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GECKOS

Common Namib Day Gecko

Rhoptropus afer

A small, lightning-fast rock gecko from the Namib Desert, one of the few geckos that is active by day. It has long legs, yellow markings on the throat and the underside of the tail, and feeds on ants and beetles. Almost no husbandry experience exists, so the species is only for the most experienced keepers.

Family: Gekkonidae Former name: *Rhoptropus braconnieri*

KEY FACTS

THE ANIMAL

Adult size	**3-5 cm** snout-vent length
Weight	**2-3.5 g**
Lifespan	**5-8 years**
Active	**By day**
Lifestyle	**Rock-dwelling and terrestrial**
Habitat	**Desert and rocky terrain**
Difficulty	**Expert**

CARE

Min. enclosure	**60 × 40 × 40 cm** L × W × H for 2 adults
Temperature, day	**26-30 °C**
Basking spot	**33-35 °C**
Temperature, night	**16-20 °C**
Humidity	**25-45%**
Water	**No water dish**
UVB	**Recommended** Ferguson zone 3
Diet	**Insects and small invertebrates (springtails, fruit flies)**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1-2 eggs**
Incubation	**56-75 days** at 30 °C

PROTECTION AND PAPERWORK

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

About the species

Rhoptropus afer is a small gecko with long legs and long, slender toes. The innermost toe is short, and under the middle toe there are five or six fine lamellae that help it grip rock. The back is a mottled greyish brown with small, round scales and provides excellent camouflage against gravel and rock. The throat and the underside of the tail and legs are bright yellow, and the tail is displayed to other geckos as a signal. The eyes have vertical pupils and no movable eyelids.

The species is secondarily diurnal: its ancestors were nocturnal, but the genus *Rhoptropus* has returned to a life by day. The gecko is more of a runner than a climber and relies on speed when fleeing. In bright light it can run at up to 2.5 m per second, but in dim light, for example on foggy days along the coast, its speed is clearly lower. It climbs less than the other species in the genus, such as *Rhoptropus bradfieldi*, and is often found on the ground around the rocks.

The body is 3-5 cm from snout to vent, and adults weigh around 2-3.5 g. The tail and body are flattened. The species was described in 1869 and has also been known as *Rhoptropus braconnieri*. It is common within its range and is not considered threatened.

In captivity the species is almost unknown. It is small, fast and tied to a particular climate, and there is no established breeding practice.

Distribution and habitat

Rhoptropus afer is found in Namibia and southern Angola. The range runs along the coast and some distance inland through the Namib Desert, from southern Angola to central Namibia.

The synonym *Rhoptropus braconnieri* was described from Lake Ngami in Botswana, but that locality is an error. The species does not occur in Botswana.

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

HABITAT

The gecko lives in desert and dry, stony terrain. It is found both on the Atlantic coast and many kilometres inland, on rock faces, large boulders and on the ground between them. It makes use of many kinds of surface.

The climate of the Namib is extremely dry. Rainfall ranges from 2 mm a year in the driest areas to around 200 mm at the edge of the plateau. Along the coast the temperature is even, at 9-20 °C all year round, and dense fog from the sea is the main source of moisture. Further inland, summer days can exceed 45 °C, and nights can be freezing. When the rocks are hot, the gecko lifts its body high above the surface and turns so that it is exposed to as little sun as possible. Its food is mostly ants and beetles.

Care

THE ENCLOSURE

Little is known about the care of *Rhoptropus afer*. The figures in this guide are based on the climate within its range and on experience with other small desert geckos from the Namib, especially *Pachydactylus rangei*, and they have not been tested with this species. It is therefore only for very experienced keepers.

A pair needs a low, wide enclosure of at least 60 × 40 × 40 cm (length × width × height). The gecko runs more than it climbs, so floor area matters more than height. The enclosure must be completely sealed, because the animal is very fast and only around 2-3 g.

Furnish with a thin layer of coarse sand and fine gravel as substrate, and flat stones and slate slabs stacked to make basking spots and crevices. Add cork bark and a few larger, flat pieces of rock so the animal can stand high and look out. Stones must be fixed firmly so they cannot slip. There must be plenty of hiding places both below and above the warm zone. The enclosure needs good ventilation.

TEMPERATURE

By day the enclosure should be 26-30 °C, and the basking spot on a flat stone may reach 33-35 °C. At night the temperature should fall to 16-20 °C. The figures are an estimate based on the climate of the Namib and on the body temperature of 26-33 °C found in the close relative *Rhoptropus bradfieldi* when active in the wild.

The temperature of the animal itself matters more than the air temperature, so measure the surface of the basking spot with an infrared thermometer. Provide a warm end and a cool end so the gecko can choose for itself. The basking spot must not exceed 35 °C. Watch the animal on hot days: if it lifts its body high and seeks shade, it is too hot.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be low, around 25-45%. The enclosure should be dry, and the substrate must not become wet. On the coast fog is the most important source of water, so a light, brief misting of rocks and plants once a week gives the animal droplets to drink. Let everything dry out completely again during the day.

Provide a very shallow, small dish of fresh water, such as a bottle cap, and change it daily. Keep a hygrometer in the enclosure.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is active by day in open, sunlit terrain, so it needs strong light and UVB. Use a UVB tube or compact lamp for desert species (Ferguson zone 3), mounted so that the UV index is 3-4 at the basking spot, with shade in the rest of the enclosure. Adjust the distance to the lamp with a UV meter.

Keep the light on for 12 hours a day in summer and 10 hours in winter, ideally controlled by a timer. Use a spotlight for the basking spot. At night it should be dark.

Read more: Lighting and UVB

FEEDING

In the wild the species eats mostly ants and beetles. Give small live insects daily to juveniles and every other day to adults: fruit flies, springtails, newly hatched crickets and small mealworms. Feeder insects must not be longer than the distance between the animal's eyes. Dust the food with calcium and vitamin D3. Also use a balanced vitamin and mineral supplement once a week.

Because the gecko is fast and hunts actively, the feeder insects should preferably be moving, and there must not be so many in the enclosure that they bother it. Remove uneaten insects in the evening. Fruit and prepared diets are not documented for the species and are not recommended.

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

BEHAVIOUR AND HANDLING

Rhoptropus afer is fast and shy and should not be handled. It is not an animal to pick up, and a single wrong grip can injure such a small gecko. It uses its tail as a signal and shows the yellow underside to other geckos. It is diurnal and moves around a lot when there is warmth and light.

How the species behaves with others of its kind is not documented. Keep them singly or as a pair in a large enclosure with many hiding places, and watch for fighting. Never keep two males together. Never house several species of the genus together.

Breeding

SEXUAL MATURITY AND SEXING

Age and size at sexual maturity are not documented for the species. The sexes can be told apart by the pores in front of the vent and a bulge at the base of the tail, but the animals are so small that sexing is difficult and requires a magnifying glass.

MATING

There is no documented experience of mating in captivity. A pair can be kept in a large enclosure with many hiding places. Whether a cooler period in winter matters is not documented.

EGG-LAYING AND CLUTCHES

The species is egg-laying. Clutch size is not documented, but like almost all geckos the female probably lays 1-2 eggs at a time. Provide a low laying box with slightly moist sand in the enclosure so the female has a safe place for the eggs.

INCUBATION

Incubation is not documented for the species. The figures of 56-75 days at 30 °C are borrowed from *Pachydactylus rangei*, a desert gecko from the same part of the world. The eggs are moved carefully, without being turned, to a small box of slightly moist vermiculite in an incubator, and the temperature is measured at the eggs.

Read more: Incubating eggs

REARING THE YOUNG

There is no documented experience of rearing the young. The young are very small and need the smallest feeder insects, such as fruit flies and springtails, daily, and the same light and warmth as the adults. They are kept singly in a small, sealed box with many hiding places until their size shows how they are coping.

Health and common mistakes

No health problems in captivity are documented for *Rhoptropus afer*. The most likely risks follow from how diurnal desert geckos are usually kept:

- Too high a temperature at the basking spot, which causes stress and dehydration. Measure with an infrared thermometer.
- Too little UVB and calcium, which causes soft bones. Use UVB at the correct distance and dust the food.
- Too high humidity and a wet substrate, which cause skin problems.
- Escape and injury, because the animal is so fast and small. Keep the enclosure completely sealed.

Lifespan in captivity is not documented; the 5-8 years are borrowed from *Pachydactylus rangei*, which also lives in the Namib.

See a reptile vet if the gecko loses weight, stops eating or becomes 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.