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MONITOR LIZARDS

Short-tailed Pygmy Monitor

Varanus brevicauda

Varanus brevicauda is one of the smallest monitors in the world: a brownish, ground-dwelling and diurnal desert dweller from the interior of Australia that reaches only 20-25 cm in length and lives in burrows under spinifex grass. It is rarely kept or bred, and much of its care has to be borrowed from relatives, so the species is only for experienced keepers who are prepared to break new ground.

Family: Varanidae Published 16 November 2026

KEY FACTS

THE ANIMAL

Adult size	**20-25 cm** total length incl. tail
Weight	**8-20 g**
Lifespan	**5-10 years**
Active	**By day**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Desert and semi-desert**
Difficulty	**Experienced**

CARE

Min. enclosure	**80 × 40 × 50 cm** L × W × H for 1 adult
Temperature, day	**28-30 °C**
Basking spot	**38-45 °C**
Temperature, night	**18-20 °C**
Humidity	**30-50%**
UVB	**Recommended** Ferguson zone 3
Diet	**Insects**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**10-22 months**
Clutch size	**1-5 eggs**
Clutches per year	**1-3**
Incubation	**70-100 days** at 18-30 °C

PROTECTION AND PAPERWORK

CITES	**Appendix II**
EU annex	**Annex B**
IUCN	**Least Concern (LC)**

About the species

Varanus brevicauda belongs to the subgenus *Odatria*, the small Australian monitors, and is the second smallest monitor in the world after *Varanus sparnus*. It is elongated and short-legged, and the tail is short, about as long as the body, as the species name also says: *brevicauda* means "short tail". The tail is round and muscular at the base and more triangular towards the tip. The colour is brown to reddish brown, often with a distinct black reticulate pattern on the back and legs and paler spots on the body, and the head is greyer. Females and males cannot be told apart by appearance. The species was described in 1898 from animals from the Sherlock River in Western Australia.

The adult monitor is typically 20-25 cm long including the tail and weighs 8-20 g. Snout-vent length reaches up to 13 cm. The smallest sexually mature male in the wild measured 8 cm from snout to vent, and the smallest female with eggs in her body 9 cm. The juveniles are 4-5 cm from snout to vent and weigh 1-3 g at hatching. Despite its size, the species behaves like a real monitor: it hisses, puffs out its throat and lunges at a threat.

The fact that the species is small does not make it easy to keep. It is rarely kept or bred, and Australia does not permit commercial export of live animals. Apart from a few details on captive breeding, the figures in the care section are therefore cautiously borrowed from the close relative *Varanus gilleni* or estimated from the species' life in the wild. The text says so where this applies. Lifespan is not documented either, and the 5-10 years in the fact box is an estimate. Expect a project for an experienced keeper who has to gather knowledge for themselves.

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

Distribution and habitat

Varanus brevicauda is found across large parts of the arid interior of Australia. It lives from the coast in Western Australia through the Northern Territory and across north-western South Australia to western Queensland. The type locality is the Sherlock River at Nickol Bay in Western Australia.

The range is large, but the species is almost never seen above ground. Most animals have been found in pitfall traps or by digging up burrows, so the population can be hard to assess. It is not regarded as threatened, but it is listed as rare in South Australia.

> **Native range:** Australia.

HABITAT

Varanus brevicauda lives in arid regions with sandy or gravelly, firm ground and dense tussocks of spinifex grass. It digs its tunnels in compact, sandy loam and gravel and is only rarely active on the surface. The female digs a hole for her eggs. Many animals can live close together in a small area, although each animal lives alone.

The climate is hot and dry with large differences between day and night and long periods of drought. In dry years, when food is scarce, the species does not breed at all. An animal that was dug out of a burrow in August and had clearly just been active had a body temperature of 35 °C, about 10 °C above the air temperature. This suggests that the species warms up in the tussocks and at the burrow entrance. Whether it mostly hunts actively or lies in wait for prey is unresolved, since both have been described.

Care

THE ENCLOSURE

No recommended enclosure size has been documented for *Varanus brevicauda*. The 80 × 40 × 50 cm (length × width × height) in the fact box for one adult is an estimate, and bigger is better. It is based on the rule of thumb for ground-dwelling monitors, where the enclosure is 5 times as long and 2 times as wide and high as the animal's snout-vent length. With up to 13 cm, that gives about 65 × 25 × 25 cm, and to this must be added the height for a deep layer of sand and a little margin, because the animal is an active hunter. Juveniles can start in a smaller box with the same elements.

The substrate is the most important part. The species digs, and a layer of sand of about 25 cm is recommended. Use dry, dust-free sand mixed with a little soil so that the tunnels do not collapse, and leave part of the substrate slightly damper. Make hides with flat stones and cork bark that the animal can dig under, and partly cover them with tussocks of dry grass resembling spinifex. Climbing branches are not necessary. Put a stable stone or a piece of bark under the heat source as a basking spot.

The enclosure must have secure doors and good ventilation. All heat sources must be placed so that the animal cannot touch them, or be shielded with mesh. The enclosure must be completely escape-proof, because such small animals can squeeze through very narrow gaps.

Read more: Heat and temperature

TEMPERATURE

The species is diurnal and loves warmth. There are no documented temperatures from captivity, so the figures are borrowed from *Varanus gilleni*, which also lives in arid country. The rest of the enclosure is kept at 28-30 °C by day, and the basking spot should reach about 38-42 °C, as given for *V. gilleni*. For a desert species that basks, a surface temperature of up to 45 °C

measured with an IR thermometer is a reasonable estimate. There must be a large temperature gradient so that the animal can choose between warm and cooler areas, with a cool zone down in the sand. The only known figure from the wild is an animal that had just been active, with a body temperature of 35 °C.

At night the heat is switched off, and the temperature may fall to 18-20 °C. Use a spot with a reflector at one end and a thermostat. The species has a winter rest in the wild, but it is not documented how cold or how long it is. For *V. gilleni* the temperature is lowered by a further 8-10 °C for a couple of months in winter, and this is a possible but untested starting point for this species.

HUMIDITY AND WATER

Varanus brevicauda comes from arid regions and needs low humidity. The 30-50 % in the fact box is an estimate and is not documented for the species. Keep the substrate dry at the top, but leave a deep corner slightly damp, so that the animal can retreat into moisture when it wants. Mould in the substrate is a sign of too much moisture.

Place a low, stable bowl of fresh water in the enclosure and change it daily. The bowl must be low enough that a juvenile can climb out again without difficulty.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Varanus brevicauda is diurnal and lives in open country with strong sunlight. There are no documented UVB measurements, but since the species basks and is active in daylight, UVB is recommended. Ferguson zone 3 is an estimate based on other diurnal monitors that bask.

Fit a T5 tube over one side of the enclosure so that the animal can choose between UV light and shade, and provide plenty of hides under sand and stones so that it can withdraw. Keep the light on for 12 hours a day in summer and 10 hours in winter, and switch everything off at night.

Read more: Lighting and UVB

FEEDING

In the wild *Varanus brevicauda* lives on insects, spiders, scorpions, centipedes and other invertebrates, and also takes small lizards such as skinks and geckos, reptile eggs and occasionally frogs and small snakes. A female of 9 g had eaten a whole skink equal to 16.5 % of her own weight. In the enclosure the staple diet should therefore be small feeder insects: crickets, small grasshoppers, cockroaches, mealworms and wax moth larvae. Everything should be smaller than the distance between the animal's eyes.

Feeding frequency is not documented. As an estimate, adults can be fed 3-4 times a week in amounts they can eat in a few minutes, and juveniles every day. The close relative *Varanus gilleni* easily becomes too fat, so do not overfeed adults. Dust the insects with calcium, and use calcium with vitamin D3 at every second or third meal. Rodents should not be a staple food, and they are not necessary for such a small animal either.

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

BEHAVIOUR AND HANDLING

Varanus brevicauda is small, but it has the temperament of a real monitor. It hisses, puffs out its throat and lunges if it feels threatened. Bites are weak because of its size, but the claws are sharp, and fast animals can be hard to hold on to. Handle the animal as little as possible, wait a couple of weeks after it moves in, and keep sessions short. The species lives hidden and prefers to be in its tunnels, so it is poorly suited to a keeper who wants to see the animal often. Never grab the tail.

Wash your hands before and after, because reptiles can carry salmonella. Males fight in the breeding season by rising on their hind legs and wrestling, so keep them apart. The species is solitary in the wild, and animals are best kept singly, also because keeping pairs is not documented.

Read more: Quarantine and hygiene

Breeding

SEXUAL MATURITY AND SEXING

The sex of *Varanus brevicauda* cannot be determined from the outside. For monitors in general, reliable sexing requires a vet experienced with reptiles and an endoscopic examination, and probing does not work, because females have a pocket that resembles the male's hemipenis pocket. Males are given as sexually mature at a snout-vent length of 7-8 cm and an age of about 10 months, and females at 8-9 cm and about 22 months. The smallest sexually mature male in the wild measured 8 cm from snout to vent, and the smallest female with eggs 9 cm.

MATING

Mating has not been documented in captivity. In the wild it takes place in September and October, after the winter rest, and by February the eggs have hatched. Males fight over females by wrestling on their hind legs. In dry years, when food is scarce, the species does not breed at all in the wild, so expect the animal to mate only if it is in fine condition. For *Varanus gilleni*, a winter rest of a couple of months at a temperature 8-10 °C lower is used to synchronise the animals, but this has not been tried on *Varanus brevicauda*.

EGG-LAYING AND CLUTCHES

The female *Varanus brevicauda* digs a hole for her eggs herself, so give her a deep, damp laying site: a closed box with at least 15 cm of damp sand and an entrance hole. A clutch most often consists of 2-3 eggs, in the wild the figures range from 1 to 5 eggs, and the largest clutches are known from coastal regions. One female has laid 8 eggs in 3 clutches within six weeks. Place the box in the enclosure, and give the female extra food and calcium in the season. The male should be moved out when she is close to laying. A female that digs without laying or becomes lethargic must go to a vet quickly.

INCUBATION

The eggs are carefully moved to an incubator and placed in damp vermiculite without being turned. Incubation of *Varanus brevicauda* is only sparsely documented. The figures range from 70-84 days at 18-25 °C to 70-100 days depending on the temperature. For the close relative *Varanus gilleni* the eggs hatch after 90-100 days at 29-30 °C. The 18-30 °C in the fact box covers both figures. Keep the substrate damp but not wet, and check that the eggs do not go mouldy.

Read more: Incubating eggs

REARING THE YOUNG

The juveniles of *Varanus brevicauda* are 4-5 cm from snout to vent, 8-10 cm in total length and weigh 1-3 g. Give them a small enclosure with a warm basking spot, sand to dig in and hides, and feed them every day with the very smallest insects, dusted with calcium. In captivity the juveniles' weight can double in a month. Sort them by size, so that the smallest also get food.

Health and common mistakes

Varanus brevicauda is hardy in the wild, but there is no documented experience of diseases in captivity, so the following is borrowed from other small monitors:

- Too low a temperature at the basking spot causes poor digestion and loss of appetite. Measure with an IR thermometer.
- Being too close to an unshielded heat source causes burns.
- Obesity, if the animal is fed too often.
- Calcium deficiency with soft jaws and bent limbs, if the insects are not dusted with calcium and the lighting is too weak.
- Infection with salmonella and parasites. Always wash your hands.
- A damp substrate and poor ventilation cause mould and respiratory problems in a desert species.

Animals in the trade: Australia does not permit commercial export of live animals of the species. International trade in captive-bred animals and in wild-caught animals for research has been recorded, but the species is rarely kept or bred. An animal offered as *V. brevicauda* should therefore be met with scepticism: demand documentation of its origin, and have the species confirmed, since it can be confused with *Varanus sparnus*. New animals must always be kept on their own for at least six weeks, and a faecal sample at a vet is a good idea.

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.