

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

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DESERT IGUANA

*Dipsosaurus dorsalis*

Family: IGUANIDAE  
R010

Order: SQUAMATA

Class: REPTILIA

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Updated by: CWHR Program Staff, March 2000

#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The desert iguana is widely distributed throughout the Mojave, Sonoran and Colorado deserts. Typically found below 1520 m (3300 ft) (Macey and Papenfuss 1991), its range in California broadly overlaps that of creosote scrub. Desert scrub, wash and succulent shrub habitats are used, as is alkalai scrub. It is found in greatest abundance in sandy creosote flats but can also be found in rocky or hilly areas (Norris 1953, Stebbins 1954).

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** These lizards are primarily herbivorous, eating flowers, buds, fruits and leaves of many annuals and perennials, especially creosote. Individuals have been observed to climb up to 2 m (6.6 ft) into a bush to forage. In addition to vegetation, insects, feces (mammal and lizard) and carrion have been reported in their diets (Norris 1953, Stebbins 1954).

**Cover:** The desert iguana uses burrows extensively and also climbs into shrubs for shelter from temperature extremes, solar radiation and predators. Mammal burrows are modified or new burrows are constructed by the lizards. Burrows may consist of a shallow, short tube or a more complex arrangement with a central chamber and several exits. The central chamber may measure up to 15 cm in diameter and lie 3-5 cm deep in the soil. When the lizard is present the entrance is usually blocked by sand. This could serve to discourage predators and retard heat gain or loss. These burrows are usually constructed in the hummocks of sand that accumulate around the bases of bushes (usually creosote). Burrows may also serve as nest sites for females. The presence of sand hummocks seems to be important as a construction site for burrows (Norris 1953).

**Reproduction:** Little is known about the habitat requirements for reproduction. Laboratory studies suggest that nest temperature may be a very important limiting factor at the higher elevation of this species range (Muth 1977).

**Water:** Permanent water is not required. Captives rarely drink.

**Pattern:** This species is herbivorous, feeding on annual and perennial plants in a variety of habitats, but seemingly reaching greatest densities in habitats that support the greatest productivity of such plant species (sandy desert flats and washes). These habitats also provide sandy, friable soil that is necessary for burrow construction.

#### SPECIES LIFE HISTORY

**Activity Patterns:** This species is more heat-tolerant than any other North American reptile. It emerges later in the year and later in the day than other lizards and remains

activelonger into the hottest part of the day than other lizards. In Palm Springs, it becomes active in late March to mid-April (depending upon the year), later further north (Norris 1953, Stebbins 1954, Moberly 1961, Mayhew 1971). Adults remain active until mid-summer when the young hatch. Young remain active until fall. This species emerges later in the day and remains active later than other species of lizards. Body temperatures of 45° C have been recorded, well above lethal levels for most other species (Norris 1953). Activity consists largely of foraging, moving from one food plant to the next and eating. Most of the time on the surface is spent basking in the sun on hummocks near burrows or in bushes.

Seasonal Movements/Migration: None.

Home Range: One study reports male home ranges of .15 ha (.36 ac) and female ranges of .16 ha (.38 ac) (Krekorian 1976).

Territory: Evidence suggests that this species is territorial during the mating season. During the remainder of the active season, home ranges overlap extensively, and there is little aggressive behavior (Norris 1953, Krekorian 1976).

Reproduction: Courtship and copulation occur shortly after emergence in the spring (Norris 1953, Moberly 1961, Mayhew 1971). Egg-laying usually takes place in late May and the young appear in late July to late August. There is considerable variation in these events from year to year and north to south in the range. There is strong evidence that only one clutch of eggs is laid each year (Norris 1953, Mayhew 1971, Grestle and Callard 1972) ranging from 3-8 eggs. Adults reduce surface activity after the appearance of the young; this may reduce competition for scarce food resources. During the period of courtship pairs of lizards (presumably male and female) have been reported foraging together (Norris 1953). This suggests the presence of pair-bonds.

Niche: Few reports of predation on this species are available, but it must certainly be preyed upon by *Masticophis flagellum* and *Crotalus cerastes* (both lizard-eating snakes), probably by loggerhead shrikes and other avian predators. Young are probably eaten by leopard and collared lizards and mammalian predators (coyote, kit fox, badger, etc.).

## REFERENCES

- Carpenter, C. C. 1961. Patterns of social behavior in the desert iguana, *Dipsosaurus dorsalis*. *Copeia* 1961:396-405.
- Grestle, J., and I. Callard. 1972. Reproduction and estrogen-induced vitellogenesis in *Dipsosaurus dorsalis*. *J. Comp. Biochem. Physiol.* 42A:791-801.
- Krekorian, C. O. 1976. Home-range size and overlap and their relationship to food abundance in the desert iguana, *Dipsosaurus dorsalis*. *Herpetologica* 32:405-412.
- Macey, J. R. and T. J. Papenfuss. 1991. Reptiles. Pages 291-360 in C.A. Hall, Jr., editor. *Natural History of the White-Inyo Range eastern California*. Univ. Calif. Press, Berkeley, California. 536 pp.
- Mayhew, W. W. 1971. Reproduction in the desert lizard, *Dipsosaurus dorsalis*. *Herpetologica* 27:57-77.
- Moberly, W. 1961. Hibernation in the desert iguana, *Dipsosaurus dorsalis*. *Physiol. Zool.* 36:152-160.
- Muth, A. 1977. Eggs and hatchlings of captive *Dipsosaurus dorsalis*. *Copeia* 1977: 189-190.
- Norris, K. S. 1953. The ecology of the desert iguana *Dipsosaurus dorsalis*. *Ecology* 34:263-287.
- Pianka, E. R. 1971. Comparative ecology of two lizards. *Copeia* 1971:129-138.
- Stebbins, R. C. 1954. *Amphibians and reptiles of western North America*. McGraw-Hill, New York. 536pp.

Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.