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Forest bavayia

Bavayia cyclura

Bavayia cyclura is a small, nocturnal gecko from the forests of New Caledonia, where it hides by day under bark and in hollows in the trees. It is hardly ever kept in enclosures, and little is known about its care. The species is threatened in the wild.

Family: Diplodactylidae Former name: *Peripia cyclura; Lepidodactylus cyclurus*

KEY FACTS

THE ANIMAL

Adult size	**7 cm** snout-vent length
Lifespan	**5-10 years**
Active	**At night**
Lifestyle	**Arboreal**
Habitat	**Dry forest and rainforest**
Difficulty	**Experienced**

CARE

Min. enclosure	**30 × 30 × 45 cm** L × W × H for 1 adult
Temperature, day	**22-26 °C**
Temperature, night	**18-21 °C**
Humidity	**60-80%**
UVB	**Optional** Ferguson zone 1
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**12-18 months**
Clutch size	**2 eggs**
Incubation	**60-120 days** at 22-25 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Endangered (EN)**

About the species

Bavayia cyclura is a small gecko in the family Diplodactylidae. It reaches up to 72 mm from snout to vent, and the tail is about as long as the body, so the total length is up to about 15 cm. The scales are fine and granular without tubercles, and the colours are muted. The toes are expanded with adhesive lamellae and all have claws.

The species was described by Albert Günther in 1872 as *Peripia cyclura* and is the type species of the genus *Bavayia*. The species name comes from the Greek kyklos (round) and oura (tail), because the tail is round in cross-section, whereas it is more flattened in other species in the genus. The genus was revised in 2022, and the number of species rose to 41. Older records of *B. cyclura* may therefore include animals that today belong to other species. It closely resembles *Bavayia crassicollis*.

B. cyclura is nocturnal and shy, and is an animal to be observed rather than handled.

Distribution and habitat

Bavayia cyclura is found only in New Caledonia, on the main island of Grande Terre and on the Île des Pins with the nearest small islands. Older records also mention the Loyalty Islands, but that occurrence is uncertain after the revision of the genus.

The map is centred on the middle of Grande Terre, and the frame covers the main island and the Île des Pins.

Native range: New Caledonia.

HABITAT

Bavayia cyclura lives in forest in New Caledonia and stays in the trees. By day the species in the genus hide under bark, in hollows in trees and under stones.

The climate is tropical with a warm and humid season from about November to March, when the temperature is 27-30 °C, and a cooler and drier season from about June to August at 20-23 °C. The annual mean temperature is 23 °C, and humidity can reach about 80 %, although the trade wind dampens it. Rainfall varies greatly from the dry west coast to the humid areas in the east. The gecko is nocturnal and feeds on invertebrates.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

Little is known about the care of *Bavayia cyclura*, and the species is hardly ever kept. The recommendations are based on the climate and habitat of New Caledonia and on better known geckos from the same archipelago: the figures are borrowed from *Eurydactylodes agricolae* and *Correlophus ciliatus*.

A single animal or a pair needs a tall enclosure of at least 30 × 30 × 45 cm (length × width × height). Height is more important than floor area, because the gecko climbs on bark and branches. Furnish with slanted branches and cork bark that provide crevices to hide in, and live plants with broad leaves such as pothos and bromeliads. The substrate can be damp, unfertilised soil mixed with coconut fibre and covered with dead leaves, preferably as a bioactive substrate with springtails and woodlice.

The enclosure must have mesh ventilation so that the air changes and the droplets dry up during the day.

Read more: Terrarium construction and bioactive substrate Read more: Feeder animals: keeping and breeding

TEMPERATURE

By day the temperature in the enclosure for *Bavayia cyclura* should be 22-26 °C and at night 18-21 °C. There is no need for a warm basking spot, because the species is nocturnal and hides during the day. Keep the temperature below 28 °C; the annual mean temperature in New Caledonia is 23 °C.

Measure with a digital thermometer in the middle of the enclosure and at the top. If the animal sits with its mouth open or is lethargic, it is too warm.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity in the enclosure for *Bavayia cyclura* should be 60-80 %, with a distinct rise at night. Mist the enclosure in the late afternoon, so that the leaves and branches are covered with droplets when the gecko wakes. The droplets are its main drinking water, and a shallow bowl of fresh water can be left out as a supplement.

Humidity should alternate with drying out during the day. If there are still droplets on the glass the next afternoon, there is too little air exchange, or too much misting.

LIGHTING AND UVB

Bavayia cyclura is nocturnal and does not need strong light. A weak UVB light in Ferguson zone 1 over part of the enclosure is an advantage, but not necessary when the food is dusted with calcium and D3. The need is not documented for the species. Keep the day length at about 12 hours with darkness at night, and provide shade and hiding places all day.

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

FEEDING

Bavayia cyclura feeds on invertebrates. Give small live insects such as fruit flies, newly hatched crickets and small cockroach nymphs, dusted with calcium with D3. The insects must not be wider than the distance between the animal's eyes. Whether the species takes fruit or commercial diet for fruit-eating geckos is not documented.

Young animals are fed daily and adults two to three times a week. Remove insects that have not been eaten so that they do not bother the gecko. Adjust the amount to the animal's body shape so that it becomes neither thin nor fat.

BEHAVIOUR AND HANDLING

Bavayia cyclura is shy and nocturnal, and its thin skin and fragile tail make it unsuitable for handling. Do not pick it up. If it is necessary to move it, lure it into a container. The tail is easily shed and does not grow back in the same form.

How the species tolerates company is not documented. Keep the animals singly or as a pair in a larger enclosure with many hides, and separate them if one is being chased or loses weight.

Breeding

SEXUAL MATURITY AND SEXING

The males of *Bavayia cyclura* have preanal pores on the underside in front of the vent; in the genus there are 7-46 pores in one to four rows. Age and size at sexual maturity have not been documented, but the animals probably become mature at 12-18 months.

MATING

The mating rhythm of *Bavayia cyclura* is not documented. A cool period of a few weeks with slightly shorter days and cooler nights corresponds to the cool season in New Caledonia and may make the females more receptive. Mating happens by itself when a pair is put together. If the male chases the female constantly, separate them.

EGG-LAYING AND CLUTCHES

Bavayia cyclura lays two eggs at a time. The number of clutches a year is not documented. The female lays the eggs in hollows, under bark or in leaf axils, so provide several suitable places. The eggs often stick fast, so do not loosen them by force.

Give the female extra calcium throughout the season, and check the egg-laying sites regularly.

INCUBATION

Eggs that are firmly glued are incubated where they are. Loose eggs are moved carefully, without being turned, to a small, ventilated box with a slightly damp substrate. At 22-25 °C the eggs probably hatch after 60-120 days.

REARING THE YOUNG

The young of *Bavayia cyclura* are small and delicate. Keep them separate from the adults in a small faunarium with mesh ventilation, a hide and a piece of bark, and mist daily. Give fruit flies and small crickets dusted with calcium from the first days. The growth rate is not documented.

Health and common mistakes

There are no documented diseases in *Bavayia cyclura* in captivity. Typical problems in small New Caledonian geckos are:

- Too little calcium and D3, which causes soft jaws and bent limbs.
- Too much heat: more than a short time above 28 °C stresses the animal and can be life-threatening.
- Stagnant, saturated air and mould, which cause skin infections.
- A lost tail, caused by stress or incorrect handling.

See a vet with reptile experience if the gecko is sluggish, loses weight or stops eating.

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.