herpy

GECKOS

Belep giant gecko

Correlophus belepensis

Correlophus belepensis is a large, rare gecko that lives only on a single small island in the Belep Islands north-west of Grande Terre in New Caledonia. It resembles its close relative *Correlophus ciliatus* and has a distinct crest of spines running from the eye down towards the shoulder. The species is critically endangered in the wild, and there is almost no knowledge of its care in captivity.

Family: Diplodactylidae

KEY FACTS

THE ANIMAL

Adult size	**18-22 cm** total length incl. tail
Lifespan	**15-20 years**
Active	**At dusk and at night**
Lifestyle	**Arboreal**
Habitat	**Rainforest**
Difficulty	**Experienced**

CARE

Min. enclosure	**60 × 45 × 90 cm** L × W × H for 1 adult
Temperature, day	**22-26 °C**
Basking spot	**26-28 °C**
Temperature, night	**18-21 °C**
Humidity	**50-80%**
UVB	**Recommended** Ferguson zone 1
Diet	**Insects, fruit and complete diet**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1-2 eggs**
Incubation	**60-120 days** at 22-26 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Critically Endangered (CR)**

About the species

Correlophus belepensis is a large gecko of the family Diplodactylidae. The body grows up to 10 cm from snout to vent. The total length and weight are not documented; the figure in the fact box is an estimate based on the body. The species differs from *C. sarasinorum* by a distinct crest of serrated scales running from behind the eye to the shoulder. From its closest relative, *Correlophus ciliatus*, it is recognised by an even scale pattern along the sides and, in three of the first four known animals, a row of small, whitish tubercles on the lower back or tail base.

The species was described in 2012 by Aaron Bauer, Anthony Whitaker, Ross Sadlier and Todd Jackman in the revision of New Caledonia's giant geckos that moved *C. ciliatus* and *Correlophus sarasinorum* to the genus *Correlophus*. The species name refers to the Belep Islands, where it lives.

Distribution and habitat

Correlophus belepensis is found only in the Belep Islands, which belong to New Caledonia and lie more than 40 km north-west of Grande Terre. The species is known only from the island of Art, and the type locality lies about 2 km east of Waala at an altitude of 230 metres. The known habitat is very small, and the species has not been found anywhere else.

The narrow range is the main reason the species is critically endangered.

> **Native range:** New Caledonia.

HABITAT

Correlophus belepensis lives in closed forest and forest-like scrub on hard, lateritic soil. There are no measurements of temperature and humidity from the habitat.

The species is threatened by loss of habitat, by the invasive ant *Wasmannia auropunctata* and by collection for trade.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

There is almost no knowledge of the care of *Correlophus belepensis*. The figures in this guide are borrowed from the close relatives *Correlophus ciliatus* and *Correlophus sarasinorum*, which live on Grande Terre and are better known in captivity.

An adult animal needs a tall enclosure of at least 60 × 45 × 90 cm (length × width × height). The species is large and arboreal, so height counts for more than floor area. Furnish with thick branches in sloping and horizontal layers, cork tubes and pieces of cork bark as sleeping places, and plants with large leaves, so there are dark and hidden spots. The substrate can be a damp mix of coconut fibre, soil without fertiliser and a little sphagnum with a layer of leaves on top. Avoid fine sand, which the animal may swallow. The enclosure must have good ventilation.

TEMPERATURE

During the day 22-26 °C is suitable for *Correlophus belepensis*, and a small area at the top may reach 26-28 °C. At night the temperature may fall to 18-21 °C.

Too much heat is a greater risk than cold. Avoid the temperature staying above 28 °C for any length of time, and place the enclosure away from sunny windows. In most homes extra heat is only necessary in winter, and a weak heat bulb or a heat mat on the side, controlled by a thermostat, is enough. Measure with a digital thermometer both high and low.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity in the enclosure for *Correlophus belepensis* must fluctuate: humid nights and drier days. Mist the enclosure thoroughly in the evening, so the humidity rises to 70-80 %, and let it fall to 50-60 % during the day. Constantly wet conditions cause mould and skin problems.

The animal drinks droplets from leaves and panes, but a shallow dish of fresh water can be left out and changed daily. A hygrometer shows whether the rhythm holds.

LIGHTING AND UVB

Correlophus belepensis is crepuscular and nocturnal and sleeps hidden during the day. A weak UVB light for shade-dwelling animals (Ferguson zone 1) is an advantage, for example a 5-7 % T5 tube on one side of the enclosure, so that there is always shade in the rest. The UV index at the uppermost branches should not exceed 1-2.

Keep the light on 11-12 hours a day, preferably on a timer, and make sure it is completely dark at night. Do not use strong spot lamps.

Read more: Lighting and UVB

FEEDING

Correlophus belepensis is fed like its close relative *Correlophus ciliatus*, which feeds on fruit and insects. The staple is a ready-mixed powder diet for fruit-eating geckos, mixed with water into a thick paste. Serve a small dish two to three times a week to adults and more often to juveniles, and remove leftovers after a day. The dish should sit high up.

Also give live insects once or twice a week: crickets, grasshoppers or cockroaches. They must be smaller than the distance between the animal's eyes and dusted with calcium with vitamin D3. Fresh, ripe fruit can be given as a treat, but should not be the main food.

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

BEHAVIOUR AND HANDLING

Like other crepuscular geckos, *Correlophus belepensis* is probably stressed by a lot of handling. Let new animals settle in for several weeks, and wait to pick them up until they are eating steadily. Keep handling short and calm, close to the floor, and never grab the tail, because it can be shed and does not grow back.

The animals are best kept singly, because they probably fight, as other giant geckos do.

Breeding

SEXUAL MATURITY AND SEXING

Age and weight at sexual maturity have not been documented for *Correlophus belepensis*. Males are probably recognised, as in *C. ciliatus*, by a bulge at the base of the tail. Wait with breeding until the female is fully grown and in good condition.

MATING

Give the female a winter rest with a slightly lower temperature and shorter days before mating in spring, as for the other giant geckos from New Caledonia. Put the male in with the female in her enclosure, and watch that he does not become too rough. Separate the animals if there are scrapes or unrest.

EGG-LAYING AND CLUTCHES

Correlophus belepensis is egg-laying. The female probably lays one or two eggs at a time like its relatives. The number of clutches per year has not been documented. Place a laying box with damp sphagnum or coconut fibre in the enclosure, for example a plastic box with a hole in the lid. Otherwise the female buries the eggs in the substrate.

Give the female plenty of calcium and insects during the season, and watch that she does not lose weight.

INCUBATION

At 22-26 °C the eggs hatch after 60-120 days, as in *Correlophus ciliatus*. Move the eggs carefully to a small box with a damp substrate such as vermiculite or perlite without turning them. The box should have a couple of small ventilation holes. The temperature must never rise above about 28 °C.

Keep the substrate damp but not wet, and leave eggs that look doubtful until they are clearly dead.

REARING THE YOUNG

The young of *Correlophus belepensis* are raised as in the close relatives: they get a small faunarium with paper towel or sphagnum, a twig and a hide and are misted daily. They live off the yolk in the first few days, and after that they get powder diet as well as small insects dusted with calcium with vitamin D3. Keep the young singly, and weigh them regularly.

Health and common mistakes

No particular diseases have been described in *Correlophus belepensis*. Based on experience with the relatives, the typical problems are:

- Too much heat. Extended periods above 28 °C stress geckos from the New Caledonian forests.
- Too little calcium and vitamin D3, which causes soft bones, bent limbs and tremors, especially in young animals and breeding females. Use a good prepared diet and dust the insects.
- Constantly wet substrate and poor ventilation, which cause mould, fungus and skin problems.
- Stuck shed on the toes and tail tip. Provide a humid hide, and gently loosen the remnants with lukewarm water.
- Lost tails after handling or fights. This is not dangerous, but the tail does not grow back.

A healthy animal has clear eyes, a plump tail base and a good grip. See a vet with reptile experience if the animal loses weight, does not eat for several weeks or looks limp.

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.