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GECKOS

Cameroon dwarf gecko

Lygodactylus conraui

A small, diurnal climber from the West African forests, and the only green gecko in the region. It sits on tree trunks, palm fronds and house walls at shady forest edges. It is rare in vivaria, and its care is based on closely related dwarf day geckos.

Family: Gekkonidae

KEY FACTS

THE ANIMAL

Adult size	**7-9 cm** total length incl. tail
Lifespan	**5-8 years**
Active	**By day**
Lifestyle	**Arboreal**
Habitat	**Rainforest**
Difficulty	**Experienced**

CARE

Min. enclosure	**30 × 30 × 45 cm** L × W × H for 2 adults
Temperature, day	**24-27 °C**
Basking spot	**32-34 °C**
Temperature, night	**21-24 °C**
Humidity	**60-80%**
UVB	**Recommended** Ferguson zone 2
Diet	**Insects, nectar and complete diet**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**4-8 months**
Clutch size	**2 eggs**
Incubation	**60-120 days** at 24-28 °C

PROTECTION AND PAPERWORK

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

About the species

Lygodactylus conraui is a small, slender, diurnal gecko with large eyes without movable lids and with round pupils. The head and body are covered in small, closely set granular scales. The tail is slightly longer than the body, round and tapering. It is fragile and often regrown after a loss. Under the tail there is a single row of enlarged scales, and this is exactly what distinguishes the species from the closely related *Lygodactylus fischeri*, which has two rows.

The colour is usually green or bluish green in both sexes, but most animals from the westernmost part of the range are brownish. There are often small black spots on the head, body and tail, and the throat is evenly whitish. The species is the only green gecko in West Africa and one of the smallest geckos in Africa.

It reaches just under 10 cm in length including the tail. Like other dwarf day geckos, it has adhesive lamellae under the toes and climbs easily on vertical surfaces.

The species was described by Gustav Tornier in 1902 from animals from Cameroon. The species name *conraui* honours Gustav Conrau, a German collector and explorer in Cameroon who was killed in 1899. In the enclosure it is a species to watch, not to hold in the hand. It is rare in captivity and in the trade.

Distribution and habitat

Lygodactylus conraui is found in West and Central Africa, from Sierra Leone and Liberia through Ivory Coast, Ghana, Togo and Benin to Nigeria, Cameroon and Equatorial Guinea. Gabon is also mentioned in some overviews, but its occurrence there has been rejected. The type locality is Bipindi in southern Cameroon and the island of Bioko.

In Nigeria it has been found in the Niger Delta, and in Benin and Ghana it also lives in and around towns such as Cotonou and Accra.

> **Native range:** Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon and Equatorial Guinea.

HABITAT

The species is a climbing forest dweller, found from sea level up to about 1,000 metres above sea level. It lives in humid tropical lowland forest, but is also found at forest edges, in gardens and agricultural areas, and on buildings. In southern Nigeria it keeps especially to forest edges and clearings with plenty of shade, where it sits on trunks, palm fronds and house walls, most often 0.8-3.2 metres above the ground. The more shade, the more animals. In protected, old rainforest and in large, intensive plantations, on the other hand, it does not occur.

In southern Nigeria the climate is hot and very humid, with over 2,500 mm of rain a year and a rainy season from April to September. Three out of four animals are seen in the rainy season. The animals often sit close together, on average 1.35 metres apart, and in Benin they live on office buildings and in the acacia trees around them. They hunt small insects, especially small butterflies and termites.

Care

THE ENCLOSURE

The care of *Lygodactylus conraui* is based on the closely related *Lygodactylus williamsi* and on the species' way of life in the wild. A single animal or a pair can be kept in a small, tall enclosure of at least 30 × 30 × 45 cm (length × width × height) with front doors and ventilation both at the front and in the top. A slightly larger enclosure gives more stable conditions, but remember that the animals are very small and must be able to find both food and water droplets.

Furnish with plenty of vertical and sloping branches of bamboo or cork, cork bark and live plants such as sansevieria, bromeliads and succulents. Choose a shady, densely planted layout, because the species seeks shade in the wild. A damp substrate of soil, peat and sand at a depth of 7-10 cm holds the moisture, and a layer of leaf litter on top provides cover for springtails and woodlice.

Dwarf geckos easily disappear into crevices. Remove background panels or seal them with silicone, and close all small gaps where a gecko could get stuck. Keep only one male in each enclosure, because males can seriously injure each other.

Read more: Feeder animals: keeping and breeding

TEMPERATURE

L. conraui lives in the warm, humid lowlands. By day it should be 24-27 °C, with a basking spot of 32-34 °C that the animal can approach and leave again. At the top of the enclosure it may be 27-29 °C and at the bottom 24-27 °C. At night the temperature may fall to 21-24 °C, and a drop as low as about 16 °C is tolerated.

Use a halogen lamp on a dimmer for the basking spot, so that you can control the heat precisely in a small enclosure. Measure with digital thermometers at the top and at the bottom. Do not let the whole enclosure become warm, so that the animal can always withdraw from the heat. Control heat and light with a timer, so that they follow each other.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity should be 60-80 %, highest at the bottom. Mist the plants, sides and substrate two to three times a day for about a minute, and let the droplets evaporate and the top layer of the substrate dry a little before misting again. In the evening, when the light is off, the humidity may approach 100 %. The animals drink the droplets they lick from the leaves.

A common problem is too much water. In the wild, dwarf day geckos sit openly on trees that are dry for much of the day, so the substrate should dry out a little between mistings, and ventilation should be good. A water bowl is not recommended, because small animals and hatchlings easily drown. If you still want to offer water, a shallow lid with a couple of pebbles is

the safest solution. A hygrometer shows whether the rhythm is holding.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is diurnal and needs strong, full-spectrum light. Use T5 fluorescent tubes, one with daylight of about 6500 K and one with UVB. A UVB tube for Ferguson zone 2 is a good starting point, mounted over the mesh lid, so that the animal can move into the light and away from it. Leave shade at one end of the enclosure, and keep far enough from the lamp that the eyes are not damaged.

Add a halogen spot for the basking spot. The light should follow the seasons, with about 14 hours in summer, 12 hours in spring and autumn and 10 hours in winter. The night must be dark.

Read more: Lighting and UVB

FEEDING

In the wild the species feeds on very small arthropods, especially small moths and termites. In the enclosure the food must be just as small: fruit flies, newly hatched crickets, small wax moth larvae, springtails and small woodlice, no longer than 6 mm. Offer insects four to seven days a week, and so many that the animal is full but no insects are left after a few hours.

Also offer nectar or prepared diet for day geckos, mixed to a thick paste and served in a bottle cap on a piece of branch. Adults can have prepared diet every second to third day so they do not get too fat. The feeder insects must be well fed right up to feeding time.

Dust the insects with a supplement whose main ingredient is calcium, with a small amount of D3 and vitamins. Small animals easily get too much, so use one balanced supplement and do not add more on top. Females need a small dish of pure calcium powder, which is changed every second week and kept away from water.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Lygodactylus conraui is an animal to watch, not to take in the hand. Dwarf geckos are small, fast and fragile, and handling stresses them and can cost them the tail. Keep handling to the minimum, and move them with a small cup or a brush instead of grabbing them.

In the wild the animals sit in small groups with a little over a metre between each. In the enclosure a pair is the safe choice. Several females may become territorial and chase each other, and two males must never be put together. If several animals share an enclosure, there must be many branches and hiding places at several heights, so that they can keep out of each other's way. Watch for bites, chasing and animals that lose weight, and separate them if there is unrest. A new animal should be given several weeks in peace to settle in.

Breeding

SEXUAL MATURITY AND SEXING

The sexes have no known colour difference, so the sex must be determined by looking closely. Males have a row of pores in front of the vent, and in mature males the hemipenal pouches are visible at the base of the tail. Females lack the pores. Sexing is most reliable in adult animals.

The animals probably become sexually mature after 4-8 months, as in *Lygodactylus williamsi*. If you wait until about a year, the animals are in better condition for breeding. Choose only healthy animals in good weight and let them settle into the enclosure before they are put together.

MATING

The species probably responds to spring cues such as longer days and slightly higher temperatures, like related day geckos. Put the females in the breeding enclosure first and the male afterwards, and watch them for the first few days. One pair is the safest, but a male with two or more females can also work. There must be only one male in each enclosure.

Give the females a break from breeding for three to five months in winter by shortening the day length to under 10 hours and removing the male. This extends their reproductive lifespan.

EGG-LAYING AND CLUTCHES

As in related dwarf day geckos, the female probably lays two eggs at a time and glues them to the surface, so they cannot be moved without breaking. Two to three weeks pass between clutches. Very small juveniles are also seen inside houses, so the species may breed on buildings.

Give the female several removable laying sites so that she does not use the sides of the enclosure: bamboo tubes, cork tubes or small flower tubes from a florist, mounted horizontally on the sides. Eggs on the sides of the enclosure cannot be moved, and the juveniles may be eaten by the adults. The female needs plenty of calcium and insects throughout the season.

INCUBATION

Eggs that sit on a detached laying site are moved together with the site to a closed plastic box with damp substrate at the bottom and a couple of small air holes in the lid, so that constant condensation does not form. Keep the humidity high and the air fresh. Hatching probably takes 60-120 days depending on the temperature, as in *L. williamsi*.

In *L. williamsi* the temperature determines the sex: an average daytime temperature of 21-24 °C gives females, 26-27 °C mixed sexes and 28 °C and above males. At night the temperature should fall a few degrees. Whether this also applies to *L. conraui* is not known, so keep the temperature at 24-28 °C and do not expect a particular sex ratio.

REARING THE YOUNG

The hatchlings are kept like the adults, only in slightly smaller enclosures, and they need prepared diet and the smallest insects every day. Newly hatched animals are very small, so all crevices must be closed, and the food must be smaller than 6 mm.

Separate the hatchlings by size and sex when they begin to chase each other, and keep them apart from the adults, who may otherwise eat them. Keep a close eye on the humidity and the drinking water, because small animals dry out quickly.

Health and common mistakes

The typical problems in *Lygodactylus conraui* are the same as in closely related dwarf day geckos:

- Dehydration. Small animals have no reserves, and too low a humidity or a lack of water droplets can be fatal in a short time.
- Too much moisture and poor ventilation, which cause fungus, mould and skin problems. Let the substrate dry out a little between mistings.
- Calcium deficiency, especially in females that lay eggs without a break. Always offer calcium powder, and give the females a break from breeding.
- Obesity if prepared diet is given too often. Give it every second or third day to adults.
- Injuries from fighting, especially between males, and dropped tails after handling. A dropped tail only partly regrows.
- Animals that get stuck in crevices or behind backgrounds. Close all small gaps.
- Mites and parasites in newly bought animals, especially wild-caught ones. Keep new animals in quarantine for up to two months.

See a vet experienced with reptiles if the animal loses weight, will not eat or sits limply on the floor.

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

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.