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GECKOS

Stumpff's ground gecko

Paroedura stumpffi

A small, brown-banded ground gecko from northern and north-western Madagascar that comes out at night and lives only on insects. *Paroedura stumpffi* is cared for much like its well-known relative *Paroedura picta* and does well at ordinary room temperature in a small enclosure.

Family: Gekkonidae Former name: *Phyllodactylus stumpffi*

KEY FACTS

THE ANIMAL

Adult size	**10-13 cm** total length incl. tail
Lifespan	**8-10 years**
Active	**At night**
Lifestyle	**Terrestrial**
Habitat	**Dry forest and rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**30 × 30 × 30 cm** L × W × H for 2 adults
Temperature, day	**22-26 °C**
Basking spot	**28-30 °C**
Temperature, night	**20-24 °C**
Humidity	**50-60%**
Water	**Water dish**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**9-12 months**
Clutch size	**2 eggs**
Incubation	**60-80 days** at 26-29 °C

PROTECTION AND PAPERWORK

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

About the species

Paroedura stumpffi is a small, nocturnal gecko with a stout body, a relatively large head and a thick tail. The colour is brown with light and dark crossbands across the body, and scattered tubercular scales give the skin an uneven, knobbly appearance. The pattern camouflages the animal well among leaves and bark.

The species was described in 1879 by Oskar Boettger under the name *Phyllodactylus stumpffi* and was later moved to the genus *Paroedura*. The species name honours Anton Stumpff, a traveller and collector who took part in a visit to the island of Nosy Be, where the first specimen was collected.

As an adult the gecko reaches about 10-13 cm including the tail. The males are easily recognised by the two distinct bulges at the base of the tail, which the females lack. The species moves mostly on the ground, but readily climbs a little on branches, bark and sturdy plants.

There is far less experience with *P. stumpffi* than with *P. picta*, and a large part of the care is therefore based on the close relative. This also applies to the lifespan of 8-10 years and the age at sexual maturity.

Distribution and habitat

Paroedura stumpffi is endemic to Madagascar. It occurs in the northern part of the island and on the islands of Nosy Be, Nosy Komba and Nosy Mitsio off the north-west coast. The type locality is Nosy Be.

Records and museum specimens show that the species also lives further south-west along the north-west coast, including around Ampijoroa in Ankarafantsika and at Baly Bay. Two other species of the genus, *P. karstophila* and *P. lohatsara*, live in the same area.

> **Native range:** Madagascar.

HABITAT

Paroedura stumpffi lives in lowland forest from about 40 to 200 metres above sea level. Its range spans from humid forest in the north and on the islands to the dry deciduous forests in the north-west. The species is semi-terrestrial: it stays mostly on the forest floor, in leaf litter, between stones and under fallen wood, but is also seen low on trunks and branches.

Northern and north-western Madagascar has a distinct rainy and dry season, and it is warm all year. Temperature and humidity at the species' own habitats are not documented. The conditions can therefore only be imitated roughly: a warm forest floor with leaf litter, hides and damp substrate, where the animal can hide during the day.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

A pair needs an enclosure of at least 30 × 30 × 30 cm (length × width × height). A larger enclosure, e.g. 45 × 45 × 45 cm, gives better room for a warm and a cool side. The species moves mostly on the ground, so floor area is more important than height. More animals need a larger enclosure, and there must be only one male, because males fight. A male can be kept with one or more females.

The substrate can be a damp mixture with coconut fibre or peat as a base, preferably as a bioactive substrate with isopods and live plants. Put leaves, cork bark and sturdy branches on top, so the animals can climb and sit a little above the ground. Provide at least one hide per animal and a damp hide where the animal can shed.

Avoid sand, gravel and corn cob as substrate, because they are difficult to keep clean and can cause constipation if the animal swallows some along with its prey. The enclosure must be ventilated well enough that water droplets on the glass have dried up by the next day.

Read more: Terrarium construction and bioactive substrate

TEMPERATURE

During the day it should be 22-26 °C. A small area can be warmed to 28-30 °C with a heat mat or a weak halogen bulb controlled by a thermostat, so the animal can choose. At night the temperature may fall to 20-24 °C, which corresponds to ordinary room temperature. At night the enclosure must be dark.

Use a heat mat rather than a heat rock, and place it so the animal does not lie directly on a hot surface, which can cause burns. Measure the temperature on both the warm and the cool side with digital thermometers. If the room is above 28 °C for a longer time, the enclosure should be moved to a cooler place, and it must never stand in direct sun.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be around 50-60 %. Mist the enclosure 3-4 times a week, so the substrate is kept moist and the animals can drink droplets from leaves and decoration. The water on the glass must have dried by the next day; otherwise ventilation is too poor.

Put a shallow bowl of fresh water in the enclosure, and change the water regularly. A humid hide with lightly moistened sphagnum or coconut fibre helps with shedding and is also used as an egg-laying site. A hygrometer shows whether humidity stays stable.

LIGHTING AND UVB

The species is nocturnal and does not need special lighting. An ordinary day with 10-12 hours of light is enough, and at night it must be dark. UVB is not necessary. A weak UVB source over a small part of the enclosure can be used if there is plenty of shade and cover, but the effect has not been studied in this particular species.

Avoid strong spotlights and coloured night lighting, which disturb the daily rhythm.

Read more: Lighting and UVB

FEEDING

Paroedura stumpffi lives exclusively on insects and takes neither fruit nor prepared food. The staple is crickets and dubia roaches, while mealworms and wax moth larvae can be given now and then as a treat. The prey must be no longer than the distance between the animal's eyes. Newly hatched young get small crickets of about 3 mm, and adults can take feeder animals of 6-10 mm.

Dust the feeder animals with calcium and a vitamin and mineral supplement, and give them nutritious food a day before feeding. Calcium deficiency is a risk, especially in females and young. Adults get a couple of feeder animals every other day, the young a small portion every day. Adjust the amount to body shape: the tail should be thick, but not round as a ball.

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

BEHAVIOUR AND HANDLING

The species is calm and not aggressive towards humans, but it is small and easily stressed. Handle it rarely and briefly, preferably low over a soft surface, so a fall does no harm. Let it walk freely from hand to hand instead of holding on, and never grab the tail, which can be shed.

Males must not be kept together, because they are territorial. A pair or a male with several females works if there is room and many hides. By day the animals sleep under bark or in hides, and when they get used to the routine, they are often seen out at the evening feeding.

Breeding

SEXUAL MATURITY AND SEXING

The males have distinct bulges at the base of the tail, which the females lack, so the sex can be determined without aids once the bulges have developed. The animals become sexually mature at about 9-12 months. Females should, however, only be bred when they are fully grown and in good condition.

MATING

Mating can take place all year without a winter rest. Put one male with one or two females. The male may bite onto the female's neck during mating and cause small scratches, so watch the animals the first nights, and take the male out if a female is injured or loses weight.

Give the females a break of a couple of months from the male every year, so they can rebuild calcium reserves and weight.

EGG-LAYING AND CLUTCHES

The female buries two eggs in the substrate at a time during spring and summer. The number of clutches per year is not documented. The eggs are small and have a hard but fragile shell. Give the female a humid laying site, for example a small plastic box with a hole in the side and moist coconut fibre or sphagnum, and check it regularly.

Keep an eye on the female's shape and weight, and give plenty of calcium and food throughout the season, because egg-laying drains calcium reserves.

INCUBATION

The eggs can be lifted carefully with a spoon and put in a small box with moist vermiculite or perlite. Do not turn them, and handle them gently, because the shell is fragile.

At 26-29 °C the eggs hatch after about 60-80 days. Hatching time depends on temperature and is shortest at the warm end. Eggs that collapse or go mouldy are usually infertile or dead.

REARING THE YOUNG

Newly hatched young are best kept in a small enclosure or plastic box with a moist substrate, a couple of hides and a shallow water bowl. Mist daily, and keep them warm, but not hot. For the first few days they live on the yolk reserve; after that they get the smallest crickets dusted with calcium.

Keep the young separately or in small groups of the same size, and separate them if one is bitten or pushed away from the food. Feed daily, and weigh the young regularly to follow growth.

Health and common mistakes

The species is hardy, but like other ground geckos it can get problems if care is wrong. The typical mistakes are:

- Lack of calcium and vitamin D3, especially in breeding females and in young. It causes soft jaws, bent limbs and tremors.
- Constipation after swallowing sand or gravel. Use a moist substrate of coconut fibre or peat.
- Skin remains stuck on toes and tail tip when the air is too dry. Provide a humid hide.
- Burns from heat rocks or heat mats that the animal lies directly on.
- A shed tail after incorrect handling. The tail grows back, but often with a different shape.

A healthy animal has clear eyes, a thick tail and eats regularly. See a vet with reptile experience if the gecko loses weight, does not eat for several weeks or looks lethargic.

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.