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GECKOS

Chondrodactylus fitzsimonsi

Chondrodactylus fitzsimonsi is a sturdy, nocturnal rock gecko from the arid regions of Namibia and south-western Angola, with an olive back, dark crossbands and broad adhesive lamellae under the toes. Almost nothing is known about its care, but its close relatives are widely kept and give a good picture of its needs.

Family: Gekkonidae Former name: *Pachydactylus fitzsimonsi; Pachydactylus laevigatus fitzsimonsi; Pachydactylus laevigatus tesselatus*

KEY FACTS

THE ANIMAL

Adult size	**7-9 cm** snout-vent length
Lifespan	**6-10 years**
Active	**At night**
Lifestyle	**Rock-dwelling**
Habitat	**Semi-desert, savanna and rocky terrain**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 40 × 40 cm** L × W × H for 2 adults
Temperature, day	**25-28 °C**
Basking spot	**32-35 °C**
Temperature, night	**18-22 °C**
Humidity	**30-50%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1-2 eggs**
Incubation	**50-60 days** at 27-29 °C

PROTECTION AND PAPERWORK

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

About the species

Chondrodactylus fitzsimonsi is a large, heavily built gecko with a flattened body and a broad, triangular head. The back is olive with four or five dark, wavy crossbands, and the belly is white. The dorsal scales are large, flat and closely set, forming something like paving, and the head is about as wide as it is long. They have no keel, and there are no distinct rows of larger tubercles, as seen in several relatives. The tail has rings of scales, each ring bearing six strong, cone-shaped tubercles. Under the toes sit broad adhesive lamellae.

Adults measure 7-9 cm from snout to vent, and the largest males reach 9 cm. Total length including the tail, weight and lifespan are not documented. The lifespan is probably 6-10 years, as in relatives of the same size.

The species was described in 1938 by Vivian FitzSimons as the subspecies *Pachydactylus laevigatus tesselatus*. The name was already taken, so Arthur Loveridge gave it the new name *fitzsimonsi* in 1947 in honour of FitzSimons, and in 2005 it was moved to the genus *Chondrodactylus*. In captivity the species is almost unknown, whereas its relatives *Chondrodactylus bibronii* and *Chondrodactylus angulifer* are far more common.

Distribution and habitat

Chondrodactylus fitzsimonsi occurs in south-western Africa: in north-western Namibia, especially the Kunene Region, and in south-western Angola, where it has been found in Namibe Province and northwards to Benguela. The type locality is Kamanjab in the Kunene Region.

The exact boundary with relatives such as *Chondrodactylus laevigatus* and *Chondrodactylus turneri* has not been established.

> **Native range:** Namibia and Angola.

HABITAT

The species lives on rock outcrops in dry savanna and semi-desert, from almost sea level up to about 1,000 metres. Like its relatives, it is nocturnal and hides in rock crevices by day.

The climate in its range is hot and dry, with a short rainy season in summer and large differences between day and night.

Care

THE ENCLOSURE

Almost nothing is known about the care of *Chondrodactylus fitzsimonsi*. The enclosure, temperature and food are based on the climate and habitat, on the animal's size and on the close relatives *Chondrodactylus bibronii*, *Chondrodactylus angulifer* and *Chondrodactylus turneri*, which are all rock- and desert-dwelling nocturnal geckos of the same size. The figures are borrowed from them.

A pair needs an enclosure of at least 60 × 40 × 40 cm (length × width × height), and a single animal can live in the same size. It is hiding places and structure that count, not height. Furnish with stacked flat stones, cork bark and slanting pieces, so that many narrow crevices form at different heights. The stones must sit firmly on the floor or be glued together, so that they cannot slide down onto the animal.

Coarse sand mixed with a little clay, or coconut fibre, works well as a substrate. The lid must fit tightly and have ventilation, because the relatives are fast and can jump, and this species probably can too.

TEMPERATURE

By day the temperature should be 25-28 °C, and under a spotlight a stone should be able to reach 32-35 °C, so that the animal can choose between warm and cool. At night the temperature should fall to 18-22 °C. The heat is controlled with a thermostat, and the temperature is measured with digital thermometers at both ends of the enclosure.

The figures are borrowed from the relatives. Winter rest is not documented for the species.

Read more: Heat and temperature

HUMIDITY AND WATER

The air should be dry, around 30-50 %, as in its natural range. Mist lukewarm water over part of the enclosure late in the evening so that the animal can lick the droplets, and let the substrate dry out again during the day. Place a shallow dish of fresh water at the cool end. A humid hide with slightly damp sphagnum or vermiculite must always be available, especially when the animal is shedding and when the female is about to lay eggs.

LIGHTING AND UVB

The species is nocturnal and sleeps in the crevices by day, so it does not need strong light. Provide a 12-hour day and complete darkness at night, controlled by a timer. UVB is optional. If you wish to provide it, a weak UVB tube suited to shade-dwelling species (Ferguson zone 1) over part of the enclosure is appropriate, with plenty of cover so that the animal can choose for itself. Without UVB it is even more important to give calcium and vitamin D3 in the food.

Read more: Lighting and UVB Read more: Calcium, vitamins and supplements

FEEDING

The animal eats live insects: crickets, cockroaches, grasshoppers and mealworms. Adults are fed 2-3 times a week, young animals more often. The insects must be no larger than the width of the head. Dust the food with calcium, and give vitamin D3 regularly, because insects contain too little calcium. Young animals and egg-laying females should have calcium at every meal, other adults once a week. The figures are borrowed from the relatives.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

The behaviour of *Chondrodactylus fitzsimonsi* in captivity is not documented. Its relatives are shy, fast and unpredictable, so the species is for watching and not for handling. Keep the animals singly or in pairs. Males must be kept apart, and if the females begin to fight, they must be separated. Give all animals plenty of hiding places.

Breeding

SEXUAL MATURITY AND SEXING

Age and weight at sexual maturity are not documented. As in the relatives, males can be recognised by two bulges under the base of the tail, where the hemipenal pouches sit. The relative *Chondrodactylus angulifer* becomes sexually mature after 10-12 months, but females should not be put to breeding until they are at least 18 months old and in good condition, because the eggs demand a great deal of calcium.

MATING

Breeding season and mating are not documented. In the relatives, the animals are given a winter rest with lower temperature, drier air and shorter days for one to two months before mating. Whether this is necessary for this species is not known. Monitor the female's weight, and separate the animals if she loses weight or is chased around.

EGG-LAYING AND CLUTCHES

The species lays eggs, and the female probably lays one to two hard-shelled eggs at a time, as in the relatives. The number of clutches per year is not documented. Give the female a laying box with slightly damp sphagnum or damp sand, and check for eggs every day. The eggs are fragile, so handle them as little as possible.

INCUBATION

The incubation period is not documented. In the relatives, the eggs hatch after 50-60 days at 27-29 °C and about 90 % humidity, and the figures are borrowed from them. Place the eggs in a box with small ventilation holes on a slightly damp, never wet, substrate, and do not turn them.

Read more: Humidity, misting and ventilation Read more: Incubating eggs

REARING THE YOUNG

Size, weight and growth of the young are not documented. Keep the young in small, simple boxes with kitchen roll or a thin layer of substrate, a humid hide and a couple of flat stones. Give small insects dusted with calcium and vitamins, and weigh the young regularly. Separate them if they begin to fight or if any become noticeably larger than the others.

Health and common mistakes

Chondrodactylus fitzsimonsi has no known specific diseases, because the species is hardly kept in captivity. The advice is based on general gecko care and on the relatives. The typical mistakes are:

- Too little calcium and vitamin D3, especially in young animals and egg-laying females. This causes soft bones and tremors.
- Humidity that is too high or a constantly wet substrate, which causes mould and skin problems.
- Stuck shed on the toes when there is no humid hide. Loosen it gently with lukewarm water.
- Overfeeding.
- Escapes. The relatives are fast and jump, so the lid must fit tightly.
- Stress and fighting when animals are kept together without enough hiding places.

A healthy animal has clear eyes and a plump tail. Consult a vet experienced with reptiles if the gecko loses weight, does not eat for several weeks or looks limp.

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.

The full guide with map and updates: herpy.org/en/geckos/chondrodactylus-fitzsimonsi