

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

COLORADO DESERT FRINGE-TOED LIZARD *Uma notata*
Family: PHRYNOSOMATIDAE Order: SQUAMATA Class: REPTILIA
R013

Written by: L. Palermo
Reviewed by: T. Papenfuss
Edited by: R. Duke, E. C. Beedy
Updated by: CWHR Program Staff, March 2000

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The Colorado Desert fringe-toed lizard is found in the Colorado and Sonoran deserts south of the Salton Sea in Imperial and San Diego cos. Its elevational range extends from sea level up to 180 m (590 ft) (Jennings and Hayes 1994). Restricted to fine, loose, wind-blown sand dunes, dry lakebeds, sandy beaches or riverbanks, desert washes, and sparse desert scrub (Heifetz 1941, Stebbins 1944, 1954, Norris 1958, Stebbins 1972, 1985).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Fringe-toed lizards are primarily insectivores, but also take plant material. Their diet consists of ants, beetles, antlion larvae, hemipterans, grasshoppers, and caterpillars. Plant foods include buds, flowers, leaves, and seeds (Stebbins 1944, 1954). Conspecifics and other lizards are also eaten occasionally (Carpenter 1963, Sugarman and Applegarth 1980). Sight is most frequently used to find food on the surface of sand (Stebbins 1944). Buried fringe-toed lizards also use hearing to detect prey on the sand surface (Stebbins 1954), or to find buried prey when above ground (Carpenter 1963).

Cover: Fringe-toed lizards usually seek refuge from enemies by burrowing in the sand ("sand swimming") within 5-6 cm (2-2.4 in) of the surface. They are usually buried on the lee sides of dunes and hummocks to prevent excavation by wind (Cowles 1941, Stebbins 1944). Rodent burrows and the bases of shrubs are also used for cover (Stebbins 1944) and thermoregulation (Pough 1970). Lizards usually hibernate in sand 30 cm (12 in) deep, but juveniles and subadults may be found closer to the surface (Cowles 1941).

Reproduction: Eggs are probably laid in sand.

Water: Water is probably obtained from food (Mayhew 1968).

Pattern: Fine, loose, wind-blown sand is required. Shrubs or annuals that are influenced by amount of winter rain may be necessary for arthropods found in the diet.

SPECIES LIFE HISTORY

Activity Patterns: Diurnal. Surface activities may be in response to fluctuating temperatures (Cowles 1941). During early spring and fall, they are active mid-day. From May to September, lizards are active in the morning and late afternoon, retreating underground when temperatures are high. Hibernation occurs from November to February (Mayhew 1964). Juveniles may not become completely torpid during the winter.

Seasonal Movements/Migration: No data.

Home Range: No data (probably similar to Mojave fringe-toed lizard).

Territory: No data.

Reproduction: Breeding occurs from May to August. Reproductive activity of males may be delayed during dry winters, probably reflecting food shortages. Females contain oviductal eggs from May to midAugust, regardless of winter rainfall. Clutch size varies from 1 to 5 eggs (mean 2 eggs). Two to 3 successive clutches per year may be produced. Most young reach sexual maturity in their second summer after hatching, at sizes of 80 mm (3.2 in) and 70 mm (2.8 in), for males and females, respectively (Mayhew 1966, 1967).

Niche: Fringe-toed lizards are highly adapted for life in fine loose sand (Stebbins 1944, 1954). They escape enemies by running bipedally at high speed, or by plunging into sand (Stebbins 1944, 1985). Predators include roadrunners, badgers, loggerhead shrikes, American kestrels, and coyotes. Snake predators include sidewinders and other rattlesnakes, glossy snakes, and coachwhips (Stebbins 1944, Norris 1958, Funk 1965).

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