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GECKOS

South-western Spiny-tailed Gecko

Strophurus spinigerus

Strophurus spinigerus is a small spiny-tailed gecko from south-western Australia. It is olive-grey with two rows of black spines on the tail and often a broad, jagged black stripe down the back. It climbs in bushes and trees at night and can squirt a sticky, foul-smelling fluid from the tail when it is startled.

Family: Diplodactylidae English name: South-western spiny-tailed gecko Former name: *Diplodactylus spinigerus*

KEY FACTS

THE ANIMAL

Adult size	**9-11 cm** total length incl. tail
Lifespan	**6-10 years**
Active	**At dusk and at night**
Lifestyle	**Arboreal and terrestrial**
Habitat	**Semi-desert and temperate woodland and meadow**
Difficulty	**Intermediate**

CARE

Min. enclosure	**30 × 30 × 45 cm** L × W × H for 2 adults
Temperature, day	**25-30 °C**
Basking spot	**30-32 °C**
Temperature, night	**18-25 °C**
Humidity	**40-60%**
UVB	**Recommended** Ferguson zone 2
Diet	**Insects**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**12-24 months**
Clutch size	**1-2 eggs**
Clutches per year	**2-6**
Incubation	**45-60 days** at 27-30 °C

PROTECTION AND PAPERWORK

CITES	**Appendix III**
EU annex	**Annex C**
IUCN	**Least Concern (LC)**

About the species

Strophurus spinigerus is a relatively slender gecko that can reach a total length of about 11 cm including the tail. The ground colour is olive-grey with black spots, and the underside is dirty white, either plain or with black speckles. The tail bears two rows of long, blackish spines, but above the eyes there are only very short spines or none. Many animals have a broad, jagged black stripe along the back and tail.

The species consists of two subspecies. The nominate form has the broad, dark dorsal stripe, while *S. spinigerus inornatus* lacks it. Females become slightly larger than males, and males have distinct hemipenal bulges. The weight is not documented. The genus's species live 6-10 years or more in captivity.

The species was described in 1842 as *Diplodactylus spinigerus* and later moved to *Strophurus*. The genus's defence is glands in the tail that squirt a sticky, foul-smelling but harmless fluid at an attacker. The tail can also be dropped and grows back slowly in a new and less attractive form. The animals tolerate being looked at, but are not suited to being handled.

Distribution and habitat

Strophurus spinigerus is found in south-western Australia, in the state of Western Australia. The nominate form lives along the lower west coast and in the hinterland, and the type locality is the Houtman Abrolhos island group. *S. spinigerus inornatus* lives further south-east, along the south coast and in the interior of the state, and it was described from Frank Hann National Park.

The species is endemic to Australia, and almost all records lie in the south-western corner of the continent. Australia does not permit the export of wild reptiles, so animals in the trade are captive-bred.

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

> **Native range:** Australia.

HABITAT

Strophurus spinigerus lives in forest and scrub in south-western Western Australia. By day it hides in hollow branches, under loose bark and in the dense branches of bushes, and at night it hunts on trunks and branches and occasionally comes down to the ground when it has to get from bush to bush. The species is therefore both arboreal and partly ground-dwelling.

The climate in the south-west is Mediterranean with hot, dry summers and cool, rainy winters. The inland parts of the range are drier with low scrub. Daily fluctuations are large, and the species is used to seasonal variation in both temperature and humidity.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Little is known about keeping *Strophurus spinigerus*. The care is therefore based on the other spiny-tailed geckos, which live in the same way in bushes and trees and whose requirements are well known, for example *Strophurus intermedius*, *Strophurus ciliaris* and *Strophurus williamsi*.

The species uses space well, so the terrarium does not need to be large. A pair can be kept in 30 × 30 × 45 cm (length × width × height), and a male with up to four females needs more space. Height is more important than floor area. In a very large terrarium the animals have difficulty catching the feeder insects before the calcium powder has rubbed off.

Furnish with branches as thick as the tail, placed vertically, horizontally and at an angle, and with bark or cork tubes as hides. Dry grass tussocks provide extra cover. The substrate is a mixture of sand and soil with a layer of dry leaves, or just sand in a layer of 1-2 cm. Provide a slightly damp hide at one end, so that shedding goes smoothly. The terrarium must be well ventilated, and the animals also climb on glass and like to rest where the wall and lid meet.

Read more: Calcium, vitamins and supplements

TEMPERATURE

By day the temperature should be 25-30 °C, and on a branch high up there should be a basking spot of 30-32 °C. At night the heat is switched off, and the temperature may fall to 18-25 °C. In winter adults can have slightly cooler days of 24-29 °C and nights down to about 18 °C, but juveniles need warmth all year.

Use a weak spotlight with a thermostat over a branch, and measure the temperature with a digital thermometer at both top and bottom. Periods above 35 °C dry out and stress the animal.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be moderate, about 40-60 %, and the terrarium should dry out completely during the day. Mist lightly on branches and walls two evenings a week, so that the animals can drink droplets, and let the substrate dry in between. In the morning there should be almost no water droplets to be seen. A shallow bowl of fresh water does no harm. A constantly wet terrarium causes mould and skin problems in a species from a dry climate.

LIGHTING AND UVB

The species basks in the wild among the thin branches, so UVB is an advantage. Use a T5 HO tube with 6 % UVB above the mesh lid, so that the UV index on the uppermost branches is about 1-3 (Ferguson zone 2), with shade at the other end. UVB reduces the risk of weakened bones and of egg-laying problems in females. Keep the light on for about 14 hours in summer and 6-10 hours in winter, controlled by a timer. The night must be dark.

Read more: Lighting and UVB

FEEDING

In the wild the genus feeds on arthropods: spiders, cockroaches, crickets, beetles, termites and their larvae. In the terrarium small crickets, cockroaches, moths, flies and wax moth larvae suit. Feeder insects should be about 60 % of the size of the head. Prey that is too large is a risk especially for juveniles.

Adults are fed every fourth to seventh day in summer and every seventh to tenth day in winter, when they can go for periods without eating. Juveniles are fed every second to fourth day all year. Dust the food with calcium and a multivitamin preparation at every second to third feeding.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Strophurus spinigerus is an animal to look at, and it should not be handled more than strictly necessary. It can squirt its sticky, foul-smelling fluid and can lose its tail, so never grab the tail.

By day it often sits still in hiding or on a branch head down, and at dusk it becomes active. Keep a single animal, a pair or a male with up to four females, never two males together.

Breeding

SEXUAL MATURITY AND SEXING

Males have distinct hemipenal bulges and enlarged spurs at the vent. Juveniles can be sexed at 6-12 months of age, when bulges appear in the males. Sexual maturity is reached at 12-24 months. The female must have reached about 80 % of adult body length before she is used for breeding.

MATING

The breeding season runs from September to February and can be extended when conditions are good. A cool period is not necessary, but it can trigger breeding: 8-10 weeks with fewer hours of light, daytime temperatures of 24-29 °C and nights down to about 18 °C, and misting only once a week. Mating begins four to six weeks after the temperature is above 25 °C again. A pair or a small group can also be kept together all year.

EGG-LAYING AND CLUTCHES

The female lays two eggs at a time, more rarely one. About 3-6 weeks pass between clutches. Give the female a laying box with 5-10 cm of slightly damp sand-peat mixture on the floor of the terrarium. The eggs are laid right at the bottom and are sticky when laid, so sand that sticks to them should not be cleaned off. After three to four clutches the food should be reduced, so that the female is not exhausted. She can store sperm, so a clutch can be fertilised even though the male has been removed.

INCUBATION

Carefully move the eggs to an incubation box with vermiculite or perlite mixed with water 1:1 by weight, without turning them. At 27-30 °C the eggs hatch after about 45-60 days. The eggs grow considerably along the way and can become almost transparent just before hatching. A low air temperature and too high humidity increase the risk of fungal attack and hatching problems. The effect of temperature on sex has not been studied for the species.

Read more: Incubating eggs

REARING THE YOUNG

The young are removed from the hatching box after one day. Keep them in small, well-ventilated boxes with branches, a hide on the floor and a warm basking spot. A substrate is not necessary. Give the smallest feeder insects, dusted with calcium, and feed every second to fourth day. UVB reduces the risk of weakened bones. Weigh the young regularly, and separate them if one is being pressured.

Health and common mistakes

The typical problems are the same as in other spiny-tailed geckos:

- Excessive heat over a longer period causes dehydration and loss of appetite. Make sure the animal can move away from the basking spot.
- Calcium and D3 deficiency in juveniles and breeding females causes soft jaws and bent limbs. Use calcium and UVB.
- Egg-laying problems in exhausted females if they lay too many clutches.
- Constipation or spinal injuries in juveniles if the feeder insects are too large.
- Problems with shedding if the air is too dry. Provide a damp hide.
- Mould and skin problems if the terrarium is permanently damp.

See a vet with experience in reptiles if the animal 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.