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AGAMAS

Nullarbor Bearded Dragon

Pogona nullarbor

Pogona nullarbor is a medium-sized bearded dragon of about 30-35 cm with a short snout and short tail, known only from the Nullarbor Plain in southern Australia. It is reddish brown to orange-brown with pale cross-bands and several rows of large spines along the flanks, and it is very rarely kept in captivity.

Family: Agamidae English name: Nullabor Bearded Dragon Former name: *Amphibolurus nullarbor*

KEY FACTS

THE ANIMAL

Adult size	**30-35 cm** total length incl. tail
Lifespan	**10-15 years**
Active	**By day**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Semi-desert and 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	**13-24 °C**
Humidity	**30-50%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 3
Diet	**Insects and plants**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**6-12 months**
Clutch size	**14-20 eggs**
Incubation	**75-85 days** at 28-30 °C

PROTECTION AND PAPERWORK

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

About the species

Pogona nullarbor is a medium-sized, broad and strongly flattened bearded dragon with a short snout and a relatively short tail. Adults measure about 14 cm from snout to vent and about 20 cm of tail, roughly 30-35 cm in all. The species is smaller than *Pogona vitticeps* and *Pogona barbata*.

The ground colour is reddish brown to orange-brown with narrow, pale cross-bands across the back. Along the transition between back and belly there are 3-7 rows of large spines. In *Pogona minor* there is only one row of small spines and the ventral scales are keeled, whereas in *P. nullarbor* they are smooth and shortly pointed.

Pogona nullarbor and *Pogona henrylawsoni* can interbreed. The species name refers to its range, the Nullarbor Plain. The species was described in 1976 as *Amphibolurus nullarbor*, and the name *Pogona nullarbor* has been in use since 1982.

Distribution and habitat

Pogona nullarbor is endemic to the Nullarbor Plain and adjacent regions in southern Australia, in South Australia and Western Australia. The type locality is about 16 km north-west of Naretha in Western Australia. The range is very small, and there are only about 185 recorded finds, spread across South Australia and Western Australia.

Australia does not permit the export of wild reptiles, so animals outside the country come from older imports or their offspring. The species is therefore rare in captivity outside Australia. Climate models indicate that suitable habitat has shrunk since the last ice age and may become even smaller towards 2070.

> **Native range:** Australia.

HABITAT

Pogona nullarbor lives on the Nullarbor Plain, a flat, dry and almost treeless landscape with low scrub. The climate is semi-arid to arid with hot summers and little rainfall. The species is diurnal and prefers scrub with low to moderate humidity. The maximum temperature of the warmest month and the annual rainfall are the climate factors that best predict where it occurs.

The diet has not been studied for this species. Like related bearded dragons, it is probably omnivorous, with mostly insects and a smaller share of plant matter.

The female lays eggs several times a year. The timing of egg-laying and the construction of the nest are not documented for the species.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Little is known about the care of *Pogona nullarbor*, because the species is hardly kept outside Australia. The figures for enclosure, temperature, humidity, light, food and lifespan are borrowed from the relatives *Pogona minor*, *Pogona henrylawsoni* and *Pogona vitticeps*, which live in similar dry, sunny conditions.

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 digs, so floor space matters more than height. 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), low branches and stable stacks of flat stones.

The substrate should be diggable. A layer at least 10 cm deep of fine-grained sand mixed with clean topsoil (e.g. 60 % sand and 40 % topsoil) resembles the soil in the wild. A solid substrate such as unglazed tiles, slate slabs or kitchen paper is an alternative for juveniles and sick animals. Calcium sand, vitamin sand, crushed nutshells, and bark or wood shavings are unsuitable, because they can cause impaction if swallowed. Remove faeces daily, and replace loose substrate completely every 3-6 months.

Keep the animals separately. Two males must never share an enclosure. Adults and juveniles must always be kept apart.

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

TEMPERATURE

Heat with at least two halogen spotlights over the basking spot. The surface there should 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 at the cool end should be 25-29 °C.

Use an infrared thermometer for the surfaces and a digital thermometer with a probe for the air, and measure only once the lamps have been on for about three hours. Halogen bulbs give short-wave infrared heat like the sun. If the basking spot is too cold, move it closer to the lamp.

At night the temperature may fall to 13-24 °C. A night-time drop makes the animal bask earlier in the morning. Connect the lamps to a thermostat with the probe at the cool end, so that they switch off if the cool side goes above 37 °C.

HUMIDITY AND WATER

Humidity should be 30-50 %, measured at the cool end, and the enclosure must be able to dry out, because the species lives in a dry region. Stagnant, wet air and a wet substrate cause illness. If humidity is constantly too high, a small fan over the mesh at the cool end helps. Too low humidity causes dehydration and problems with shedding.

Always offer fresh water in a shallow dish. The animal gets part of its water through its food, so greens that have been rinsed and are still wet help. A light shower over the furnishings provides droplets that the animal can lick. A slightly moist hide at the cool end helps during shedding.

LIGHTING AND UVB

Pogona nullarbor depends on strong, white light, which promotes appetite and activity. The basking spot should be the brightest place, and 75-100 % of the length of the enclosure should be lit.

UVB is necessary, and the species is counted like the other species in the genus as Ferguson zone 3. Use a T5 HO tube of 10-14 % UVB in a reflective fitting 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 at the cool end. The distance between tube and basking spot depends on the tube, fitting and mesh, so preferably measure with a UV meter. Glass and plastic between tube and animal block UVB. Good T5 HO tubes are replaced after about 12 months, even if they still light up.

LED lamps with UVB are not yet considered safe for reptiles. The light is on 12-14 hours a day in summer and about 10 hours in winter, controlled by a timer.

Read more: Lighting and UVB

FEEDING

Pogona nullarbor is fed like other medium-sized bearded dragons: mostly insects and a daily supplement of greens. The diet in the wild is not documented for the species.

- Hatchlings (under 3 months): insects 2-3 times a day 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, grasshoppers, black soldier fly larvae and silkworms; mealworms are given sparingly. The insects must be no larger than the distance between the animal's eyes and must have been gut-loaded with good food for at least 24 hours before being fed on. Wild insects may be sprayed or toxic and should be avoided.

Greens are e.g. rocket, pak choi, kale, mustard leaves, dandelion, watercress and cactus pads, cut into small strips. Avocado is toxic. Fruit is an occasional treat.

Dust the insects with calcium. Sprinkle a multivitamin on the greens once a week.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

Pogona nullarbor is diurnal and basks a lot. Its behaviour has not been studied for the species; the other species in the genus head-bob at rivals and wave a foreleg as a sign of submission, and the same can be expected here.

Let a new animal settle into the enclosure for about two weeks before it is picked up. Offer food from tweezers, and let your hand rest in the enclosure until the animal is calm. 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. Males are territorial, and animals that share an enclosure squabble over rank and the basking spot.

Breeding

SEXUAL MATURITY AND SEXING

The animals reach sexual maturity after six months to one year. Males have a broader head and more distinct femoral pores than females. Animals for breeding must be fully grown and in good condition, and the female must have received plenty of calcium.

MATING

The course of mating is not documented for the species. The species in the genus mate in spring after a cool rest period in winter, which only healthy, well-nourished animals may be given; the length and temperature are not known for *P. nullarbor*. Put the female in with the male for a short period, and separate them afterwards.

EGG-LAYING AND CLUTCHES

The female lays 14-20 eggs per clutch and lays several clutches a year; the number of clutches is not documented. The clutch is large relative to the female's size, so she needs plenty of calcium and food.

Give the female a laying box with a layer at least 25 cm deep of moist, diggable sand and topsoil. A female that does not find a suitable site may lay the eggs scattered around the enclosure, where they dry out, or retain them; the latter is an emergency that requires a vet.

INCUBATION

The eggs hatch after about 80 days. The temperature is not documented for the species; 28-30 °C is used for the other species in the genus. Place the eggs in an incubator in moist vermiculite, and do not turn them.

Read more: Incubating eggs

REARING THE YOUNG

The hatchlings are small and must be kept on a solid substrate, e.g. kitchen paper, until they eat reliably. Give insects daily. They need the same light and heat as adults: basking spot, UVB and calcium on all food. Sort them by size, so they do not bite each other's toes and tails.

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, faeces and shedding. The list applies to bearded dragons in general; specific diseases in the species are not documented.

- Metabolic bone disease from too little UVB, too little calcium or too low a temperature.
- Obesity and gout from too much food and too little water.
- Dental disease and stomatitis.
- 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, breathing with the mouth open when the animal is not hot, and an animal that stops eating are reasons to see a vet with reptile experience. Reptiles often carry salmonella, so wash your hands after touching animals, enclosure and equipment, and keep the animal and its things away from the kitchen.

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.