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

COAST HORNED LIZARD *Phrynosoma coronatum*
Family: PHRYNOSOMATIDAE Order: SQUAMATA Class: REPTILIA
R029

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Updated by: CWHR Program Staff, March 2000

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The coast horned lizard is uncommon to common in suitable habitat. Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Occurs in the Sierra Nevada foothills from Butte Co. to Kern Co. and throughout the central and southern California coast. Its elevational range extends up to 1200 m (4000 ft) in the Sierra Nevada foothills and up to 1800 m (6000 ft) in the mountains of southern California.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Horned lizards forage on the ground in open areas, usually between shrubs and often near ant nests. Pianka and Parker (1975) noted that this species, like other horned lizards, consumes many ants. Small beetles are taken in large numbers when especially abundant. Stebbins (1954) reported other insects as food items, including wasps, grasshoppers, flies, and caterpillars.

Cover: This species relies on camouflage for protection and often hesitates to move at the approach of a predator. Horned lizards often bask in the early morning on the ground or on elevated objects such as low boulders or rocks. Predators and extreme heat are avoided by horned lizards by burrowing into loose soil. Periods of inactivity and winter hibernation are spent burrowed into the soil under surface objects such as logs or rocks, in mammal burrows, or in crevices.

Reproduction: Little is known about habitat requirements for breeding and egg-laying. Males may use elevated "viewing platforms" such as cow dung (Tollestrup 1981) to locate females during the reproductive season. Eggs are apparently laid in nests constructed by females in loose soil.

Water: No information on water requirements. Does not require permanent water.

Pattern: Inhabits open country, especially sandy areas, washes, flood plains and wind-blown deposits in a wide variety of habitats. Found chiefly below 600 m (2000 ft) in the north and 900 m (3000 ft) in the south.

SPECIES LIFE HISTORY

Activity Patterns: Being a diurnal lizard, most activity occurs during the middle of the day in the spring and fall but is restricted to morning and late afternoon during mid-summer. Nocturnal activity may occur during particularly warm periods. Fall and winter are inactive periods in most areas.

Seasonal Movements/Migration: Pronounced seasonal movement or migration has not been reported. Habitat requirements, such as sites for courtship and display, egg-laying, and hibernation are apparently found within the normal area of activity.

Home Range: Little is known about home range. In Arizona, some individuals of a related horned lizard species, P. solare, established well-defined home ranges, while some wandered without establishing one. Males used a larger area than females; the mean maximum distance between capture points was 30 m (98 ft) for males and 15 m (49 ft) for females (Baharav 1975).

Territory: Horned lizards generally lack territorial defense (Lynn 1965, Stamps 1977), but combat between males (Whifford and Whifford 1973) and over female feeding territories (Nussbaum et al. 1983) has been reported.

Reproduction: The reproductive season for the coast horned lizard varies from year to year and geographically depending on local conditions. Pianka and Parker (1975) reported that egg-laying in southern California extends from late May through June with a mean clutch size of 13 eggs. Stebbins (1954) reported a range of 6 to 16 eggs. Hatching probably occurs after two months. The coast horned lizard is apparently unique among lizards in using a belly-to-belly position during copulation (Tollestrup 1981).

Niche: The spiny armour and aggressive behavior towards potential predators exhibited by horned lizards confer only partial immunity from predators. Leopard lizards, sidewinders, striped whipsnakes and other snakes, loggerhead shrikes, and hawks have all been reported as predators of horned lizards. After a review of the genus Phrynosoma, Pianka and Parker (1975) concluded that because of their rather specialized diets, most horned lizards probably experience little competition for food from other coexisting lizards.

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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 Depart. of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.