herpy

GECKOS

Sinai fan-fingered gecko

Ptyodactylus guttatus

A slender rock gecko with fan-shaped toes and a pattern of dark and light spots on the back. It lives on rocks and stone walls in Sinai, the Negev and neighbouring countries. Little is known about its care, so many figures are borrowed from the genus.

Family: Phyllodactylidae Former name: *Ptyodactylus gecko; Gecko maculatus*

KEY FACTS

THE ANIMAL

Adult size	**6-9 cm** snout-vent length
Lifespan	**10-11 years**
Active	**At dusk and at night**
Lifestyle	**Rock-dwelling**
Habitat	**Desert and rocky terrain**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 40 × 60 cm** L × W × H for 2 adults
Temperature, day	**27-32 °C**
Basking spot	**32-38 °C**
Temperature, night	**18-22 °C**
Humidity	**30-50%**
UVB	**Optional**
Winter rest	**10-21 °C** 8-12 weeks
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**12 months**
Clutch size	**2 eggs**
Clutches per year	**5-6**
Incubation	**45-100 days** at 27-30 °C

PROTECTION AND PAPERWORK

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

About the species

Ptyodactylus guttatus is a slender, medium-sized rock gecko. The toes are flat and fan-shaped, with adhesive lamellae radiating out to the sides, and the claws can be retracted. The pupil is a vertical slit. The back is covered with scattered dark and light spots, and the name *guttatus* is Latin for spotted. The tail is ringed with light and dark bands. Females are paler than males, and the spots are less contrasting.

It reaches about 6-9 cm from snout to vent, with the tail on top of that. The size is not documented for the species and is an estimate based on the genus; *Ptyodactylus hasselquistii* reaches up to 10 cm. The lifespan is likewise unknown for the species, but *P. hasselquistii* can live about 11 years in captivity. Mature males can be recognised by distinct hemipenal bulges at the base of the tail.

The species was described in 1827 with Sinai as the type locality. For a long time it was regarded as a form of *Ptyodactylus hasselquistii*, and in the trade many animals still carry that name, although they are most often *P. guttatus*. The two are told apart by their pattern: *P. guttatus* has spots, *P. hasselquistii* crossbands. In Egypt there is a distinct form, *siphonorhina*, with its

type locality near Giza.

The males chirp, and the animals are fast and shy.

Distribution and habitat

Ptyodactylus guttatus is found in Sinai and the Negev and on through Israel and the West Bank to Jordan and Syria. To the south-east it reaches northern Saudi Arabia. The type locality is at Tor in Sinai. In Egypt it is also found west of the Suez Canal.

The populations in Oman do not belong to the species. They were formerly included but are today assigned to other species in the genus.

> **Native range:** Egypt, Israel, Palestinian Territories, Syria, Jordan and Saudi Arabia.

HABITAT

Ptyodactylus guttatus is a rock dweller. The genus lives first and foremost on rocky ground in deserts and their fringes, and this species is no exception. The animals hide in crevices and under stones and sit on rock faces. They also enter and frequent houses, where walls with crevices provide the same kind of shelter.

The climate is hot and dry. Temperatures swing widely between day and night and between summer and winter, and winter nights can be cold. Females in the genus share communal egg-laying sites and glue the eggs to rock. At what time of day the species is most active is not documented; the genus includes both diurnal and nocturnal species.

Care

THE ENCLOSURE

Little is known about the care of *Ptyodactylus guttatus*. The care is based on the genus as a whole, especially *Ptyodactylus hasselquistii*, and on the climate of the hot, dry rocky regions where the species lives. A pair needs at least 60 × 40 × 60 cm (length × width × height), and bigger is better. Juveniles can be kept in a smaller enclosure of at least 20 × 20 × 30 cm. It should be fairly tall so that the lamp does not overheat the juveniles. Three or four juveniles of the same size can be kept together.

Furnish with rock slabs, stacked stones, cork bark and flat hides, so that the animal can squeeze in between the surfaces and climb on vertical sections. The stones must sit firmly so that they cannot slip and crush the animal. The substrate is sand or a sandy mix. Plants are not necessary. Provide ventilation so that the air does not become stagnant.

TEMPERATURE

The enclosure must have a clear temperature gradient. The daytime temperature should be 27-32 °C, and under the heat lamp one spot should reach 32-38 °C. At night the temperature falls to 18-22 °C. The daytime figures are borrowed from the genus, and the night temperature is an estimate.

For a cool brumation, lower the temperature to about 21 °C by day and 10 °C at night for 8-12 weeks, and keep the light on no longer than it is light outside. Then raise the temperature gradually back over a few days. The animals eat less during the rest period. Use digital thermometers both at the basking spot and in the cool end.

Read more: Heat and temperature Read more: Brumation and the seasons

HUMIDITY AND WATER

Ptyodactylus guttatus comes from dry regions and thrives at low to moderate humidity, 30-50 %. The figure is an estimate. The enclosure should not be wet, and the substrate should be able to dry out.

Mist lightly so that the animal can drink droplets from the stones. During brumation, misting can be cut down to every second day. You can also put a shallow dish of fresh water alongside, but it is not documented that the species uses it.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Use a heat lamp or spotlight over a flat stone so that the animal can bask. The UVB requirement is not documented for the species. A weak UVB tube for desert species can be used as long as there is shade in the rest of the enclosure. If the species is kept without UVB, the food must be supplemented with calcium with D3.

The light is on for about 12 hours a day in the season, and during brumation no longer than it is light outside. At night it must be dark.

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

FEEDING

Ptyodactylus guttatus feeds on insects and other small arthropods. Crickets, locusts, mealworms and cockroaches are good feeder insects, and they should be smaller than the distance between the animal's eyes. Exact quantities are not documented for the species.

Juveniles are fed every day with the same food as the adults, just in smaller sizes. Adults are fed a few times a week, and during brumation about twice a week. Dust the insects lightly with calcium, and give a supplement with D3 and vitamins regularly. Keep an eye on the weight so that the animals do not become fat.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Ptyodactylus guttatus is fast and shy and is not suited to handling. Give it peace to settle in after a move. Never grab the tail, because it can be shed.

The species is kept in pairs or singly. Pairs bond with each other and can be kept together all year, but animals from outside the pair are often bitten and chased. Do not put several males or several pairs in the same enclosure. Whether several females can be kept together is not documented. Males chirp and nod their heads at the female.

Breeding

SEXUAL MATURITY AND SEXING

Males are recognised by distinct hemipenal bulges at the base of the tail once they are sexually mature. Females have no such bulges and are paler than males, with less contrasting spots. The young begin to chirp when they are about six months old and are sexually mature at about 12 months. The figures are borrowed from the genus.

MATING

Established pairs are kept together all year. Breeding is triggered by a cool rest period in winter of at least two months, as described under temperature. When spring comes, the temperature is raised gradually, and the male begins to chirp and nod more vigorously at the female. Most females in established pairs are receptive. If the female rejects the male, she may attack him, and the pair should then be separated.

EGG-LAYING AND CLUTCHES

Two to three weeks after mating, the female glues two eggs to a rock surface and positions them with her feet. If the surface is cooler than the sand, she buries the eggs. In the wild, females share egg-laying sites. This amounts to five or six clutches or more per season, with intervals as short as two weeks. Provide the female with a flat stone with a hide beneath it and a box of damp sand, and plenty of calcium and food throughout the season.

INCUBATION

The eggs are stuck fast and must not be moved. Leave them where they are and let them hatch at the enclosure temperature. After a few days blood vessels can be seen in the eggs, within the first couple of weeks they turn pink, and after 30-40 days the eyes can be glimpsed. At the enclosure temperature, about 27-30 °C, the eggs hatch after 45-100 days: the warmer, the faster. The figures are borrowed from the genus.

REARING THE YOUNG

The parents do not eat the young straight away but may do so later, and the young are easily outcompeted for food. The young are therefore moved to a small enclosure of their own, fairly tall. Three or four young of the same size can be kept together. Give them the same food as the adults every day in smaller sizes and the same temperatures. After about a year they are sexually mature and should be moved to adult-sized enclosures, in pairs or singly. There are no reliable figures for growth and weight in the species.

Health and common mistakes

There is no reliable information on diseases in *Ptyodactylus guttatus* specifically. The most likely problems resemble those in other desert geckos in captivity:

- Too little calcium and vitamin D3, especially in juveniles and in females during the breeding season. This causes soft bones and tremors. Dust the insects and give supplements.
- An enclosure that is too damp, which causes skin problems and fungus. Keep the substrate dry.
- Too low a temperature, which causes poor food intake and poor digestion. Use a thermometer and thermostat.
- Bites and stress if animals from outside an established pair are kept together.
- Lost tail after handling. It is not dangerous, but the new tail never looks like the old one.

See a vet with experience in reptiles if the animal loses weight, stops eating or seems listless. Wild-caught animals can carry parasites, so have a sample examined shortly after purchase.

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.