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GECKOS

Rough-throated leaf-tailed gecko

Saltuarius salebrosus

Saltuarius salebrosus is a large, nocturnal leaf-tailed gecko from central-eastern and southern Queensland, Australia. It has a rough throat covered in tubercles, skin that resembles lichen-covered bark, and a broad, leaf-shaped tail. It tolerates more heat than the other species in the genus, does well in captivity and is a calm species for the experienced keeper.

Family: Carphodactylidae Former name: *Phyllurus salebrosus*

KEY FACTS

THE ANIMAL

Adult size	**14 cm** snout-vent length
Lifespan	**5-10 years**
Active	**At night**
Lifestyle	**Arboreal and rock-dwelling**
Habitat	**Dry forest and rocky terrain**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 40 × 80 cm** L × W × H for 3 adults
Temperature, day	**22-26 °C**
Temperature, night	**19-21 °C**
Humidity	**55-100%**
UVB	**Not required**
Winter rest	**10-16 °C** 9-13 weeks
Diet	**Insects**
Kept	**In pairs or in groups**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**36-48 months**
Clutch size	**2 eggs**
Clutches per year	**2-3**
Incubation	**95-105 days** at 26-28 °C

PROTECTION AND PAPERWORK

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

About the species

Saltuarius salebrosus is a large, flattened gecko with a triangular head and long, slender limbs. The body grows to about 14 cm from snout to vent and the whole animal to about 25 cm with the tail. When the species was described, it was the largest in the genus *Phyllurus*. The most distinctive feature is the rough throat: small tubercles cover the whole chin and not just the row of scales under the jaws, and the species name *salebrosus* means "rough" in Latin. The grey, brown and olive-green pattern of the skin resembles lichen-covered bark, so the animal is almost invisible when it sits still on a rock or a trunk. The tail is broad and leaf-shaped, and the original tail has a long, drawn-out tip. Unlike most geckos, the species has claws on its toes and no adhesive lamellae.

The species was described in 1975 as *Phyllurus salebrosus* and was moved in 1993 to the new genus *Saltuarius*. The genus name can be translated as "forest guardian". The tail is used to store fat and is shed easily. It grows back, but the new tail is broader and flatter, has a shorter tip and is less finely patterned.

S. salebrosus is regarded as the hardiest of the genus in captivity. Lifespan is not documented; the figure in the box is borrowed from *Phyllurus platurus*.

Distribution and habitat

Saltuarius salebrosus lives in central-eastern and southern inland Queensland, Australia. It is most widespread in the mountain ranges west and south-west of Rockhampton, including Blackdown Tableland and the Dawes Range. The type locality is Monto. Records lie between about 23.5 and 26.5 degrees south and between 148 and 152 degrees east, from coastal mountains inland.

The range lies further south and is drier than that of *Saltuarius cornutus*, which lives in the rainforests of the north-east. This fits with *S. salebrosus* tolerating more heat than the other leaf-tailed geckos.

> **Native range:** Australia.

HABITAT

Saltuarius salebrosus is first and foremost a rock dweller that lives in caves and crevices. It is found in several habitat types, from rainforest in gorges to dry, stony scrubland, but prefers sandstone cliffs and open forest in the dry parts of Queensland. During the day it sits pressed into a crevice or against bark, and at night it hunts for insects and other arthropods on rocks and trunks.

The female lays two eggs at a time and buries them in the soil under the leaf litter.

Care

THE ENCLOSURE

Two or three animals can be kept in an enclosure of 60 × 40 × 80 cm (length × width × height). Furnish it with vertical pieces of rigid bark and a few branches so that the animals can move around the whole enclosure. The animals always sit on branches or bark, so hides on the floor are not necessary.

As substrate, about 1 cm of fine sand or a mixture of fine sand and coconut fibre is enough. The enclosure needs good ventilation, preferably with openings both at the top and at the bottom so that the air circulates. Females that are about to lay need a deep laying substrate (see breeding).

TEMPERATURE

The daytime temperature is 22-26 °C and the night temperature 19-21 °C. The figures for temperature, humidity, rest period and incubation are borrowed from the related *Phyllurus platurus*. *S. salebrosus*, however, is the most heat-tolerant species of the genus and copes with the occasional warm day in the high 30s if the animals are not in direct sun. Prolonged heat above that can be fatal.

Mist the enclosure on warm days so the temperature falls a degree or two, and never place it in direct sun. A heat source is not necessary but can be used if it does not get warmer than 32 °C. It must be switched off in midsummer and at night in the cool period.

A cool rest period is part of keeping the species (see breeding).

Read more: Humidity, misting and ventilation Read more: Incubating eggs

HUMIDITY AND WATER

Mist the enclosure thoroughly 2-3 times a week. After misting the humidity rises towards 100 % and should then fall to about 55-60 %, so bark and substrate can dry out. During the rest period it is misted every evening, so the animals can drink the droplets. The substrate must not be constantly wet. Air that is too dry causes shedding problems.

Read more: Common diseases and signs of illness

LIGHTING AND UVB

The species is nocturnal and lives hidden during the day, and UVB is not necessary. Give the enclosure a fixed daily rhythm with dim daylight and darkness at night. Do not use strong spotlights or coloured night lights, and provide shaded areas throughout the day.

Read more: Lighting and UVB

FEEDING

The species takes ordinary feeder insects such as crickets and cockroaches. In the breeding season it is fed three times a week, and for the rest of the year every other week. During the rest period itself the animals are not fed (see breeding). Give only two to three insects per animal at each feeding, and dust them regularly with calcium and multivitamin. The tail stores fat and shows the animal's condition. Remove leftovers the next morning.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

Saltuarius salebrosus is a calm, nocturnal species that sits still on bark during the day. It makes few demands, but it should not be handled more than strictly necessary, and never by the tail, which it sheds.

Two or three animals can share an enclosure as long as there is only one male. Keep an eye on weight and growth, and separate them if one animal is being dominated.

Breeding

SEXUAL MATURITY AND SEXING

Males have a distinct hemipenal bulge at the base of the tail, which females lack. The species grows slowly and reaches sexual maturity after 3-4 years.

MATING

Breeding is triggered by a cool rest period. The daytime temperature is lowered by 2-3 degrees a day to 10-16 °C, and the animals are not fed during the period. The enclosure is misted every evening. The rest period lasts two to three months, and the temperature is then raised over a week to normal. Take an animal out of the period if it loses more than a few grams.

Matings are rarely seen.

EGG-LAYING AND CLUTCHES

The female begins to lay late in the season, in mid-October at the earliest. She lays two eggs at a time and 2-3 clutches per season. She needs a deep, constantly moist but not wet substrate, in a container without a lid, which must never dry out. She buries the eggs about 6-8 cm down and usually raises the substrate above the spot, so that it is easy to find.

INCUBATION

Remove the eggs from the nest and incubate them at 26-28 °C. The eggs hatch after about 100 days.

The medium can be a mixture of perlite and water in the ratio 1:1 by weight. The influence of temperature on sex has not been established. The young shed their skin almost immediately after hatching.

REARING THE YOUNG

The young can be reared in small boxes of about 15 × 15 × 25 cm, furnished like the adults' enclosures. Spray every second day, and offer the first food about ten days after hatching. Give small insects, dusted with calcium and multivitamin, and only two to three per animal at a time. The young grow slowly.

Health and common mistakes

There is no documented overview of diseases for *Saltuarius salebrosus*. The main risks are:

- Longer periods of heat in the high 30s °C or direct sun, which can be fatal. Keep the enclosure cool and in shade.
- Air that is too dry, which causes problems with shedding.
- A constantly wet substrate and stagnant air, which cause mould and skin problems.
- Calcium deficiency if the food is not dusted.
- Weight loss during the rest period. Take the animal out of the period, and build it up again.

The tail shows the animal's condition. See a vet with experience in reptiles if the animal loses weight, does not eat or looks 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.