herpy

GECKOS

Middle Eastern short-fingered gecko

Stenodactylus doriae

One of the largest species in the genus *Stenodactylus*: a slender, nocturnal ground-dweller with long legs and fringed toes that buries itself in the sand during the day. Little is known about its care, but the species can be kept like its closest relatives in a dry sand enclosure.

Family: Gekkonidae Former name: *Ceramodactylus doriae; Ceramodactylus major; Stenodactylus major*

KEY FACTS

THE ANIMAL

Adult size	**5-8 cm** snout-vent length
Weight	**5-11 g**
Lifespan	**9-10 years**
Active	**At night**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Desert**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 40 × 20 cm** L × W × H for 2 adults
Temperature, day	**24-29 °C**
Basking spot	**35-38 °C**
Temperature, night	**18-24 °C**
Humidity	**40-60%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**8 months**
Clutch size	**1-2 eggs**
Incubation	**60-80 days** at 27-30 °C

PROTECTION AND PAPERWORK

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

About the species

Stenodactylus doriae is one of the largest species in the genus. The body measures up to 8 cm from snout to vent. Adults weigh about 5-6 g, and the heaviest up to 11 g. The legs are long and thin, and the toes have a fringe of pointed, serrated scales along the sides that gives good grip on loose sand. Large scales around the eyes protect against the sand when the animal digs. The toes have no adhesive lamellae, so the gecko cannot climb vertical surfaces.

The species was described in 1874 by William Thomas Blanford and is named after the Italian zoologist Giacomo Doria. Older names are *Ceramodactylus doriae*, *Ceramodactylus major* and *Stenodactylus major*. The gecko lives hidden during the day and is active after dark. In captivity it lives to at least 9 years of age.

The young are very small at hatching, about 3 cm from snout to vent and barely 1 g. Females are sexually mature from about 5 cm. Males are slimmer and have a distinct bulge at the base of the tail.

Distribution and habitat

The species is found in desert regions around the Persian Gulf and across large parts of the Arabian Peninsula: south-western Iran, Iraq, Kuwait, Qatar, the United Arab Emirates, Oman, Saudi Arabia, Jordan and southern Israel, where the sand areas of the Arava Valley mark the western limit. The type locality is Bandar Abbas in Iran.

The gecko lives from sea level up to about 1,000 m. Animals in the trade are almost always wild-caught, and captive breeding is rare.

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

> **Native range:** Saudi Arabia, Qatar, Iran, Iraq, Israel, United Arab Emirates, Oman, Jordan and Kuwait.

HABITAT

Stenodactylus doriae is tied to sand and lives in sandy areas with sparse vegetation. It digs tunnels in the sand and hides in them during the day, and the females also dig the holes in which they lay eggs. At night the gecko hunts insects and other small invertebrates on the ground.

The climate is hot and dry with large swings between day and night and a cool winter. In summer the sand surface becomes very hot, while it is cooler and more humid down in the tunnels. Temperature and humidity in the tunnels have not been measured for the species.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Little is known about the care of *Stenodactylus doriae*. The set-up follows its closest relatives *Stenodactylus petrii* and *Stenodactylus sthenodactylus*, which come from the same deserts. The humidity figures are borrowed from *Stenodactylus petrii*.

Floor area matters more than height, because the gecko lives on the ground and does not climb. A pair needs at least 60 × 40 × 20 cm (length × width × height), and a plastic box of that size is enough. One male with two females needs more floor area. Juveniles can be kept in smaller boxes.

Use a 2-3 cm layer of fine, sieved sand, ideally mixed with a little peat or soil, so that the tunnels do not collapse when the animals dig. Kitchen roll is a simple alternative for newly acquired animals in quarantine. Heavy hides of slate or cork bark should stand directly on the base and not on the sand, so that they do not collapse onto the animals when they dig beneath them. Provide at least one hide at the warm end and one at the cool end.

Read more: Quarantine and hygiene

TEMPERATURE

During the day the enclosure should be 24-29 °C, with 35-38 °C at the warmest spot, for example over a heat mat or heat cable under the base or under a lamp at one end. The other end should be cooler, so that the animals can choose. At night the temperature may fall to 18-24 °C. Use a thermostat, and avoid heat rocks.

The species needs a cool period of 6-8 weeks at 18-24 °C in winter in order to breed. All animals that are at least half grown get it, and the adults are best placed in separate smaller boxes while they are cool.

Read more: Heat and temperature

HUMIDITY AND WATER

The air should be low to moderately humid, about 40-60%. Mist part of the enclosure lightly in the evening once or twice a week, so that there are damp patches and water droplets, and leave the rest dry. If you mist just before the animals come out, they often eat better.

Provide a small, shallow water dish that cannot tip over, for example a bottle cap, at the cool end, and change the water at least twice a week. Some animals do not use the dish and drink the droplets from misting instead. Keep the sand slightly moist under the hide at the cool end, or provide a hide with damp moss, so that the animals can choose for themselves.

LIGHTING AND UVB

The species is nocturnal and can live without UVB when it receives calcium with vitamin D3 through its food. A weak UVB light over part of the enclosure is optional, provided the animals can dig down into shade. Keep 12 hours of light and 12 hours of darkness in summer and slightly shorter days in winter, ideally controlled by a timer.

Read more: Lighting and UVB Read more: Calcium, vitamins and supplements

FEEDING

The staple food is live insects, mostly crickets, supplemented with waxworms, mealworms, small mealworms and flightless fruit flies. The insects should be no wider than the gecko's head. Feed in the evening, several times a week. Adults get 2-8 insects each time.

Dust the insects with phosphorus-free calcium and, every second or third time, with a vitamin and mineral supplement. Young animals need supplements more often.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Stenodactylus doriae is not for handling. It is fast and fragile, and the tail can be shed. The animals come out after dark and spend the day in their tunnels. Males can make sounds. Newly acquired animals take a long time to settle in and often do not lay eggs in the first year.

A pair or one male with two females can be kept together. If the males fight, or an animal is chased, they should be separated. How the species fares in larger groups is not documented.

Breeding

SEXUAL MATURITY AND SEXING

Males are slimmer than females and have a distinct bulge at the base of the tail. Females are sexually mature from about 5 cm from snout to vent. The only figure for age is about 8 months in the wild; for captivity it is not documented. Only breed females when they are fully grown, because egg-laying costs a great deal of calcium.

MATING

Breeding is triggered by the cool period in winter: 6-8 weeks at 18-24 °C. When the animals are warm again and get longer days, the male is placed with the female or females. Mating has not been described in more detail for the species. Newly acquired animals rarely lay eggs in the first year.

EGG-LAYING AND CLUTCHES

The female lays one or two eggs per clutch and buries them in the sand. Keep one corner of the base slightly moist, so that she has somewhere to lay them. How many clutches a female lays per year is not documented. Give the female plenty of calcium and insects throughout the season.

INCUBATION

Incubation figures are not documented for the species. The figures are borrowed from *Stenodactylus sthenodactylus*: at 27-30 °C the eggs hatch after 60-80 days. The eggs are hard-shelled and fragile. Lift them with a teaspoon together with a little of the sand, and move them, without turning them, to a small box with slightly moist substrate. Hard-shelled gecko eggs do not tolerate wet substrate. Eggs that are not found may hatch in the enclosure.

Read more: Incubating eggs

REARING THE YOUNG

The young are very small and need small feeder insects: newly hatched crickets and fruit flies, dusted with calcium. Keep them singly or in small groups of the same size in a small box with fine sand and a hide. Provide a shallow dish of water, and mist lightly in the evening. The growth of the young is not documented for the species.

Health and common mistakes

There are no diseases specific to the species, and most problems are caused by husbandry. The typical mistakes are:

- Dehydration, if there is no water, no damp patches or no light misting. The signs are wrinkled skin and lethargy.

- Too little calcium and vitamin D3, especially in egg-laying females. This causes soft bones and tremors.
- Skin remnants that stick, if the air is too dry. Provide a humid hide.
- The tail can be shed if the animal is grabbed.

Have a vet examine the faeces of new animals, and keep them in quarantine for at least three months.

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.