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GECKOS

Cape York pad-tail gecko

Pseudothecadactylus australis

A large, nocturnal tree gecko from the Cape York Peninsula and the Torres Strait islands in the far north of Australia. The species is rarely kept and very little is known about its care, so this guide is based on the climate of its range and on close relatives.

Family: Diplodactylidae Former name: *Thecadactylus australis; Torresia australis; Rhacodactylus australis*

KEY FACTS

THE ANIMAL

Adult size	**20-25 cm** total length incl. tail
Lifespan	**10-15 years**
Active	**At night**
Lifestyle	**Arboreal**
Habitat	**Savanna and rainforest**
Difficulty	**Expert**

CARE

Min. enclosure	**60 × 60 × 120 cm** L × W × H for 1 adult
Temperature, day	**25-29 °C**
Basking spot	**29-31 °C**
Temperature, night	**22-25 °C**
Humidity	**60-85%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1-2 eggs**
Incubation	**70-120 days** at 24-28 °C

PROTECTION AND PAPERWORK

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

About the species

Pseudothecadactylus australis is a large, nocturnal gecko with strongly expanded toes that have two rows of transverse adhesive lamellae underneath, vertical pupils and a tail with an adhesive pad under the tip. The snout and forehead are covered in coarse, rough tubercles, while the back has large, flat scales lying close together.

The species was described in 1877 by Albert Günther as *Thecadactylus australis* from animals from the Torres Strait islands. In 1934 it was moved to the genus *Torresia*, but that name was already used for a genus of fish, so in 1936 the genus was given the name *Pseudothecadactylus*, "the false *Thecadactylus*". The species has also been listed as *Rhacodactylus australis*, because it is closely related to the large geckos from New Caledonia.

The genus has three species, all living in Australia. *Pseudothecadactylus lindneri* and *Pseudothecadactylus cavaticus* live on rocks and in caves, while *P. australis* is the only one that lives in trees.

The size is not reliably documented. *Pseudothecadactylus lindneri* measures about 10 cm from snout to vent, and the total length including tail for *P. australis* is probably 20-25 cm. The weight is not documented. The tail can be shed and regrows, but not in the same form.

The species is rare in captivity. Australia does not allow the export of wild reptiles, so animals outside Australia are captive-bred.

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

Distribution and habitat

Pseudothecadactylus australis is found only in northern Australia: on the Cape York Peninsula in Queensland, south to about 15-16° south, and on the islands of the Torres Strait between Australia and New Guinea. The Torres Strait islands are the type locality of the species.

Precise localities and population figures are only roughly known. Occasional records outside the range come from captive animals or misidentifications.

> **Native range:** Australia.

HABITAT

The species is arboreal and nocturnal and is found in both closed rainforest and open forest. By day it probably hides in tree hollows and behind loose bark, and at night it forages on trunks and branches. More detailed knowledge of its habitat is not documented.

The climate in the northern part of Cape York is tropical, with a distinct wet season from about December to April and a dry season for the rest of the year. Temperatures typically lie between 22 and 32 °C all year round, and humidity is high in the wet season and lower in the dry season. This is the pattern the enclosure should imitate.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Very little is known about the care of *Pseudothecadactylus australis*. This guide is based on the climate of its range, the size of the animal and its arboreal way of life. *Oedura castelnaui* lives in the same area and has the same climate requirements, and the close relatives *Rhacodactylus leachianus* and *Correlophus ciliatus* from New Caledonia are far better known and can be used as a comparison for the furnishing.

An adult needs a tall enclosure of at least 60 × 60 × 120 cm (length × width × height). Height matters more than floor area, because the species lives in trees.

Furnish with thick branches at various angles, cork tubes and cork bark at several heights and large-leaved plants, which provide cover and hold humidity. Leave free climbing space between the branches. The substrate should be a moist mix of coir and soil without fertiliser. Ensure good ventilation with mesh both at the top and at the bottom.

TEMPERATURE

The figures are estimated from the climate of the range. By day the temperature should be 25-29 °C and at night 22-25 °C. A small area near the top may reach 29-31 °C. The temperature must not exceed 32 °C for long.

In most living rooms extra heat is needed. A low-wattage heat bulb or a heat mat on the side, controlled by a thermostat, is enough. Always measure with a digital thermometer both at the top and at the bottom.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be 60-85 %. Mist the enclosure thoroughly in the evening so that it rises towards 85 %, and let it fall during the day so that the substrate and branches can dry out. Constantly wet conditions cause mould and skin problems.

The animal drinks droplets from leaves and glass. Also provide a shallow dish of fresh water, changed daily. A hygrometer shows whether the routine is working.

LIGHTING AND UVB

The species is nocturnal and should not have strong light. A weak UVB light for shade-dwelling species (Ferguson zone 1) is optional, but a safe supplement when the food does not contain much vitamin D3. Mount the tube over one side of the enclosure, so that there is always shade in the rest.

Keep the light on for 12 hours a day all year round, controlled by a timer, corresponding to the day length in northern Australia. The night must be dark; do not use coloured night lights.

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

FEEDING

The diet of *Pseudothecadactylus australis* is not documented. Insects are the safe staple, as with other large, nocturnal geckos.

Give adults large insects such as crickets, locusts and dubia roaches 2-3 times a week. Dust them with calcium with vitamin D3, and use a multivitamin at every second or third feeding. The insects must be smaller than the distance between the animal's eyes. Juveniles are fed every other day with smaller insects.

A ready-mixed powdered diet for fruit-eating geckos can be offered as a supplement, but whether the species accepts it is not documented.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Behaviour in captivity is not documented. A frightened gecko can shed its tail, so keep handling to a minimum, and never grab the tail.

Whether several animals can be kept together is not documented either. Therefore keep adults singly.

Breeding

SEXUAL MATURITY AND SEXING

Age and weight at sexual maturity are not documented for *Pseudothecadactylus australis*. In the close relatives from New Caledonia it takes from just over a year to several years. The male has a triangular group of pores in front of the vent and a distinct bulge at the base of the tail; the female lacks the pores.

MATING

Mating has not been described in captivity. Put the male with the female in her enclosure, and watch them for the first nights. Mating season and the need for a cool rest period are not documented; in the species' range the seasons change mainly between rain and drought.

EGG-LAYING AND CLUTCHES

The species lays eggs. Geckos in the family Diplodactylidae normally lay two soft eggs per clutch, and this probably applies here too. The number of clutches per year is not documented. Place a laying box with moist sphagnum or coir in the enclosure, so that the female can bury the eggs.

INCUBATION

Incubation time and temperature are not documented for the species. The figures in the fact box are an estimate based on close relatives such as *Correlophus ciliatus* and *Rhacodactylus leachianus*. Place the eggs in moist perlite or vermiculite at 24-28 °C without turning them, and keep the temperature below 29 °C.

Read more: Incubating eggs

REARING THE YOUNG

Rearing of *Pseudothecadactylus australis* is not documented. Juveniles of large geckos are kept singly in a small faunarium with kitchen roll, a moist hide and a branch and misted daily. They live on the yolk sac for the first few days and are then offered small insects dusted with calcium and vitamin D3.

Health and common mistakes

Diseases are not documented for the species, but the typical mistakes with large arboreal geckos apply here too:

- Too low a temperature or too dry air, which cause poor shedding and loss of appetite.
- Too little calcium and vitamin D3, which cause soft jaws and bent limbs. Dust the insects.
- A constantly wet substrate and poor ventilation, which cause fungus and mould.

- Stuck shed on toes and the tail tip. Provide a moist hide.
- A lost tail after handling. It regrows, but not in the same form.

See a reptile-experienced vet if the animal loses weight, does not eat for several weeks or looks lethargic.

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.