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GECKOS

Golden-tailed gecko

Strophurus taenicauda

Strophurus taenicauda is a small, spotted gecko from the scrubland of Queensland, with a shiny golden stripe down the tail and red eyes. It climbs in branches, rests head down and smears a sticky, foul-smelling fluid on whatever grabs it. It suits the practised keeper who wants a species with plenty of personality.

Family: Diplodactylidae Former name: *Diplodactylus taenicauda*

KEY FACTS

THE ANIMAL

Adult size	**6-7 cm** snout-vent length
Weight	**5-8 g**
Lifespan	**4-10 years**
Active	**At dusk and at night**
Lifestyle	**Arboreal**
Habitat	**Semi-desert and dry forest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**45 × 45 × 45 cm** L × W × H for 2 adults
Temperature, day	**25-28 °C**
Basking spot	**30-32 °C**
Temperature, night	**19-22 °C**
Humidity	**30-60%**
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	**4-6**
Incubation	**48-72 days** at 27-30 °C

PROTECTION AND PAPERWORK

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

About the species

Strophurus taenicauda is one of the most striking geckos in the genus *Strophurus*. The body is grey or brownish and covered in black dots, rather like a Dalmatian, and a golden stripe runs down the back and tail, which has given the species both its English and its scientific name. *Taenia* means ribbon and *cauda* tail. The eyes are large and often glow red or amber. In most other species in the genus there are spines or knobs on the back and tail, but here both body and tail are smooth, and this is one of the species' hallmarks.

With a snout-to-vent length of about 7 cm it is small and slender. The spiny-tailed *Strophurus* species as a whole measure 60-89 mm, and an animal of 60 mm weighs on average 5-7 g. The weight for this particular species has not been measured, so the figure in the fact box is borrowed from the genus and is an estimate. The length of the tail is not documented either. In captivity the arboreal *Strophurus* species typically live 4-10 years, and some animals live longer.

The species was described by Charles De Vis in 1886 under the name *Diplodactylus taenicauda* and is today placed in the family Diplodactylidae. In 2012 Brown, Worthington-Wilmer and Macdonald divided it into three subspecies: the nominate *taenicauda*, the northern *albiocularis* with pale eyes and *triaureus* with three golden stripes on the tail, one on the top and one on each side. The animals are still uncommon in the hobby, but are bred regularly, both in Europe and in the USA.

The gecko is lively and curious and has a special defence if it becomes frightened. The tail contains glands that release a sticky, amber-coloured fluid, which dries to a resin. In this species it is smeared on the attacker instead of being squirted out, as the spiny-tailed species do. The fluid is irritating to eyes and mucous membranes, so wash your hands after handling. In captivity the animals rarely use it unless they are very frightened or ill.

Distribution and habitat

Strophurus taenicauda occurs only in Australia, and almost all records lie in south-eastern Queensland, both in coastal areas and inland. The subspecies each have their own area. The nominate form is described from Chinchilla, *albiocularis* from the Dawson Valley at Castle Creek and *triaureus* from the eastern part of the Brigalow Belt, from Mundubbera in the south to Callide in the east and Biloela in the west.

Only one record is known from northern New South Wales, and it is unsupported by a specimen and therefore unconfirmed. There are also a couple of isolated registered records far from the others, which must be regarded as uncertain. The map is therefore set to south-eastern Queensland.

> **Native range:** Australia.

HABITAT

Strophurus taenicauda lives in open woodland and scrubland, especially where cypress pine (*Callitris*) grows. The Brigalow Belt, where many of the records lie, is a landscape of dry to semi-arid forests with acacias and eucalypts. By day the animals sleep on trunks and branches head down or hide under loose bark and in hollows. At night they climb about in the shrubs hunting insects, and they also go down to the ground to get from tree to tree.

Concrete measurements of temperature and humidity in the species' range have not been found. For the genus in general, conditions are harsh and changeable, with temperatures from over 40 °C to under 15 °C, so the animals are adapted to large swings. This is worth bearing in mind when furnishing the enclosure.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

A pair of *Strophurus taenicauda* needs an enclosure of at least 45 × 45 × 45 cm (length × width × height), and a single animal can manage with a little less. A small group needs more space, especially more floor area. If the enclosure is very large, the animals may have difficulty catching the insects before the calcium has fallen off. Height matters more than floor area, because the species is a climber.

Furnish with thin branches in vertical, slanting and horizontal positions, so the animal can reach everywhere. The gecko has good adhesive feet and also climbs on glass, and it often seeks out the place where the wall meets the lid. Dry grass tufts and a couple of pieces of bark in a corner provide cover. Use either fixed, dry branches or fresh, leafy branches of, for example, *Leptospermum*, *Melaleuca*, *Casuarina* or *Callitris*, which are replaced every few weeks.

A layer of fine sand of 1-3 cm works as substrate. Keep the enclosure well ventilated, so it does not become wet and mouldy.

Read more: Calcium, vitamins and supplements

TEMPERATURE

Strophurus taenicauda likes to bask under a spot lamp, just as it basks in the branches in the wild. By day it should be 25-28 °C low in the enclosure and 30-32 °C at the top under a low bulb.

At night the temperature should fall to 19-22 °C, and no extra heat is needed. In winter the temperature is lowered by about 5 °C for 8-10 weeks, and it may fall to 15-20 °C, but not lower. Young animals should be kept warm all year. The enclosure needs a cool corner, so the animal can choose, and a thermostat and digital thermometer are necessary.

Read more: Heat and temperature

HUMIDITY AND WATER

Strophurus taenicauda comes from dry to semi-arid country, and there is no documented figure for the humidity. The 30-60% in the fact box is therefore an estimate based on the habitat. The enclosure must be dry most of the time.

Mist walls and branches with water in the evening, twice a week in summer and once a week during the winter rest. The geckos often come out and lick the droplets. There must be almost no wet droplets left the next morning. A shallow dish of fresh water is a safeguard so the animal can drink, but the geckos mostly drink droplets.

LIGHTING AND UVB

Strophurus taenicauda sleeps freely on the branches by day and likes to bask, so give it UVB light. A real need has not been demonstrated in captivity, and with calcium and D3 in the food it can manage without.

Use a UVB tube, for example a T5 with 5-6% UVB, so the UV index is 2-3 on the top branches and lower further down (Ferguson zone 2). There must be shade where the animal can retreat. The light should be on for 12-14 hours in summer and 8-10 hours in winter. It must be dark at night.

Read more: Lighting and UVB

FEEDING

In the wild *Strophurus taenicauda* eats small arthropods, especially cockroaches, crickets, grasshoppers, beetles, moths and spiders. In the enclosure crickets, small cockroaches, moths, flies and waxworms work. Hornworms and black soldier fly larvae can be given occasionally. They are eager eaters and often take 3-4 insects at a time, and in the dark they like to come down the branches to take the prey.

Feed adults twice a week in summer and every 7-10 days in winter. Young animals and gravid females are fed every 2-4 days, newly hatched young daily. The prey should not be larger than about 60% of the size of the head, because large insects can cause constipation and spinal damage in young animals.

Lightly dust the insects with calcium and vitamins at every second or third meal. If the animals do not get UV light, the supplement is even more important. Feed in the evening when the light is off; that also makes it easy to check on the animals.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Strophurus taenicauda is bold and curious and is not as shy as many other species. It often sits openly on a branch and is active at dusk and at night. It is not suited to handling, however. It is fast, and if it is grabbed, it can release the sticky and strongly irritating tail fluid. Keep handling to a minimum, and let it climb onto the hand rather than grabbing it.

Keep them in pairs or in a small group with one male and up to four females. Never put several males together. Watch for bites and animals losing weight, and separate them if unrest arises. The animals can also be kept alone.

Breeding

SEXUAL MATURITY AND SEXING

Males of *Strophurus taenicauda* are recognised by clear hemipenial bulges at the base of the tail with a depression in the middle and by a small group of enlarged, spur-like scales at the top of the bulge, where it meets the hind leg. The females have a smooth, smaller bulge without a depression. Young animals can be sexed once they have reached 50-70% of adult size, typically at 6-12 months. They grow quickly and can in principle breed as early as the first year, but wait with breeding until the animal has reached about 80% of adult length, typically after 12-18 months. Many do not become fully grown until two years.

MATING

In the wild the arboreal species of the genus typically breed from September to February, in good years from August to April. For *Strophurus taenicauda* the period is October-January. Separating males and females in autumn can give good results, when day length and temperature fall. A cooling period of 8-10 weeks follows, with less misting and only the odd insect. When temperature, light and food are increased again, breeding begins. Cooling is not strictly necessary, however, and pairs can also stay together all year.

The male licks the female and grips her over the shoulders and neck, and he may wind the tip of his tail around her tail and the branch. The female can store sperm and lay fertilised eggs even after the male has been removed.

EGG-LAYING AND CLUTCHES

The female of *Strophurus taenicauda* normally lays two eggs at a time, occasionally only one. Three to six weeks pass between clutches, and with plenty of food it amounts to four to six clutches or more in a season. It is hard on the female, so give her rest after three to four clutches by cutting down on food.

The female sheds her skin one to seven days before laying. Put a laying box on the bottom of the enclosure, for example a plastic box with a hole in the side or an upturned clay dish, with 5-10 cm of damp sand, sand and peat, or sphagnum. She lays the eggs at night, right at the bottom. The eggs are slightly sticky when laid, so the substrate clings to them, but it does not need to be brushed off.

INCUBATION

Carefully move the eggs of *Strophurus taenicauda* to a small box with a damp substrate of perlite or vermiculite mixed with water in a ratio of 1:1 by weight. The temperature should be 27-30 °C. The eggs hatch after 48-72 days, at 27-29 °C typically after about 60 days. Room temperature can also work, but then it takes much longer, and the eggs are more exposed to fungus.

The eggs grow a lot during incubation, and the shell can become almost transparent just before hatching. The eggs sweat 1-2 days before. If it lasts longer, it is a bad sign: especially in warm and humid weather the fully developed young can die in the egg, swollen with fluid.

Read more: Incubating eggs

REARING THE YOUNG

The young of *Strophurus taenicauda* are duller in colour than the adults and slightly darker. At hatching they measure about 3 cm from snout to vent and 4 cm in total. You can keep them individually in a small box with mesh in the lid, or two or three together in a small rearing cage. They need the same furnishings as the adults, with thin branches, a little cover and light misting.

Give small crickets, large fruit flies and bean weevils dusted with calcium and vitamins. Feed daily for the first few weeks and then every other day. Young animals grow quickly and can reach adult size and breed within the first year, but it is not recommended to use them so early. Keep young animals warm all year.

Health and common mistakes

Only a few documented details exist on diseases in *Strophurus taenicauda*, so the list is based on experience with the genus in general. Typical problems are:

- Too little calcium and vitamin D3, especially in young animals and egg-laying females. This causes soft bones, tremors and, at worst, spinal damage. Insects that are too large can cause spinal paralysis in young animals. Therefore give small insects, dust them and provide UV light.
- Constipation if the prey is too large.
- Exhausted females that lay too many clutches. Cut down on food after three to four clutches, and let the female rest.
- Fungus and persistent damp if ventilation is poor or there is too much misting.
- Stress from too much handling. In extreme stress the animals can release tail fluid, and dead animals have been found covered in dried fluid.

A healthy animal has clear eyes, a plump tail and a good grip. Seek a vet with reptile experience 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.

The full guide with map and updates: herpy.org/en/geckos/strophurus-taenicauda