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

NORTH AMERICAN RACER *Coluber constrictor*
Family: COLUBRIDAE Order: SQUAMATA Class: REPTILIA
R051

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

This common snake is wide-ranging in California, absent only from the high mountains of the Sierra Nevada, the deserts, and most of the floor of the San Joaquin Valley. Also found on Santa Cruz Island off southern California. Elevational range is sea level to 2530 (8300 ft) (Stebbins 1985). Racers are found in many habitat types within their range in California. They are most common in open country and are generally absent from densely forested habitats.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Racers are active diurnal predators and appear to rely heavily on visual cues for prey finding. Small mammals, birds, snakes, (cannibalism has been reported) lizards, frogs, and insects are all commonly taken as food by racers (Cunningham 1959, Jackson 1971, Brown 1973, Best 1974, Nussbaum et al. 1983).

Cover: When not moving about on the surface, racers seek cover under surface objects such as flat rocks, logs, and debris. In warmer areas brief periods of winter inactivity are spent under such cover, but where winters are colder hibernation is usually passed in the shelter of a rockpile or den within a rocky outcrop. Large numbers of racers, as well as other species of snakes, are known to hibernate in dens in rock accumulations in Utah (Parker and Brown 1973). Groups of hibernating racers have also been found in small caves (Drda 1968) and in mammal burrows (Cohen 1948, Schroder 1950).

Reproduction: Eggs are laid 5 to 7 cm (2-3 in) below the surface in stable rock talus, under large rocks, in abandoned mammal burrows, under rotting logs, or in soft moist soil (Stebbins 1954, Swain and Smith 1978, Nussbaum et al. 1983).

Water: No information on water requirements.

Pattern: They are most common in open country and are generally absent from densely forested habitats.

SPECIES LIFE HISTORY

Activity Patterns: Strongly diurnal, racers become active in March or April after a variable period of winter hibernation. Adults become inactive again in October but juveniles may extend their period of activity until November if conditions are suitable.

Seasonal Movements/Migration: In Utah, where racers utilize the same hibernacula year after year, they may migrate up to 1.8 km (1.1 mi) to and from their warm-season areas of activity (Brown and Parker 1976). In milder areas snakes spend brief periods of winter activity

under surface objects and no migrations occur.

Home Range: Racers at one locality in Utah (Brown and Parker 1976) were found to have an average home range size of 0.38 ha (1.04 ac).

Territory: No evidence for the territorial defense resources has been reported. Communal hibernation and egg-laying are well documented.

Reproduction: Three to 13 eggs are laid by the California subspecies in July and August. Courtship and copulation have been observed as late as July the Sierra (Cunningham 1959). Communal nesting has been observed on several occasions (Brodie et al. 1969, Foley 1971, Parker and Brown 1972, Swain and Smith 1978).

Niche: These aggressive and active diurnal snakes are taken as food by a variety of mammals, diurnal birds, especially hawks, and snakes such as kingsnakes and striped racers. The social nature of this snake is demonstrated by its tendency towards communal hibernation and egg-laying.

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