAE R058 *Lampropeltis californiae* Order: SQUAMATA

Class: REPTILIA

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Scarce to abundant, the California kingsnake is found throughout California including Santa Catalina Island off the southern coast. It is absent only from the high mountains of the Sierra Nevada and from the extreme northwestern and northeastern portions of the state. Widely distributed, and occurring in nearly all habitats (exclusive of high mountains), the kingsnake is most abundant in valley-foothill riparian situations and in other habitats occurring in the vicinity of irrigated agriculture. Elevation sea level to 2100 m (7000 ft).

## SPECIFIC HABITAT REQUIREMENTS

Feeding: Kingsnakes feed on the ground, in mammal burrows, and under surface objects. Primary foods appear to be lizards and snakes (rattlesnakes exhibit a distinctive defensive postural response when in the presence of kingsnakes; see Carpenter and Gillingham 1975). Large numbers of small rodents, birds, and bird eggs are also taken. Kingsnakes have also been reported to swallow their own shed skins (Keown 1973).

Cover: When inactive, kingsnakes seek cover in rodent burrows and under surface objects such as flat rocks, logs, and boards. At montane localities with cold winters, individuals hibernate in rodent burrows and in deep fissures in rock accumulations.

Reproduction: The eggs of the eastern kingsnake are thought to be laid in loose well-aerated soil. Cavities in stable talus, abandoned rodent burrows, and rotten logs may also be used as nest sites.

Water: No information on water requirements. In California this kingsnake is most abundant near streams and rivers, and in the vicinity of irrigated agriculture.

Pattern: Often found in the vicinity of rock outcrops and clumps of vegetation.

## SPECIES LIFE HISTORY

Activity Patterns: California kingsnakes may be active 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 afternoon and early evening. Winter inactivity occurs at all localities.

Seasonal Movements/Migration: Predictable seasonal movements have not been reported for this species in California. It is possible that individuals from montane localities make annual migrations to and from known hibernacula. Elsewhere individuals apparently spend periods of winter inactivity in or near the area of their warm-season activity.

Home Range: The nature of the home range of this species in California is unknown.

Territory: No evidence for the territorial defense of resources has been reported for this species in California. It is probable that males occasionally "fight" during the breeding season. Male combat has been observed within the genus (Shaw 1951, Moehn 1967).

Reproduction: Clutch sizes range from 2 to 12 (usually 9). Egg-laying usually occurs in June or July after the mating season, which extends from March to June. Courtship in kingsnakes is somewhat elaborate and in males involves neck-biting behavior (Leweke 1979). Eggs hatch in about 70 days.

Niche: Because of their activity patterns and local abundance, eastern kingsnakes are taken by a wide variety of predators (in spite of the release of a noxious musk from the postanal glands of disturbed individuals). Predators include mammals, predatory birds, especially hawks, and other snakes. The nature of competitive interactions between common kingsnakes and other species with which they coexist is unknown.

## REFERENCES

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