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GECKOS

Moorish gecko

Tarentola mauritanica

A stocky gecko from the rocks and house walls of the Mediterranean, with a back armoured with pointed tubercular scales and large eyes with vertical pupils. It is hardy and lives on insects, but does not become sexually mature until after several years and needs a cool winter rest to breed.

Family: Phyllodactylidae Former name: *Lacerta mauritanica; Platydactylus mauritanicus*

KEY FACTS

THE ANIMAL

Adult size	**12-16 cm** total length incl. tail
Lifespan	**8-12 years**
Active	**At dusk and at night**
Lifestyle	**Arboreal and rock-dwelling**
Habitat	**Rocky terrain**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 45 × 60 cm** L × W × H for 1 adult
Temperature, day	**25-30 °C**
Basking spot	**30-35 °C**
Temperature, night	**18-20 °C**
Humidity	**50-60%**
UVB	**Recommended** Ferguson zone 2
Diet	**Insects**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**36-60 months**
Clutch size	**1-2 eggs**
Clutches per year	**1-6**
Incubation	**55-98 days** at 27-30 °C

PROTECTION AND PAPERWORK

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

About the species

Tarentola mauritanica likes to sit on walls and stone fences. It is a stocky, flattened gecko with a broad, triangular head and large eyes without eyelids. The pupil is a narrow vertical slit in daylight and opens fully in the dark. The back, legs and tail are covered with rows of large, cone-shaped tubercular scales, which give it an armoured appearance. Under the broad toes are undivided adhesive lamellae, so it can walk on vertical glass and hang from the ceiling. Visible claws are found only on the third and fourth toes.

The colour is brownish grey to sandy with darker and paler spots and changes with the light: the animal is dark by day and pale at night. The young have distinct cross-bands and a ringed tail. The belly is whitish to yellowish. Adults reach 12-16 cm including the tail, and the head and body alone measure at most about 9 cm. Males are on average larger than females and have a broader head. The tail can be dropped, and the new tail is smoother and without the large tubercular scales. There are no reliable weight figures for adults.

Linnaeus described the species in 1758 as *Lacerta mauritanica*. Three subspecies have been described, but genetic studies suggest that the two Moroccan ones, *juliae* and *pallida*, are not separate lineages. The closely related *Tarentola fascicularis* from eastern North Africa is today a separate species, but it is still sometimes treated together with *T. mauritanica*. The species name *mauritanica* refers to ancient Mauretania in north-western Africa.

It is a robust and adaptable species, but not an animal to hold in the hand. It suits best someone who wants to watch a vigilant hunter in a well-furnished enclosure.

Distribution and habitat

Tarentola mauritanica lives naturally in the western Mediterranean region in Europe and North Africa. In Europe it is found over most of the Iberian Peninsula, in southern France and Monaco, along the coasts of Italy, on Malta, along the Adriatic in Slovenia and Croatia and in parts of Greece. In North Africa the range runs from Morocco and Western Sahara through Algeria to Tunisia. Older records also include Libya and Egypt, but recent studies suggest that the populations there belong to other species, especially the closely related *Tarentola fascicularis*.

Many records outside the core area are due to humans. The species has been brought to the Balearic Islands and Madeira and to California, Chile, Uruguay and Argentina, most often with freight or as escaped pets. Records on the map outside the Mediterranean region come from such populations, and only the original range is marked.

> **Native range:** Portugal, Spain, France, Monaco, Italy, Malta, Slovenia, Croatia, Greece, Morocco, Western Sahara, Algeria and Tunisia.

HABITAT

In the wild *Tarentola mauritanica* lives on rocks, in stone walls and stone piles, under loose stones and on tree trunks. It is at the same time one of Europe's most pronounced synanthropes and sits on house walls, in ruins and under roof tiles in villages and towns. It prefers warm, dry lowland regions, but has been found as high as about 2,300 metres.

The gecko is most active at dusk and in the first hours of the night and hunts insects and spiders on walls and near lamps, where prey gathers. It is not strictly nocturnal, however, because it readily basks at the entrance to its retreat, especially in late winter and spring. In winter it withdraws into frost-free crevices and hibernates, in cooler regions often from November to March. In the warmest coastal regions it can be active all year, as long as the temperature does not fall below about 15 °C. It is precisely this rhythm of cool winter and warm, dry summer that should be imitated in the enclosure.

Care

THE ENCLOSURE

The gecko is a climber, so height and vertical surfaces matter more than floor area. One adult needs at least 60 × 45 × 60 cm (length × width × height), because the species is active and territorial, and a pair or a male with several females needs 100 × 50 × 70 cm or more.

Furnish the enclosure like a rock face: back and side walls of cork or stone imitation, stacked stones and slate slabs with crevices, branches and thick roots to climb on, and at least two hides, one at the warm and one at the cool end. The crevices must be so narrow that the gecko can squeeze in with back and belly against the stone. Sand or sand mixed with fine gravel works as substrate, and succulents and drought-tolerant grasses can be used as plants.

The enclosure needs good ventilation and must not stand in direct sun. Lids and doors must close tightly, because the animal is fast and can squeeze through narrow gaps. Remove droppings and shed skin every week, and change the substrate only rarely.

TEMPERATURE

By day the enclosure should be 25-30 °C and at night about 18-20 °C. Give the animal a warm spot of 30-35 °C under a lamp, so that it can choose for itself how warm it wants to be. There must always be a cool end.

The species is adapted to a cool winter. Lower the temperature slowly over several weeks, and keep it at 15-18 °C during the winter rest itself, which lasts about three months. Stop feeding, turn the light down to a few hours a day, and leave fresh water available at all times. Then raise the temperature slowly over about two weeks. The winter rest is regarded as necessary for the animals to breed. Measure with digital thermometers at both the warm and the cool end, and use a thermostat for all heating.

Read more: Heat and temperature

HUMIDITY AND WATER

The species comes from dry to semi-arid regions and manages with a moderate humidity of about 50-60%. Mist the enclosure lightly once a day, preferably in the evening, so there are droplets on stones and plants, and let it dry out again. Persistently high humidity and still air can cause respiratory infections and mould.

The gecko readily drinks droplets, but a shallow dish of fresh water must always be available and changed daily. During the shed a humid hide, for example a small box with lightly dampened moss, can help the animal shed, including on the toes.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Tarentola mauritanica is most active in the evening and at night, but also basks in the wild, so a weak UVB light is recommended. Use a UVB tube of 2-5% for animals that bask in partial shade (Ferguson zone 2) over part of the enclosure, so the animal can choose between light and shade. The zone is set from the basking and has not been measured on the species itself. There must always be ample shade.

Use a timer that gives about 12 hours of light and 12 hours of darkness. At night it must be dark or at most a very faint light. Turn the light down during the winter rest.

Read more: Lighting and UVB

FEEDING

The species is an insectivore and in the wild takes beetles, spiders, ants, butterflies and caterpillars. In the enclosure you can give crickets, small cockroaches, locusts and occasionally waxworms or mealworms as a treat. Vary the food, and choose insects that are smaller than the distance between the animal's eyes.

Give adults food every second or third day and young every day, preferably in the evening and in portions so small that everything is eaten. Remove insects that have not been eaten the next morning. Feed the insects good vegetables for a couple of days before they are passed on, and dust them with calcium. A good plan is calcium with D3 once or twice a week and a multivitamin supplement once a week.

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

BEHAVIOUR AND HANDLING

Tarentola mauritanica is vigilant and not an animal to be picked up for fun. It can get used to your being there, but handling stresses it, and it drops its tail if it feels threatened. If you need to move it, let it walk onto your hand over a soft surface, and never grab the tail.

Males are territorial. They defend hides and hunting ground with screams and clicks, and fights often end with lost tails. Therefore never keep two males together. A pair or a male with a couple of females can live together in a large enclosure with many hides. Watch for bites and missing tails, and separate the animals at any sign of unrest. Keeping them singly is also a common choice. By day the gecko hides, and only in the evening does it go hunting.

Breeding

SEXUAL MATURITY AND SEXING

The sexes are difficult to tell apart from the outside, because the differences are small. Males are on average larger and have a broader head, and in sexually mature males two distinct openings in the skin under the vent can be seen, which females lack. Females have small, often hidden claws on all toes, while males have claws only on the third and fourth toes.

Tarentola mauritanica becomes sexually mature late, in enclosures at the earliest around three years old and often only at four to five years. Do not put animals together for breeding until they are fully grown. There are no reliable weight figures for animals ready to breed.

MATING

In the wild the breeding season begins shortly after the winter rest, and mating takes place from April to June. The male calls with short, growling screams, up to eleven in a row, and the female answers with a single call. During mating the male holds the female fast with his mouth around her belly.

A cool winter rest of about three months at 15-18 °C is regarded as necessary for the animals to breed, and the temperature is then raised slowly again. Put the male in with the female, and take him out again if she is chased or bitten.

EGG-LAYING AND CLUTCHES

The female lays 1-2 hard-shelled, almost round eggs at a time, about 11-12 mm long and 9-10 mm wide. In the wild this amounts to 1-3 clutches a year, laid in crevices in rocks, walls and trees or under roof tiles. In enclosures a female can lay up to six clutches a year, which draws heavily on her calcium reserves.

Provide a laying site, for example a box with slightly damp sand or vermiculite and a hole in the lid, otherwise the female lays the eggs in a crevice or on the floor. Give her plenty of food and calcium throughout the season, and stop breeding if she loses weight.

INCUBATION

The eggs have a hard shell and can be moved carefully, without turning them, to a small box with slightly damp vermiculite or perlite and a couple of air holes. Substrate and moisture are not described in detail for the species, so the method is the same as for other geckos with hard-shelled eggs: dry to slightly damp, never wet.

At 27-30 °C the eggs hatch after about 70-75 days, but depending on temperature it can take from 55 to 98 days. The species has temperature-dependent sex determination, but which temperatures give which sex is not well described. Keep the temperature stable, and expect the sex ratio to be skewed.

Read more: Incubating eggs

REARING THE YOUNG

The young are small at hatching, about 2-5 cm in total, and weigh only a few hundredths of a gram. They look like the adults in miniature, but with distinct cross-bands and rings on the tail. Move them to a small box with kitchen roll or a little sand, some hides and a shallow water dish, and keep them warm. Give them tiny insects every day, such as fruit flies and newly hatched crickets, lightly dusted with calcium with D3.

Keep the young singly or in small groups of the same size, and separate them at once if one is chased. They grow slowly and do not become sexually mature for several years. There are no good figures for growth, so weigh them regularly.

Health and common mistakes

Tarentola mauritanica is hardy, and most problems are caused by the care. The typical mistakes are:

- Too little calcium and D3, especially in young animals and breeding females. This causes metabolic bone disease with soft jaws and bent limbs. Dust the insects with calcium, and provide a weak UVB light.
- Too high humidity and poor ventilation, which can cause respiratory infections and mould. The species comes from dry regions.
- Stuck shed on the toes if the air is too dry. Provide a humid hide, and gently loosen the remains with lukewarm water.
- A dropped tail from handling or fights. It grows back, but is smoother and without tubercular scales.
- Fights between males, which cause bites and wounds.
- Intestinal worms and other parasites in wild-caught animals and mites between the toes. Therefore buy captive-bred animals.

As in many reptiles, there may be salmonella in the gut, so wash your hands after contact with animals and enclosure. Seek a vet with experience in reptiles if the animal loses weight, does not eat for several weeks or seems limp.

Read more: Quarantine and hygiene Read more: Common diseases and signs of illness 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.

The full guide with map and updates: herpy.org/en/geckos/tarentola-mauritanica