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SKINKS

African fire skink

Mochlus fernandi

A heavy, fast skink from the forests of West Africa with vivid red-orange flanks, black and white crossbars and a bronze back. *Mochlus fernandi* burrows into moist substrate, needs warmth, UVB and moist substrate, and can live for 15-20 years.

Family: Scincidae Former name: *Lepidothyris fernandi; Lygosoma fernandi; Riopa fernandi; Tiliqua fernandi*

KEY FACTS

THE ANIMAL

Adult size	**25-38 cm** total length incl. tail
Weight	**50-100 g**
Lifespan	**15-20 years**
Active	**By day**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Savanna and rainforest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**120 × 60 × 60 cm** L × W × H for 2 adults
Temperature, day	**25-30 °C**
Basking spot	**33-36 °C**
Temperature, night	**20-24 °C**
Humidity	**60-70%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 2
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**3-9 eggs**
Clutches per year	**3-5**
Incubation	**55-65 days** at 30 °C

PROTECTION AND PAPERWORK

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

About the species

Mochlus fernandi is a large, sturdily built skink with smooth, glossy scales, a long, thick tail and short, strong legs. The back is bronze to golden, while the flanks are red-orange with black and white crossbars. The tip of the tail may be bluish. Adults are 25-38 cm long including the tail. Males are slightly larger and heavier than females, weighing 70-100 g against the females' 50-70 g, but the difference is subtle. Hatchlings are about 5 cm and reach full size only after a year or more.

The species has changed names several times and appears in older literature as *Lepidothyris fernandi*, *Lygosoma fernandi* and *Riopa fernandi*. The species complex has since been split: animals from East Africa belong to *Mochlus hinkeli*, and *Mochlus striatus* is a separate species. The West and Central African animals that reach the trade belong to *M. fernandi*, which has two subspecies: *M. f. fernandi* in Central Africa and *M. f. harlani* in West Africa. Animals in the trade often come from several countries and may be mixed stock, so their origin is rarely certain.

The skink is diurnal and very fast. It is regarded as shy, but it often shows itself on the surface when the enclosure has plenty of hiding places and the substrate is moist. It tolerates careful handling, but it is slippery and bolts easily.

Distribution and habitat

Mochlus fernandi occurs in the forest belt of West and Central Africa: Sierra Leone, Guinea, Liberia, Ivory Coast and Ghana (the subspecies *M. f. harlani*) as well as Nigeria, Cameroon, Equatorial Guinea (including the island of Bioko), Gabon and Congo-Brazzaville (the subspecies *M. f. fernandi*). The type locality is Bioko, formerly Fernando Po.

Animals from East Africa do not belong to this species but to *Mochlus hinkeli*. Isolated records further east, for example near the Zambian border, are probably mislabelled.

> **Native range:** Sierra Leone, Guinea, Liberia, Côte d'Ivoire, Ghana, Nigeria, Cameroon, Equatorial Guinea, Gabon and Congo - Brazzaville.

HABITAT

The species lives on the ground in forest, scrub and densely vegetated areas with grass, and it readily burrows into loose, moist soil and beneath leaf litter and fallen branches. The climate is warm and humid. The animals are diurnal and bask for short periods.

The species feeds on insects and other small animals that it finds on the ground. Moisture in the soil is essential for it.

Care

THE ENCLOSURE

Mochlus fernandi lives on the ground and burrows, so floor area and substrate matter most. A single animal can be kept in 90 × 45 × 45 cm, while a pair needs at least 120 × 60 × 60 cm (length × width × height). Larger is better, because the species is active and investigates everything.

The substrate should be a deep, moist mixture of nutrient-free soil, coconut fibre, cypress mulch and sphagnum, 10-15 cm deep so that the animal can burrow completely out of sight. Put a layer of leaf litter or moss on top, and furnish the enclosure with bark, cork, slabs of stone and branches so that there are many hiding places on the surface. The substrate must not dry out, because dry substrate causes poor sheds and a risk of the animal swallowing substrate.

The enclosure must be completely escape-proof. The lid must fit tightly, because the skink is fast and finds gaps.

TEMPERATURE

The enclosure needs a clear gradient. By day the temperature should be 25-30 °C, and at the basking spot the surface should reach 33-36 °C, measured with an infrared thermometer. The cool end should sit at about 24-26 °C.

At night the temperature should fall to 20-24 °C; the animal tolerates about 18 °C for short periods. Heat is provided by a halogen spot above the basking spot or a ceramic heat emitter, always controlled by a thermostat. Heat rocks are not used.

Read more: Heat and temperature

HUMIDITY AND WATER

The species needs high humidity in the substrate: 60-70 % around the animal's hiding places, while the surface in the warm end may be drier, down to about 40 %. Mist the enclosure thoroughly morning and evening so that the substrate stays evenly moist, but not wet.

Provide fresh water in a shallow, stable dish that the animal can easily climb out of. The dish also helps raise the humidity. The animal is rarely seen in the dish, and much of its fluid comes from its food and the moist surroundings.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is diurnal and belongs to Ferguson zone 2: it basks a little and needs moderate UVB. The UV index should be about 3 at the basking spot and lower elsewhere in the enclosure. A T5 HO tube with 6 % UVB in a reflector, above the basking spot and at a suitable distance, provides this; measure with a UV index meter if possible. Replace the tube according to the manufacturer's instructions, normally every 12 months.

The photoperiod is 10-12 hours a day in the summer months and 8-10 hours in winter.

Read more: Lighting and UVB

FEEDING

Mochlus fernandi is an insectivore. The staple is crickets, supplemented with cockroaches, mealworms, silkworms, snails and other insects of a suitable size. Prey should be no larger than the animal's head. Pinkie mice are given no more than once a month as a treat.

Young animals are fed daily or every other day, adults every third day with as many insects as they will eat in about five minutes, typically five or six. Dust the food with calcium at every feeding and give a vitamin supplement once a week. Feeder insects are fed a nutritious diet for at least a day before they are offered. Offer food from tongs or a shallow dish so that the animal does not lose the prey in the substrate.

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

BEHAVIOUR AND HANDLING

The species is fast, slippery and somewhat shy. A new animal needs at least two weeks of peace before it is handled, and it should be lifted gently from below in a closed room so that it cannot escape.

Most animals are best kept singly. A male and a female can share a large enclosure with many hiding places, but two males must never be kept together. The animals may defend food against each other; separate them if bites or wounds appear. Quarantine new animals for at least 30 days.

Read more: Quarantine and hygiene

Breeding

SEXUAL MATURITY AND SEXING

The sexes are difficult to tell apart. The male has a slightly broader head, a heavier build, develops small jowls below the ears with age and has a thicker tail base; in the female the tail tapers immediately behind the hips. Newly acquired animals often all look like females, so the sex can only be judged once the animals are well fed and adult. The animals are adult at about two years and 50-60 g. The exact age at sexual maturity is not documented.

MATING

The species mates without any special stimulation as long as the temperature stays above 25 °C and the day is longer than 12 hours. The season runs from early spring to mid-autumn, and a winter rest is not necessary. Mating takes place out of sight and is rarely seen. The female can store sperm but rarely lays more than one clutch from it. A gravid female needs plenty of varied food with calcium and a basking spot of about 33 °C.

EGG-LAYING AND CLUTCHES

About 30 days after mating the female is visibly plump, stops eating and digs around looking for a place to lay. She lays 3-6 eggs, often up to 9, in moist but not wet substrate, preferably under the water dish or under cork at the humid end. Egg-laying itself is rarely seen, but the female suddenly loses a lot of weight. A well-fed female lays 3-5 clutches a year; an underfed female risks egg binding and calcium deficiency.

Read more: Common diseases and signs of illness

INCUBATION

Dig the eggs out carefully, mark the top, and place them without turning them half buried in moist vermiculite or another incubation medium in a closed box. At 30 °C most eggs hatch after 55-65 days. Leave the hatchlings in the box until the whole clutch has hatched; waiting a day or two does the first ones no harm. Eggs can also hatch in a bioactive enclosure, but then the hatchlings must be removed at once, because the adults will eat them. Temperature-dependent sex determination is not documented.

Read more: Terrarium construction and bioactive substrate Read more: Incubating eggs

REARING THE YOUNG

The hatchlings are about 5 cm when they emerge. They are raised in a smaller enclosure, for example 90 × 30 × 30 cm, set up like the adults' with a thick, moist substrate, a basking spot and UVB. Pour water directly into the substrate under the heat lamp so that the hatchlings can find the moisture level they prefer.

For the first weeks the hatchlings eat small crickets of 3-6 mm, and after a couple of weeks also mealworms and waxworms. Hungry hatchlings bite each other's tails, so keep them well fed: 5-10 small crickets per hatchling every other day and a dish of mealworms, all dusted with calcium. Growth to full size takes a year or more.

Health and common mistakes

Mochlus fernandi is hardy when heat, humidity and light are right. The typical problems are:

- Poor sheds and toes stuck in old skin if the substrate is too dry.
- Calcium deficiency and brittle bones from too little UVB and a one-sided diet.
- Respiratory infections if the enclosure is too cold or the substrate too dry.
- Internal and external parasites, especially in wild-caught animals; most animals in the trade are wild-caught.
- Egg binding in females that get too little food or calcium.
- Obesity from too much fatty food.

Quarantine new animals for at least 30 days. Contact a vet with reptile experience if appetite changes, or in the case of weight loss or swellings.

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.