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IGUANAS

Desert Iguana

Dipsosaurus dorsalis

Dipsosaurus dorsalis is a pale, fast and unusually heat-tolerant iguana from the deserts of the south-western USA and north-western Mexico. It grows to 33-45 cm, burrows in sand and feeds almost exclusively on flowers, leaves and buds. It needs a dry enclosure with a deep sand floor, very high heat and strong UVB, and it can live 8-15 years.

Family: Iguanidae Former name: *Crotaphytus dorsalis; Dipsosaurus carmenensis*

KEY FACTS

THE ANIMAL

Adult size	**33-45 cm** total length incl. tail
Lifespan	**8-15 years**
Active	**By day**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Desert and semi-desert**
Difficulty	**Intermediate**

CARE

Min. enclosure	**120 × 60 × 60 cm** L × W × H for 1 adult
Temperature, day	**28-38 °C**
Basking spot	**42-46 °C**
Temperature, night	**18-24 °C**
Humidity	**15-30%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 4
Diet	**Plants**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**31-33 months**
Clutch size	**3-8 eggs**
Clutches per year	**1-2**
Incubation	**60-75 days** at 30-35 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Least Concern (LC)**

About the species

Dipsosaurus dorsalis is a medium-sized, round-bodied iguana with a small, short head, long, strong legs and a long, tapering tail that is about one and a half to two times as long as the body. A low crest of slightly enlarged, keeled scales runs along the middle of the back. No other lizard in the USA has such a dorsal crest.

The body is about 13 cm from snout to vent, at most just over 15 cm. Adults typically reach 33-40 cm including the tail, and the largest reach about 45 cm. The colour is pale grey to creamy white with a pattern of brown and often reddish spots and reticulations on the back and sides, and the spots become broken bands on the tail. The belly is pale. Males and females resemble each other. Both can turn pink on the belly and sides in the breeding season, and males develop enlarged, pale femoral pores on the underside of the thighs.

The genus name means "thirsty lizard". *Dipsosaurus* is the sister group to all other iguanas and split from them about 38 million years ago. The genus has only two species, *D. dorsalis* and *D. catalinensis*, which lives on Isla Santa Catalina in the Gulf of California.

The species is very fast and can run on its hind legs, but it is calm in the hand once used to handling. Toes and claws are fragile.

Distribution and habitat

Dipsosaurus dorsalis lives in the Mojave and Sonoran Deserts: in south-eastern California, southern Nevada, western Arizona and south-western Utah, and south through Baja California, western Sonora and north-western Sinaloa. The species is also found on several islands in the Gulf of California.

Its range broadly follows that of the creosote bush, and the species stays mostly below 1,000 m.

> **Native range:** United States and Mexico.

HABITAT

Dipsosaurus dorsalis lives in dry, sandy desert with scrub, often right beside creosote bushes, and on sand flats with small dunes and scattered stones. It is also found in stony, dry riverbeds up to 1,000 m. In the southern part of its range it lives in dry subtropical scrub and dry forest.

The species tolerates high heat unusually well and is active at about 40 °C, when other lizards have withdrawn. The body temperature of active animals is 37-42 °C. The animals seek shade when the body reaches the low forties and go into a burrow at about 45 °C. Air temperatures of 55-60 °C are lethal. The burrows are dug in the sand under bushes, and the animals also use the burrows of other animals. If they sense danger, they run into a bush and down into a burrow.

Males are territorial and perform push-ups. From autumn until about March the animals brumate underground.

The diet is buds, flowers, fruit and leaves, especially from the creosote bush, and only a little insect matter. Young animals eat more insects than adults.

Care

THE ENCLOSURE

One animal or a pair needs an enclosure of at least 120 × 60 × 60 cm (length × width × height). Three or four adults need at least 120 × 120 cm of floor space and preferably 180 × 90 cm. Use glass rather than plastic and mesh: the long claws catch in mesh, so that toes can break, and the animal rubs its snout raw against mesh. A mesh lid is fine. The animal is curious, so place the enclosure where things are going on.

The substrate is a deep layer of clean sand, 20-30 cm, preferably mixed with a little fine gravel. The sand should be very slightly damp at depth so that the tunnels do not collapse. Stones, branches and cork provide basking spots, and large stones must stand on the bottom of the enclosure and be glued together with aquarium silicone so that they cannot fall on the animal while it digs. Put a hide at each end.

There must be no more than one male, because males are territorial.

TEMPERATURE

The air should be 28-38 °C during the day with a clear gradient, and the warm half should be 33-41 °C, which the species prefers. The basking spot should be 42-46 °C measured on the surface with an infrared thermometer. This is among the highest figures for commonly kept lizards, but the species needs the heat to digest its plant diet. Use a halogen spot over the basking spot, preferably supplemented with a heat mat under part of the enclosure, and make sure the animal can dig away from the heat and light. At night the lamp is switched off, and the temperature may fall to 18-24 °C.

Measure the heat every day. A sluggish animal is usually too cold.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be low: 15-30 %, briefly higher just after a light misting of the sand. Mist the substrate only a little, when the sand is so dry that the tunnels collapse. Ventilation should be good, and a hygrometer shows that the air stays dry.

Read more: Humidity, misting and ventilation

WATER AND WATER QUALITY

Put a small, stable water bowl in the cool end. The species seldom drinks from the bowl and gets most of its fluid from damp greens, but the bowl should be available at all times. Change the water daily, because the animal easily covers it with sand.

LIGHTING AND UVB

Dipsosaurus dorsalis is diurnal and belongs to Ferguson zone 4. UVB is essential: use a 10-12 % T5 HO tube giving a UV index of 6-8 at the basking spot, and keep the distance to the animal at 25-35 cm unless the manufacturer advises otherwise. UVB does not pass through glass or plastic. Replace the tubes according to the manufacturer's instructions.

Strong light for 12-14 hours a day, controlled by a timer, gives faster growth and better health. A heat lamp in a reflector over the basking spot provides both heat and light.

Read more: Lighting and UVB

FEEDING

Dipsosaurus dorsalis is herbivorous, and the diet must be plant-based. Give leafy vegetables such as dandelion, collard greens and mustard greens, flowers such as hibiscus and dandelion, and squash, pumpkin, bell pepper and a few berries. Cut everything into small pieces, because the mouth is small. Avoid avocado and aubergine, and limit spinach and kale. Damp greens cover part of the fluid requirement.

Herbivores need to eat a lot and often, so food should be available every day, and old leftovers are removed daily. The animal does not overeat. Insects make up only a very small part of the natural diet and are not necessary. With a varied plant diet and strong UVB, supplements are not necessary either, and mineral supplements, especially potassium, are not recommended.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Dipsosaurus dorsalis is calm and can become nearly tame if handled gently from a young age. Lift it from underneath, and do not close your hand around it. Newly caught and very warm animals may bite hard enough to break the skin, but most often they run off. The species is very fast, so keep an eye on it at all times outside the enclosure. It can drop its tail, but this happens only under severe stress, and the tail does not always regrow. Wash your hands after every contact, because reptiles can carry *Salmonella*.

Read more: Quarantine and hygiene

Breeding

SEXUAL MATURITY AND SEXING

The sexes resemble each other. Mature males have enlarged, pale femoral pores in the breeding season and often reddish markings at the base of the tail. The animals are sexually mature after about 31-33 months in captivity; in the wild it may take longer.

MATING

Mating takes place from April to June, mostly in May and June. The male performs push-ups and defends his territory, so there must be only one male in an enclosure. Breeding requires peace, a large enclosure and high heat.

EGG-LAYING AND CLUTCHES

The female lays up to 8 nearly round eggs, most often 3-8, in a tunnel she digs in slightly damp sand. One clutch a year is normal, two under good conditions. The laying site must be free of plant roots, deep and slightly damp, with a soil temperature of 28-38 °C. Loss of appetite, digging without laying and a swollen abdomen require a vet.

INCUBATION

Carefully move the eggs, with the same side up, to an incubator with damp vermiculite or perlite. In the wild they develop at 28-38 °C and hatch after 60-75 days, fastest at the high temperatures. 30-35 °C is a suitable starting point in the incubator.

Read more: Incubating eggs

REARING THE YOUNG

The hatchlings are about 10-14 cm long and have a more variegated pattern than the adults, often with yellow on the head and back. They grow about 2 cm in body length a year and need high heat, strong light, UVB and finely chopped greens every day from the first day. They can stay together for a few months, but the males must be separated before they begin to attack each other.

Health and common mistakes

Most problems are caused by too little UVB, too little heat and an incorrect diet:

- Metabolic bone disease from too little UVB or too much spinach. Signs are muscle twitching and general lethargy.
- Broken toes and claws and a scraped snout if the animal is kept in an enclosure with mesh.
- Burns from unguarded heat lamps.
- Poor digestion and constipation in a setup that is too cold.
- Obesity from too much fruit.
- Retained skin on the snout and ear openings in old animals or those kept too dry. Never pull on the skin; moisten it and remove it carefully.
- Parasites in newly bought animals.
- *Salmonella* without symptoms, which can infect humans.

Wild animals live about 7 years, and animals of just under 15 years have been recorded in captivity. Visit a vet with reptile experience soon after acquiring the animal and then every year. Weight loss, changed appetite, muscle twitching and abnormal droppings require a vet.

Read more: Common diseases and signs of illness

Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.