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AGAMAS

North-west Bearded Dragon

Pogona mitchelli

Pogona mitchelli is a slender, diurnal bearded dragon of about 40 cm from tropical north-western Australia, with a weak beard and stronger spines on the neck than *Pogona minor*. Its care follows its closest relatives: heat, strong UVB, a diggable substrate and mostly insects.

Family: Agamidae

KEY FACTS

THE ANIMAL

Adult size	**30-40 cm** total length incl. tail
Lifespan	**10-15 years**
Active	**By day**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Savanna**
Difficulty	**Intermediate**

CARE

Min. enclosure	**120 × 60 × 60 cm** L × W × H for 1 adult
Temperature, day	**24-37 °C**
Basking spot	**40-45 °C**
Temperature, night	**18-24 °C**
Humidity	**30-60%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 3
Diet	**Insects and plants**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**5-19 eggs**
Clutches per year	**2-4**
Incubation	**58-64 days** at 29 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Not Evaluated (NE)**

About the species

Pogona mitchelli is a medium-sized, relatively slender bearded dragon. The snout-vent length is about 16 cm, slightly more than in *Pogona minor*, and including the tail the animal reaches about 40 cm. It differs from *P. minor* in a broader head, stronger spines, especially in the transverse row on the neck, and a less greyish colour. The beard is weakly developed, as in the other small species in the genus.

The taxonomy has not been settled. The species was described in 1976 by Judith Badham as *Amphibolurus mitchelli* and is named after Francis John Mitchell (1929-1970), curator at the South Australian Museum. It is treated both as a separate species and as a subspecies of *P. minor*, and where the two forms meet, they hybridise. This guide applies to *P. mitchelli* in the narrow sense.

Australia does not allow the export of wild reptiles, so all animals in the trade outside Australia are captive-bred.

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

Distribution and habitat

Pogona mitchelli is found in northern Western Australia north of the Pilbara, especially in the Kimberley region, and in the north-western Northern Territory. The type locality is Derby in Western Australia. Further south the species is replaced by *P. minor*, and in the transition zone the two hybridise.

The species has not been assessed on the IUCN Red List (NE).

> **Native range:** Australia.

HABITAT

Pogona mitchelli lives in tropical woodland and savanna in northern Australia. The climate is hot all year with a short, unpredictable wet season from the end of December to March and a long dry season from April to November. At Derby the days average 35-36 °C and the nights about 26 °C in December and January, while July has days of about 30 °C and nights of about 15 °C. Humidity is 60-70 % in the wet season and about 40 % in the middle of the dry season.

Life in the wild is almost undescribed. In *P. minor* the diet consists mostly of insects and to a lesser extent of plant parts, and the females dig a burrow, lay the eggs and close it again.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Little is known about the care of *Pogona mitchelli*. The climate in the range is hot all year with a short wet season and a long, dry period with cool nights. The figures in this guide are borrowed from *Pogona minor*, *Pogona henrylawsoni* and *Pogona vitticeps*, which are far better known in captivity.

A single adult needs an enclosure of at least 120 × 60 × 60 cm, and more space will be used. The enclosure must be well ventilated with a lid or mesh. The species lives on the ground and also climbs, so floor space is more important than height, but there must be branches and flat stones to climb up on.

Furnish with a flat basking spot of stone or wood under the lamps, at least two hides (one at the warm end and one at the cool end) and low branches. The substrate should be diggable: a layer at least 10 cm thick of fine sand mixed with clean topsoil (for example 60 % sand and 40 % topsoil). Solid substrate such as unglazed tiles, slate or kitchen paper is an alternative for young and sick animals. Calcium sand, vitamin sand, crushed walnut shells and bark or wood shavings are unsuitable, because they can cause constipation. Remove faeces daily, and replace loose substrate completely every 3-6 months.

Keep the animals singly. Two males must never share an enclosure, and adults and young must always be kept apart.

Read more: Heat and temperature Read more: Calcium, vitamins and supplements

TEMPERATURE

Heat with at least two halogen spots over the basking spot. The surface there must be 40-45 °C, measured with an infrared thermometer, and the warm patch must be at least as large as the whole animal. The air in the enclosure should be 24-37 °C, warmest at the basking end and coolest at the opposite end. The surface in the cool end must be 25-29 °C.

At night all heat and light are switched off, and the temperature may fall to 18-24 °C. This suits the climate of the range, where nights are about 26 °C in the rainy season and about 15 °C in the middle of the dry season. Connect the lamps to a thermostat as a safeguard, so that they switch off if the air rises above 37 °C. Dark, sluggish and withdrawn behaviour suggests that the animal is too cold.

HUMIDITY AND WATER

Humidity should be 30-60 %, measured at the cool end, and the enclosure must be able to dry out between mistings. The climate in the wild is more humid than for the desert-dwelling relatives, especially in the wet season, so the upper part of the range is fine in summer. Stagnant, wet air and a wet substrate cause illness.

Always offer fresh water in a shallow bowl. A light shower over the furnishings provides droplets that the animal can lick, and a slightly damp hide at the cool end helps during shedding.

LIGHTING AND UVB

Pogona mitchelli is diurnal and needs very bright, white light and strong UVB. Use a T5 HO tube of 10-14 % UVB in a reflective fixture over the warm side, parallel to the heat lamps. The aim is a UV index of 4.0-4.5 at the basking spot, falling to 0 in the cool end (Ferguson zone 3). The distance between tube and basking spot depends on the tube, fixture and mesh, so preferably measure with a UV meter. Glass and plastic between tube and animal block UVB. Replace T5 tubes after about 12 months, even if they still light up. LED lamps with UVB are not yet a safe choice.

The whole enclosure should be bright. The light is on for 12-14 hours a day and switched off completely at night.

Read more: Lighting and UVB

FEEDING

Pogona mitchelli is fed mostly insects and a little greens:

- Hatchlings (under 3 months): insects 2-3 times daily and greens daily.
- Juveniles (3-12 months): insects and greens daily.
- Adults: insects 3-5 times a week and greens daily, but only a small portion.

Good feeder insects are Dubia roaches, crickets, locusts, black soldier fly larvae and silkworms; mealworms are given sparingly. The insects must not be larger than the distance between the animal's eyes and must have been fed a good diet for at least 24 hours before being passed on. Wild insects may have been sprayed and should be avoided. Greens are e.g. rocket, pak choi, kale, mustard leaves, dandelion and watercress, cut into small strips. Avocado is toxic. Fruit is an occasional treat. Dust the insects with calcium, and sprinkle multivitamin on the salad once a week.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Pogona mitchelli is diurnal and basks a lot. Like other bearded dragons, it uses body language: males bob their heads at rivals and females, and waving a foreleg is a sign of submission. The beard display is weak.

Let a new animal get used to the enclosure for about two weeks before it is picked up. Lift it with support under body and legs, and move slowly. Animals that hide or are dark and withdrawn are often too cold or stressed. Keep the animals singly, because males are territorial.

Breeding

SEXUAL MATURITY AND SEXING

Age and size at sexual maturity are not documented for *Pogona mitchelli*. In *P. minor* females become sexually mature at a snout-vent length of about 9 cm. Males have a broader head and more distinct femoral pores than females. Use only fully grown, healthy animals for breeding, and give the female plenty of calcium.

MATING

The breeding season is not documented for *Pogona mitchelli*. In *P. minor* the northern populations lay eggs from July to September and the southern ones from October to December. Males bob their heads, and females wave a foreleg. A cool rest period in winter is used to bring bearded dragons into breeding condition, but it is given only to healthy, well-nourished animals; its length and temperature are not known for the species. Put the female in with the male for a short period, and separate them afterwards.

EGG-LAYING AND CLUTCHES

The female probably lays 5-19 eggs per clutch, on average about 8, and two to four clutches per season. Give the female a laying box with a layer of damp, diggable sand and topsoil at least 25 cm thick. A female that does not find a suitable site may retain the eggs. This is an emergency that requires a vet.

INCUBATION

Incubate the eggs at 29 °C in damp vermiculite in an incubator, and do not turn them. At 29 °C they hatch after about 58-64 days and at 25 °C after 100-109 days.

Read more: Incubating eggs

REARING THE YOUNG

The hatchlings are independent from hatching. Keep them on solid substrate, for example kitchen paper, until they eat reliably, and give them the same light and heat as adults, with UVB and calcium on the insects. Give small insects several times a day and greens every day. Young can bite each other's toes and tails, so sort them by size.

Health and common mistakes

Husbandry errors are the most common cause of illness. Sick reptiles hide their illness for a long time, so weigh the animal every week, and keep notes on weight, appetite and droppings.

- Metabolic bone disease from too little UVB, too little calcium or too low a temperature.
- Obesity from too much food and too little exercise.
- Constipation from too low a temperature, dehydration or parasites.
- Intestinal parasites and mites; have a faecal sample examined when the animal is new.
- Eggs that are not laid, in females.

Loss of appetite, lethargy, swollen joints, an open mouth when the animal is not hot and an animal that stops eating are reasons to go to a vet with reptile experience. Reptiles often carry salmonella, so wash your hands after touching animals and equipment.

Read more: Quarantine and hygiene 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.