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IGUANAS

## Desert Spiny Lizard

# *Sceloporus magister*

*Sceloporus magister* is a robust, spiny lizard from the deserts of the south-western USA and north-western Mexico. It is diurnal, climbs in trees, bushes and on rocks, and feeds on insects. The male has blue patches on the throat and belly. It needs a large, dry enclosure with strong UVB, a very hot basking spot and a cool brumation. The female lays eggs.

Family: Phrynosomatidae

KEY FACTS

### THE ANIMAL

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|---|---|
| Adult size | **20-30 cm**<br>total length incl. tail |
| Lifespan | **5-8 years** |
| Active | **By day** |
| Lifestyle | **Arboreal, rock-dwelling and terrestrial** |
| Habitat | **Desert and rocky terrain** |
| Difficulty | **Intermediate** |

### CARE

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|---|---|
| Min. enclosure | **120 × 50 × 50 cm**<br>L × W × H for 1 adult |
| Temperature, day | **27-32 °C** |
| Basking spot | **38-42 °C** |
| Temperature, night | **16-22 °C** |
| Humidity | **20-40%** |
| Water | **Water dish** |
| UVB | **Essential**<br>Ferguson zone 3 |
| Winter rest | **9-12 °C**<br>8-12 weeks |
| Diet | **Insects** |
| Kept | **Singly or in pairs** |

### BREEDING

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|---|---|
| Reproduction | **Egg-laying** |
| Sexually mature | **12-24 months** |
| Clutch size | **4-24 eggs** |
| Clutches per year | **1-2** |
| Incubation | **60-80 days**<br>at 27-30 °C |

### PROTECTION AND PAPERWORK

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

## About the species

*Sceloporus magister* is a large and heavily built lizard in the genus *Sceloporus*. The scales are large, keeled and pointed and give it a spiny appearance. The ground colour is grey, brown or yellowish brown with dark cross-bands, and both sexes have a yellowish brown, triangular patch on the shoulders. The male has blue to violet patches on the throat and belly and a greenish or bluish sheen on the flanks and tail. Females and juveniles are more patterned and have no blue patches or only weak ones. The species changes colour with temperature: it is darker when cold and paler when warm.

The body is 8-14 cm from snout to vent, and with the tail the animal reaches 20-30 cm. The total length is an estimate from the body length. The species was described in 1854 by Hallowell.

The delimitation of the species is not settled. Formerly several desert forms were treated as subspecies of *S. magister*. *S. bimaculosus* from the Chihuahuan Desert is now treated by several authors as a separate species, while *S. uniformis* from the Mojave Desert and the Great Basin is alternately treated as a separate species and as a subspecies of *S. magister*. The species has previously been confused with *Sceloporus clarkii*. Only little specific knowledge exists about its care. The figures in this guide are therefore based on the desert climate of the range and on knowledge of the genus. See also *Sceloporus cyanogenys* and *Sceloporus malachiticus*.

## Distribution and habitat

*Sceloporus magister* lives in the south-western USA: in south-eastern California, Nevada, southern Utah, Arizona, New Mexico and parts of Colorado. In Mexico it occurs in Baja California, Sonora, north-western Chihuahua and Sinaloa. The populations further east in the Chihuahuan Desert, including in Coahuila, are now assigned to *S. bimaculosus*. The core of the range is the Sonoran Desert. The species occurs from sea level along the Colorado River up to about 1,500 metres altitude. The boundaries with the split-off species are not finally settled, so the map shows only the countries, not a precise delimitation.

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

### HABITAT

*Sceloporus magister* lives in dry desert and semi-desert on low slopes, plains and in valleys with boulders, shrubs and trees such as cottonwood, yucca, Joshua tree and ironwood. It lives mostly in the trees and basks on rocks, trunks and branches, but is also found at rock piles, woodpiles and other cover on the ground. It is diurnal and basks especially in the morning, while in summer it seeks shade or burrows during the hottest part of the day. It brumates from late autumn to spring. Males are territorial and mark the territory from a high rock or branch with push-ups and a blue belly.

The diet is arthropods. Ants make up 10-30 %, and in addition there are beetles, caterpillars, spiders, centipedes and occasionally small lizards. The female lays eggs in summer, 4-24 per clutch.

## Care

### THE ENCLOSURE

Little specific knowledge exists about the care of *Sceloporus magister*, and it is based on the desert climate and on knowledge of the genus. The species is large, fast and active, and an adult needs an enclosure of at least 120 × 50 × 50 cm (length × width × height). A pair needs a larger enclosure with many hides, and bigger is always better, because the species has large territories in the wild.

The substrate is dry sand, mixed with a little clay, so the animal can dig. Furnish with pieces of rock, cork and sturdy branches, so the animal can climb and bask, and with several hides at both ends. Stonework must stand firmly on the floor, so it cannot topple when the animal digs. The enclosure needs a tight-fitting lid, because the species is a good jumper and climber. Remove faeces weekly, and replace the substrate completely every 3-4 months.

### TEMPERATURE

The air should be 27-32 °C by day. The basking spot should have 38-42 °C on the surface, measured with an infrared thermometer. The species prefers a body temperature of about 33 °C, and the basking spot must be hot enough for it to reach that quickly. Use a halogen spotlight or a heat lamp over a rock, and let part of the enclosure be cooler, so the animal can choose. The animal is dark and sluggish when too cold, and pale and seeks shade when too hot.

At night the temperature should fall to 16-22 °C, and the heat lamp is switched off. Desert nights are cool, and the night temperature is an estimate from the climate.

Read more: Heat and temperature

### HUMIDITY AND WATER

Humidity should be low, about 20-40 %. The enclosure must be dry and well ventilated. Provide a shallow dish of fresh water, and change the water daily. Now and then mist the side of the enclosure lightly, so the animal can lick droplets. A wet substrate and stagnant air cause mould, skin problems and respiratory infection.

Read more: Humidity, misting and ventilation

### LIGHTING AND UVB

*Sceloporus magister* is diurnal and basks, so it needs strong UVB. Use a T5 HO tube (Ferguson zone 3) in a reflector over the basking spot. The distance depends on the strength of the tube and on whether the tube sits above mesh or inside the enclosure. UVB does not pass through glass or plastic. Replace the tube according to the manufacturer's instructions, normally after 12 months.

Supplement with a strong daylight lamp. The light should be on 13-14 hours in summer and 10-11 hours in winter and switched off completely at night.

Read more: Lighting and UVB

### FEEDING

The species is insectivorous. Give varied live insects: crickets, cockroaches, grasshoppers, mealworms, Zophobas, silkworms and waxworms. The feeder insects must not be larger than the animal's head. Vary the diet, and gut-load the feeder insects with nutritious food for the last day before feeding.

Juveniles are fed daily, adults 3-4 times a week with as much as they can eat. Dust the feeder insects lightly with calcium at most feedings, and give a vitamin supplement with D3 every 2 weeks. Obesity is a problem in adults that are fed too often.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

### BEHAVIOUR AND HANDLING

The animal is alert, fast and territorial, and handling stresses it. Keep handling to a minimum, and never grab the tail, because it can break off.

Males must always be kept separately, because they fight each other, and females too can be aggressive towards each other. A pair or a male with two females can be kept in a large enclosure with many visual barriers; otherwise the animals are best kept singly. The male shows his blue belly with push-ups and head-bobbing movements. Newly acquired, wild-caught animals need peace and many hides.

Read more: Buying animals: captive-bred, wild-caught and transport

## Breeding

### SEXUAL MATURITY AND SEXING

The male is larger, has blue patches on the throat and belly, and has a thicker tail base and larger femoral pores. The female is more patterned and has only weak blue patches. The age at sexual maturity is not documented for the species; 1-2 years is an estimate from the genus.

### MATING

Mating takes place in spring. A brumation of 8-12 weeks at 9-12 °C in darkness and with moderate humidity, followed by rising heat and day length, suits the species and is common practice for the genus. Put the female together with the male in a large enclosure and separate them if he bites her too hard. How often the species breeds in captivity is not documented.

Read more: Brumation and the seasons

### EGG-LAYING AND CLUTCHES

The female lays 4-24 eggs per clutch, most often in summer, and large females lay the most. How many clutches she lays per year is not documented; one or two is an estimate. Provide a laying bin with 15 cm of moist sand and soil, in which the female can dig. Give her plenty of food and calcium, and contact a vet if she strains without result.

### INCUBATION

The eggs are incubated in an incubator in moist vermiculite or perlite. Temperature and duration are not documented for the species. 27-30 °C and 60-80 days are estimates borrowed from the genus. The eggs must not be turned, and they must be kept moist, but not wet.

Read more: Incubating eggs

### REARING THE YOUNG

The hatchlings are small and must be fed daily with small insects, dusted with calcium. Give them a small enclosure with dry sand, hides, UVB and a warm basking spot. Separate the males when they gain colour, because they quickly become territorial.

## Health and common mistakes

Wild-caught animals often have mites and intestinal parasites, so new animals must be quarantined and have their faeces examined. Typical problems are:

- Metabolic bone disease from too little UVB and calcium.
- Respiratory infection and mould from wet, stagnant air.
- Obesity and fatty liver in adults that are fed too often.
- Overheating or chilling if the basking spot is too small or too cold.
- Loss of the tail if the animal is held by the tail.
- Egg-laying problems in females without a suitable laying site.

A healthy animal is lively, has clear eyes and a plump tail. Lifespan in captivity is not reliably documented; 5-8 years is an estimate. An animal that loses weight, does not eat or breathes with its mouth open must see a vet with experience of reptiles.

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.