herpy

GECKOS

Helmethead gecko

Tarentola chazaliae

A small, compact gecko from the Atlantic coast of north-western Africa with long, pointed bumps at the back of the head that look like a helmet. It is nocturnal, fearless and greedy, chirps and grunts when it is on the go, and lives in dry terrain with damp fog from the sea. It therefore needs a dry enclosure with humid hides and daily misting.

Family: Phyllodactylidae Former name: *Geckonia chazaliae*

KEY FACTS

THE ANIMAL

Adult size	**5-10 cm** total length incl. tail
Lifespan	**8-12 years**
Active	**At night**
Lifestyle	**Terrestrial**
Habitat	**Desert**
Difficulty	**Intermediate**

CARE

Min. enclosure	**50 × 30 × 30 cm** L × W × H for 2 adults
Temperature, day	**24-29 °C**
Basking spot	**32-35 °C**
Temperature, night	**18-22 °C**
Humidity	**40-60%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**2 eggs**
Incubation	**70-110 days** at 27-30 °C

PROTECTION AND PAPERWORK

CITES	**Appendix II**
EU annex	**Annex B**
IUCN	**Vulnerable (VU)**

About the species

In *Tarentola chazaliae* the head is covered in small granules and has long, pointed knobs at the back, so that it looks like a helmet. The body is short and stocky with rough scales, which along the relatively short tail become small spines. The colour is grey, brown or orange. Some animals are uniform, others have irregular light or dark blotches.

It is a small gecko. Adult females reach 8-10 cm including the tail, while the males are clearly smaller, down to about 5 cm. The male can also be recognised by a bulge at the base of the tail. Animals from the inland valleys can be considerably larger than the coastal animals.

F. Mocquard described the species in 1895 as *Geckonia chazaliae* from an animal from Cap Blanc in Mauritania. The name comes from the yacht *Chazalie*, which belonged to the French naturalist Raymond de Dalmas, who collected the animal, and which ran aground off Cap Blanc. Genetic studies have since shown that the species belongs to the genus *Tarentola*, but many keepers still know it as *Geckonia*.

The gecko is fearless and curious. It chirps, grunts and croaks and waves its tail, and it has a big personality. The IUCN assesses it as Vulnerable (VU), and it is still collected for the pet trade. It was once common in the trade, but today it is harder to obtain, and it can be difficult to breed. Lifespan is not documented for the species; 8-12 years is borrowed from the larger

T. mauritanica.

Distribution and habitat

The species is found only along the Atlantic coast of north-western Africa, from the area around Agadir in southern Morocco through Western Sahara and Mauritania to Senegal. About three quarters of the range lies in Morocco. The type locality is Cap Blanc at Nouadhibou in Mauritania.

The range is a long, narrow coastal strip, but the species has also been found at Sidi Ahmed Laaroussi near Smara in Western Sahara, 144 km from the sea. The map shows the area in broad terms.

> **Native range:** Morocco, Western Sahara, Mauritania and Senegal.

HABITAT

The gecko lives in dry, stony desert areas and on sandy ground close to the sea. By day it lies under stones or debris on the ground, where it is a little cooler and damper. At night it is active with round, wide-open pupils and stays mostly on the ground.

Almost no rain falls, but dense fog drifts in from the Atlantic and is the most important source of moisture. The species is therefore not a desert gecko in the usual sense: it lives in damp coastal air over dry ground. The wind from the sea can be sharply cold. In Morocco in 1993 many animals were found under black plastic bags lying fixed to the ground, which acted as small solar collectors. There are no measurements of the temperature in the species' retreats, so the care advice is based on experience from captivity.

Care

THE ENCLOSURE

Two adult animals need an enclosure of at least 50 × 30 × 30 cm (length × width × height). Three animals need more floor area, and more space gives more activity, because the animals explore diligently. The gecko is not good at climbing smooth surfaces and stays mostly on the ground, but it can get up the glass, so the lid must always be secure.

Use sand as substrate; clay, coconut fibre and paper can also be used, and newly hatched young are kept on kitchen roll. Sand causes no problems when the animals are healthy, the temperature is right and the substrate is cleaned regularly. Provide many hides: cork bark, upturned plant pots, slate and low roots, and at least one, preferably two, humid hides with damp moss. Heavy items must rest directly on the floor of the enclosure and not on the sand, so they cannot slip and crush an animal.

TEMPERATURE

By day the temperature should be 24-29 °C, from 24-27 °C at the cool end to about 29 °C at the warm end, with a basking spot of 32-35 °C. Use a heat mat under the floor at one end or a small spotlight, always with a thermostat. At night the temperature should fall to 18-22 °C, an estimate based on the species' cool coastal climate. Measure with a digital thermometer at both ends.

Breeding animals get a mild, cooler period in winter with a temperature a couple of degrees lower, shorter days and less food. Leave the water available.

Read more: Heat and temperature

HUMIDITY AND WATER

The species differs from most desert geckos in needing moisture, and moisture is the key to success. Humidity should be 40-60 %, and the enclosure is lightly misted once or twice a day. In addition, give the cool end a thorough spraying about once a week, so that the lower layers of sand retain a little moisture.

Ventilation must be good enough for the enclosure to dry out within a couple of hours, because the animals must not live in constant dampness. There must always be a humid hide with damp moss and a shallow dish of fresh water.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The gecko is nocturnal and requires no special lighting. The light can be anything from a spot bulb with UV or a daylight tube to ordinary daylight from the room. The species can be bred entirely without UV, but UV may benefit the young in particular. The animals bask when the light gives them the right warmth, and UV in the cool months may give a better breeding season.

UVB is therefore optional. If you use it, provide shade and hides, so the animals can withdraw. Keep the light on for about 12 hours a day, and keep the enclosure dark at night.

Read more: Lighting and UVB

FEEDING

The gecko is an eager and greedy hunter, which eats surprisingly much for its size. The staple diet is dubia roaches or crickets, and small mealworms and waxworms can be given for variety. The insects must not be longer than the distance between the animal's eyes, that is, about 3 mm for newly hatched young and about 6 mm for half-grown and adult animals. Give them in a dish with high sides, so they do not escape and hide.

Dust the insects at every feed with calcium with D3 or a combined calcium and vitamin supplement. Breeding females must be fed often and have extra calcium, otherwise they may develop health problems. There are no fixed figures for how often adults should be fed, so adjust according to the animal's condition, and watch that the tail is plump.

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

BEHAVIOUR AND HANDLING

The gecko is hardly afraid of people at all. Many animals quickly learn that you mean food, and come to the glass or take insects from tweezers or fingers. Even newly hatched young take food from a finger. Careful handling is well tolerated, but the animals are small and must be treated with care.

Groups are usually peaceful, but males must not be housed together. One male can be kept with one or several females, and the species also does well alone. Mating can be violent: the female may bite the male's hemipenis, and an infected wound can kill him. Watch new pairs closely, and have a spare enclosure ready.

Breeding

SEXUAL MATURITY AND SEXING

The males are recognised by the bulge at the base of the tail and are smaller than the females. When the species reaches sexual maturity, and how much a female should weigh before breeding, is not known. Wait until the females are fully grown and in good condition, because the eggs draw on the calcium reserves.

MATING

A mild, cool winter rest brings the animals into breeding condition (see Temperature). Females may lay eggs at regular intervals without a male, but the eggs are then infertile. When the male is introduced, watch the first few days, and separate the animals if the female attacks him.

EGG-LAYING AND CLUTCHES

The females lay two eggs at a time and are diligent egg-layers. How many clutches there are per year is not known for the species. In *T. mauritanica* a female in an enclosure can lay four to six clutches a year, and the eggs are hard-shelled, almost round and 11-12 × 9-10 mm.

Tarentola females readily lay the eggs in a corner or at the foot of a stone and cover them with sand, so provide a deeper layer of sand somewhere in the enclosure. The eggs can be carefully removed and placed in an incubator.

Read more: Incubating eggs

INCUBATION

Incubation is not documented for the species, and the figures are borrowed from *T. mauritanica* and *T. nicolauensis*. Incubate at 27-30 °C and expect 70-110 days, longest at low temperature. Do not exceed 30 °C, because the species lives in a cooler climate than both relatives.

Hard-shelled gecko eggs do not tolerate wet substrate, so place them in a box with dry or only slightly damp vermiculite, and do not turn them. In *T. mauritanica* the sex of the young depends on temperature, but whether this applies to this species is not known. Incorrect incubation can cause eggs to die late in development and young to die just after hatching.

REARING THE YOUNG

The young are small but robust, and grow quickly. Keep them on kitchen roll for the first few weeks, so you can see whether they eat and pass droppings, and give them a humid hide. Feed with insects of about 3 mm dusted with calcium with D3.

The first shed is the greatest challenge: some young shed perfectly, others have difficulty, so the humid hide is important. The young are generally more demanding than the adults. There are no figures for size at hatching or for growth.

Health and common mistakes

Adults are hardy, but the species has a reputation for being difficult, especially because of mortality among newly hatched young and problems with the food. The typical problems are:

- Desiccation. Mist daily, and provide humid hides and fresh water, but avoid constant dampness and poor ventilation.
- Mortality among newly hatched young, which is probably linked to the incubation and the food. Use small insects and humid hides.
- Problems with the first shed in young.
- Calcium deficiency in breeding females. Provide plenty of calcium with D3 and food.
- Injuries during mating, where the female attacks the male.
- Animals crushed by heavy items standing on the sand. Place everything directly on the bottom.

A healthy animal is lively and greedy at night and has a plump tail. Seek a vet with experience in reptiles if the gecko loses weight, does not eat for several weeks or seems 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.