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GECKOS

Anderson's short-fingered gecko

Stenodactylus petrii

A small, sand-coloured desert gecko with large eyes and a thin, whip-like tail, which runs and burrows on the sand dunes of North Africa and southern Israel. It is nocturnal and wants warmth, relatively dry air, a humid hide and a cool winter rest. It is rare in the trade.

Family: Gekkonidae Former name: *Stenodactylus elimensis*

KEY FACTS

THE ANIMAL

Adult size	**9-11 cm** total length incl. tail
Lifespan	**6-10 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	**32-35 °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**
Clutch size	**1-2 eggs**
Incubation	**60-80 days** at 28-30 °C

PROTECTION AND PAPERWORK

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

About the species

Stenodactylus petrii is a small, slender gecko, built for running and digging in sand. The eyes are large, and in bright light the pupil contracts to a narrow slit. The legs are long, the toes narrow and without adhesive lamellae, and the tail is long and thin like a whip. The base colour is sandy. The gecko does not climb, but lives on the ground and lies in wait for the small insects that pass by.

It grows to 6 cm from snout to vent and about 11 cm including the tail. Males are slimmer than females and have a bulge at the base of the tail, where the hemipenal pouches sit. The species has no pores in front of the vent, so the sex is read from the bulge. During the breeding season the males call with loud, squeaking sounds.

John Anderson described the species in 1896 from animals from Tell el-Amarna in Egypt. The name probably alludes to the archaeologist Flinders Petrie, who collected them. The genus name *Stenodactylus* means narrow-fingered and alludes to the narrow toes. *Stenodactylus stenurus* from West Africa was long counted as part of the species, but is now again a separate species, so older descriptions may cover both.

The species resembles the closely related *S. sthenodactylus* and *S. doriae*, which are sold under the same trade names. *S. petrii* is recognised by a slightly rounder head and a markedly thinner tail. It is common in the wild and assessed as Least Concern (LC) by the IUCN, but rare in terrariums. The lifespan is not known, but the somewhat larger *S. doriae* lives for over nine

years in captivity, so 6-10 years is realistic with good care. The guide is partly based on *S. sthenodactylus* and the genus as a whole.

Distribution and habitat

The species lives in arid regions of North Africa and in southern Israel. It has been recorded in Morocco, Western Sahara, Algeria, Tunisia, Libya, Egypt, Sudan, Eritrea, Niger, Mali, Mauritania and Senegal. In Egypt it is found, among other places, in Sinai, and at Zaranik on the coast of North Sinai it is by far the commonest gecko.

The range is large, but not fully clarified. Since *Stenodactylus stenurus* was split off, it is uncertain whether all records, especially in western North Africa, belong to *S. petrii*. The map therefore gives only a rough picture, and the recorded finds may contain misidentifications.

> **Native range:** Morocco, Western Sahara, Algeria, Tunisia, Libya, Egypt, Israel, Sudan, Eritrea, Niger, Mali, Mauritania and Senegal.

HABITAT

The species lives in sand and gravel desert and especially on dunes. At Zaranik in North Sinai, where 50-100 mm of rain falls a year and plants cover 5-10% of the ground, it runs about on undulating sand and dunes. The genus seeks shelter in holes and crevices where loose sand meets hard ground, rock or plant stems. *Stenodactylus petrii* prefers more sandy terrain than *S. sthenodactylus*, which readily lives in sandy, dry wadis, but keeps away from the large dune areas.

The gecko is nocturnal and sits hidden by day. On Israeli dunes it is most active early in the night and more active at the end of summer than at the beginning. Its tracks are found equally often in open sand and by bushes, and it frequents the same places as darkling beetles, but different places and times from the desert gerbils. Temperature and humidity in the retreats have not been measured.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Floor area matters more than height, because this gecko lives on the ground. A pair of *Stenodactylus petrii* needs at least 60 × 40 × 20 cm (length × width × height), and a plastic box will do perfectly well. A male with two or three females needs more floor space.

For substrate use clean, fine sand mixed with a little soil or peat, so the burrows hold when the animals dig. For newly bought animals in quarantine, kitchen paper can be a simple solution, but it must be changed regularly. Add slate, cork bark or upturned plastic bowls with an entrance, so there is cover at both the warm and the cool end. Heavy hides and stones must sit directly on the bottom of the enclosure and not on the sand, because when the animals dig under them they can slip and crush an animal. A few branches add variety, but the animals climb very little.

Put damp moss in one hide, so the animals can choose between damp and dry. The enclosure must not stand in direct sun, and the lid must be secured.

Read more: Quarantine and hygiene

TEMPERATURE

Keep 24-29 °C by day with a small hot spot of 32-35 °C at one end, measured on the sand. Keep the hot spot mild, because drying out is the greatest danger for this species. Use a heat mat or heat tape under the floor at one end and, if wanted, a small spot lamp or ceramic heater from above, always controlled by a thermostat. At night the temperature may drop to 18-24 °C. Make sure there is cover at both the warm and the cool end, so the animals can regulate themselves. In an ordinary living room extra heat is needed, especially in winter. Measure with a digital thermometer at both ends.

Animals that are half-grown or larger need a winter rest of 6-8 weeks at 18-24 °C. During that period they are less active and eat less. It is a good idea to house the adults separately during the rest and put them together again when the breeding season begins.

Read more: Heat and temperature

HUMIDITY AND WATER

The air may be relatively dry, around 40-60%. Spray part of the enclosure 1-2 times a week in the evening, so the animals can drink the droplets. Spraying just before they come out often gets them to eat. Keep the substrate slightly damp in one corner, where the females can lay eggs, and keep the moss in the hide damp, so the animals have somewhere to shed.

Put a small, shallow water dish or a bottle cap of water in the cool end, even though the animals do not always use it. Desiccation is the greatest danger in captivity. If the animals are kept very hot and dry on plain sand without a humid hide, up to two thirds of a group can die within a few weeks. A humid hide and more water prevent this.

LIGHTING AND UVB

The gecko is nocturnal and hides from the light by day, but it needs a fixed daily rhythm. Use a fluorescent tube or an LED with daylight for about 12 hours in summer and shorter days during the winter rest, and keep the enclosure dark at night. Position the light so the hides are in shade.

UVB is not necessary when the insects are dusted with calcium with D3. A weak UVB tube does no harm, however, and lets the animals make some of the vitamin D3 themselves.

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

FEEDING

The species lives on small insects. The staple diet is crickets, and for variety you can give mini mealworms, small waxworms and flightless fruit flies. Adults are fed several times a week with a few insects each, while young are fed daily. The insects must be small, and for the young they must be newly hatched crickets or even smaller, so it is an advantage to breed your own food.

Dust the insects with calcium with D3 and a multivitamin supplement, and give gravid females extra insects and calcium. The gecko sits and waits for its prey rather than hunting it, so release the insects in the evening or give them in a shallow dish, and remove those that are not eaten. A small juvenile that is outcompeted by larger animals needs its own enclosure.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

By day the gecko stays hidden, but at night it is active and curious. In small groups the animals chase each other, dig tunnels under stones and pieces of wood, and come to the glass when something happens in the room.

Preferably keep one male with two to three females. Two males can live together in a larger enclosure without problems, but keep an eye on them and separate them at any sign of unrest. Large groups of more than 20 animals work poorly, so start small, or keep the animals alone.

Many animals in the trade are wild-caught and need time to settle into the enclosure. Handle them as little as possible, and never grab the tail.

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

Breeding

SEXUAL MATURITY AND SEXING

Males are recognised by the bulge at the base of the tail and are slimmer than the females. The species has no pores in front of the vent, so the bulge is the most reliable sign. Age and weight at sexual maturity are not known. Wait until the females are fully grown and in good condition. Like *S. doriae*, *Stenodactylus petrii* may need a long time to settle in, and the females often lay no eggs in the first year.

MATING

The breeding season is in spring, and the males then call more. Without a cool winter rest of 6-8 weeks at 18-24 °C, species of the genus seldom come into breeding condition. Put the animals together again when the rest is over and the temperature has been raised. A male can be kept with one or more females.

EGG-LAYING AND CLUTCHES

About three weeks after mating the female lays her first clutch, usually two eggs and more rarely one, and buries them in loose, slightly damp substrate. New clutches then follow at intervals of 2-6 weeks. The number of clutches per year is not known.

The eggs have a calcified shell, measure about 11.5 × 9 mm and are so thin-walled that they break easily, so be careful when you look for them. The females use a lot of calcium, so give plenty of calcium and insects throughout the season.

INCUBATION

Lift the eggs carefully with a teaspoon together with a little of the sand, and move them, without turning them, to a small box in an incubator. Like other hard-shelled gecko eggs, they do not tolerate wet substrate, so keep it only slightly damp. The eggs do not absorb water and do not grow larger during development.

At about 28 °C the eggs hatch after 70-80 days, and at 29-30 °C and 60-70% humidity after 60-70 days. The figures are borrowed from the closely related *Stenodactylus sthenodactylus*. Whether temperature affects the sex of the young is not known.

Read more: Incubating eggs

REARING THE YOUNG

The young are about 5 cm long at hatching, that is, almost half the adult length. Set up a small box like the adults' enclosure with fine sand, a humid hide and a shallow water dish, and spray lightly in the evening.

The young must be fed every day. The first food is newly hatched crickets of about 3 mm, so make sure to have them ready before the first eggs hatch. Dust with calcium with D3, check that all the young get food, and separate them if one is outcompeted.

Health and common mistakes

The species has no known particular diseases. The typical problems are the same as in the genus and small desert geckos in general:

- Desiccation in a set-up that is too hot and dry without a humid hide. This is the mistake that has cost the most animals. Provide a humid hide, spray regularly, and always keep water available.
- Crushed animals and eggs if heavy hides and stones stand on sand that the animals dig under. Place them directly on the bottom.
- Too little calcium and vitamin D3, especially in egg-laying females.
- Parasites, especially in wild-caught animals. Have a faecal sample examined.
- Stress in newly acquired animals. Give them quiet, darkness and cover for the first while.
- Malnutrition in young that cannot manage insects that are too large or are outcompeted by larger animals.

A healthy animal is lively 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.