herpy

GECKOS

Southern spiny-tailed gecko

Strophurus intermedius

Strophurus intermedius is a sturdily built spiny-tailed gecko from the semi-arid mallee scrub and woodland of southern Australia. The back and tail carry two rows of orange-brown tubercles, and when in danger it squirts a sticky, foul-smelling fluid from the tail. It climbs in bushes and trees, but also spends much time on the ground.

Family: Diplodactylidae Former name: *Diplodactylus intermedius*

KEY FACTS

THE ANIMAL

Adult size	**6-8 cm** snout-vent length
Lifespan	**4-10 years**
Active	**At dusk and at night**
Lifestyle	**Arboreal and terrestrial**
Habitat	**Semi-desert and savanna**
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	**24-36 months**
Clutch size	**1-2 eggs**
Clutches per year	**2-5**
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 intermedius is a sturdily built gecko with a grey, patterned base colour and a pale belly. The back and tail carry two continuous, parallel rows of orange-brown tubercles, which become heavier towards the tail tip. Above the eyes it has no spines or only short ones, where some of its relatives have long ones. The iris ring is bright orange, and the mouth lining is blue. The toes have adhesive lamellae, so the species climbs easily, also on glass.

Adults measure on average about 6 cm from snout to vent and no more than about 8 cm. Females are larger than males. The tail is relatively short, shorter than in the close relative *Strophurus assimilis*. Males have large hemipenal bulges and enlarged cloacal spurs, which females lack. Weight is not documented. Spiny-tailed geckos live 4-8 years in captivity, a few over 10 years.

The species was described in 1892 as *Diplodactylus intermedius*. The species name is Latin for "intermediate" and alludes to its standing between *Strophurus ciliaris* and *Strophurus spinigerus*. The defence is that of the genus: glands in the tail squirt a sticky, foul-smelling but harmless fluid at an attacker, and the gecko aims by curving the tail. Appearance varies quite a lot

between populations.

Distribution and habitat

Strophurus intermedius occurs in southern and central Australia. The core range is New South Wales, South Australia and the northern half of Victoria, and the species reaches west into south-eastern Western Australia. There are also records from the southernmost parts of the Northern Territory and Queensland. The type locality is given as inland New South Wales.

Most records come from the mallee regions of New South Wales, South Australia and Victoria.

> **Native range:** Australia.

HABITAT

Strophurus intermedius lives in semi-arid regions with mallee scrub, open woodland, grassland and spinifex. By day it hides under stones and loose bark, in hollow branches or in spinifex clumps, and at night it hunts in bushes, on trunks and on the ground. The species is both arboreal and ground-dwelling; some populations live mostly on the ground.

The climate is hot and dry, with large differences between day and night and between summer and winter. Winters are cool in the southern part of the range.

Care

THE ENCLOSURE

Spiny-tailed geckos use space well, so the enclosure does not need to be large. A pair can be kept in 30 × 30 × 45 cm (length × width × height), and a male with several females needs more space. Larger is fine, but in a very large enclosure it is hard for the animals to catch the feeder insects before the calcium powder has rubbed off. Height matters more than floor area.

Furnish with many branches as thick as the tail, vertical, horizontal and slanting, and with bark or cork tubes as hides. Dry grass tufts give extra cover. The species also moves on the ground, so the floor must be walkable: sand or a mix of sand and soil with a layer of dry leaves. Provide a slightly damp hide at one end, so shedding goes easily. The enclosure must be well ventilated.

Read more: Calcium, vitamins and supplements

TEMPERATURE

Use 25-30 °C by day and a basking spot of 30-32 °C high up on a branch. At night the heat is switched off, and the temperature may fall to 18-25 °C. The figures are borrowed from the other species in the genus. In winter adults can have slightly cooler days of 24-29 °C and nights down to about 18 °C, but young animals need warmth all year.

Use a weak spot lamp with a thermostat over a branch, and measure with a digital thermometer at the top and the bottom. Long 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 enclosure must dry out completely during the day. Mist the branches and walls lightly a couple of evenings a week, so that the animal can drink droplets, and let the substrate dry in between. A shallow dish of fresh water does no harm. An enclosure that is wet all the time causes mould and skin problems in a species from a dry climate.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species basks occasionally, so UVB is an advantage, especially for young animals and breeding females. Use a T5 HO tube with 6 % UVB over 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. The zone is an estimate based on the genus's way of life. Without UVB it is even more important to provide calcium and D3. Keep the light on for 12-14 hours in summer and fewer hours in winter, controlled by a timer. The night must be dark.

Read more: Lighting and UVB

FEEDING

In the wild *Strophurus intermedius* feeds exclusively on arthropods: spiders, centipedes, scorpions, cockroaches, crickets, beetles and their larvae. In the enclosure small crickets, cockroaches, moths, flies and wax moth larvae are suitable. The insects should be about 60 % of the size of the head; prey that is too large is a risk especially for young animals.

Feed adults every fourth to seventh day in summer and every seventh to tenth day in winter, when they can go for periods without eating. Young animals are fed every second to fourth day all year. Dust every second or third feeding with calcium and a multivitamin preparation.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Strophurus intermedius is an animal to watch and should not be handled more than strictly necessary. It can squirt its sticky, foul-smelling fluid, and it can lose its tail. Never grab the animal by the tail.

By day it often sits still in hiding or on a branch head down, and at dusk it becomes active. The species is not very shy and is seen a lot. Keep a single animal, a pair or a male with up to four females, never two males together.

Breeding

SEXUAL MATURITY AND SEXING

The males have clear hemipenial bulges and enlarged cloacal spurs. Young animals can be sexed once they have reached 50-70% of adult body length, typically at 6-12 months of age. The young grow quickly, but *S. intermedius* does not become sexually mature until 2-3 years of age. The female must be at least 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 there has been a lot of rain. A cool winter period is not necessary, but it can kick-start breeding: 8-10 weeks with fewer hours of light, daytime temperatures of 24-29 °C and the night down to about 18 °C. Mist only once a week during the period. Mating begins four to six weeks after the temperature is again above 25 °C. A pair or a group can stay together all year.

EGG-LAYING AND CLUTCHES

The female lays two eggs at a time, more rarely one. There are 21-35 days between clutches, and she lays several clutches in the season. Provide the female with a laying box with 5-10 cm of slightly damp sand-peat mixture on the floor of the enclosure. The eggs are laid right at the bottom. They are sticky when laid, and sand that sticks to them should not be cleaned off. The eggs measure about 9 × 15 mm. Provide plenty of calcium and insects throughout the season.

INCUBATION

Move the eggs carefully to an incubation box with vermiculite or perlite mixed with water 1:1 by weight, without turning them. At 27-30 °C they hatch after 45-60 days. The eggs grow considerably along the way. The effect of temperature on sex has not been studied for the species.

Read more: Incubating eggs

REARING THE YOUNG

The young measure about 3 cm from snout to vent and 5 cm in total. Keep each juvenile separately in a small, well-ventilated box with branches, a hide on the floor and a warm basking spot; substrate is not necessary. Offer the smallest feeder insects, dusted with calcium, and feed every second to fourth day. Weigh the young regularly, and separate them at once if a juvenile is being pressured.

Health and common mistakes

The list is based on general knowledge of spiny-tailed geckos and other geckos from dry regions:

- Excessive heat over a longer period, which causes dehydration and loss of appetite. Make sure the animal can retreat from the basking spot.
- Calcium and D3 deficiency, especially in young animals and breeding females. This causes soft jaws and bent limbs. Use calcium and UVB.

- Constipation or spinal injuries from feeder insects that are too large in young animals.
- Exhausted females if they lay too many clutches. Reduce feeding after three or four clutches.
- Shedding problems if the air is too dry. Provide a damp hide.
- Mould and skin problems if the enclosure is permanently damp.

See a vet with experience in reptiles if the animal loses weight, does not eat for several weeks or seems listless.

Read more: Common diseases and signs of illness

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.