

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

MEARN'S ROCK LIZARD

Petrosaurus mearnsi

Family: PHRYNOSOMATIDAE
R028

Order: SQUAMATA

Class: REPTILIA

Written by: R. Marlow

Reviewed by: T. Papenfuss

Edited by: S. Granholm

Updated by: CWHR Program Staff, March 2000

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Mearn's rock lizard is restricted to the eastern slopes, canyons and rock-dominated desert flats of eastern San Diego and central Riverside cos. It ranges up to 1100 m (3610 ft) (Jennings 1990) and is most common in desert wash, palm oasis, and barren habitats. It prefers rock outcrops, boulder piles and canyon walls and is rarely found on the ground. No information is available on abundance, but it is possible to see several individuals in an area of less than 0.25 ha (0.63 ac) near Palm Springs. This species is active from mid-March until late summer (Stebbins 1954, Hain 1965, MacKay 1972).

SPECIFIC HABITAT REQUIREMENTS

Feeding: This lizard eats beetles, ants, bees, hemipterans, homopterans, flies, spiders and the buds of some plants (Stebbins 1954).

Cover: This lizard lives almost exclusively on rock outcrops, boulder piles and canyon walls where it takes shelter under rocks, in cracks and crevices (Stebbins 1954, Hain 1965).

Reproduction: Eggs are laid, presumably, in nests constructed in friable or sandy soil.

Water: Water is probably not required.

Pattern: This species occupies arid and semiarid habitats in the foothills and canyons along the western margin of the Colorado Desert. It is most frequently encountered in habitats dominated by rocks and canyon walls. This lizard moves about on the vertical and under surfaces of rocks, foraging with great agility.

SPECIES LIFE HISTORY

Activity Patterns: These are diurnal lizards that shuttle between sun and shade and are active all day even in hot weather. They usually become active by mid-March and remain active until the end of summer. In some years, late summer rains result in a period of fall activity (Stebbins 1954, Hain 1965, MacKay 1972).

Seasonal Movements/Migration: These lizards are not known to migrate.

Home Range: Spend much time on vertical surfaces and this complicates measurement of home range. Home ranges were 85 m² (930 ft²) for males and 40 m² (440 ft²) for females in Deep Canyon, Riverside County (Carpenter 1962, Hain 1965, MacKay 1972, 1975).

Territory: Male Mearn's rock lizards defend territories but tolerate subadult males; females defend territories against other females (Carpenter 1962, Hain 1965).

Reproduction: Courtship begins shortly after emergence in early spring. Eggs are laid in June and July. Clutches range from 2-5 and average 3 eggs (Stebbins 1954, Hain 1965).

Niche: Few potential predators could pursue this lizard over the surfaces it normally traverses. The young may be taken by *Crotaphytus* and avian predators.

REFERENCES

- Carpenter, C. C. 1962. A comparison of pattern os display of *Urosaurus*, *Uta* and *Streptosaurus*. *Herpetologica* 18:145-152.
- Hain, M. L. 1965. Ecology of the lizard *Uta mearnsi* in a desert canyon. *Copeia* 1965:78-81.
- Jennings, R. M. 1990. *Petrosaurus mearnsi*. *Cat. Amer. Amph. Rept.* 495.1-495.3.
- MacKay, W. P. 1972. Home range behavior of the banded rock lizard, *Petrosaurus mearnsi*. M. S. Thesis, California State Coll., Fullerton.
- MacKay, W. P. 1975. The home range of the banded rock lizard *Petrosaurus mearnsi* (Iguanidae) Southwest. *Nat.* 20:113-120.
- Stebbins, R. C. 1954. *Amphibians and reptiles of western North America*. McGraw-Hill, New York. 536pp.*herpetologica* 26:341-357.
- Stebbins, R. C. 1954. *Amphibians and reptiles of western North America*. McGraw-Hill, New York. 536pp.
- Vitt, L. J. 1974. Winter aggregations, size classes and relative tail breaks in the tree lizard, *Urosaurus ornatus* (Sauria: Iguanidae). *Herpetologica* 30:182-183.

R028

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.