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GECKOS

Crested gecko

Correlophus ciliatus

A curious, nocturnal climber from the rainforests of New Caledonia, with fringed crests above the eyes and sticky toe pads that can climb glass. It tolerates room temperature, lives on prepared diet and insects, and is one of the best choices for anyone wanting a first reptile.

Family: Diplodactylidae Former name: *Rhacodactylus ciliatus*

KEY FACTS

THE ANIMAL

Adult size	**18-25 cm** total length incl. tail
Weight	**35-55 g**
Lifespan	**15-20 years**
Active	**At dusk and at night**
Lifestyle	**Arboreal**
Habitat	**Rainforest and montane forest**
Difficulty	**Beginner**

CARE

Min. enclosure	**45 × 45 × 60 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 or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**15-24 months**
Clutch size	**1-2 eggs**
Clutches per year	**5-9**
Incubation	**60-120 days** at 22-26 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Annex D**
IUCN	**Vulnerable (VU)**

About the species

Correlophus ciliatus has soft, spiny scales that sit like fringes above the eyes and continue as a crest down the sides of the head to the shoulders. The eyes are large and have no eyelids, and the gecko keeps them clean by licking them with its long tongue. Under the toes and on the tip of the tail there are fine lamellae that cling to almost anything, even vertical glass.

The species was described in 1866 and for more than a hundred years was known only from a few museum specimens. Many believed it to be extinct until it was rediscovered in 1994. Today it is one of the most common geckos in vivaria around the world, and all animals in the trade come from captive breeding. For most of that time it was known as *Rhacodactylus ciliatus*, and it regained its old genus name *Correlophus* in 2012.

It grows to 18-25 cm including the tail and weighs 35-55 g as an adult. The colours range from greyish brown through olive and reddish brown to yellow and orange, and a wealth of patterns has been bred in captivity, for example harlequin, dalmatian and flame. The tail can be dropped if the animal is frightened or squeezed, and it never grows back. Many adult animals in the wild have no tail, and it does not trouble them, but it is a good reason never to grab the tail.

It is a calm and robust species that does not need heat lamps or live food every day. In return, you have to respect that it is a nocturnal, leaping animal that prefers to watch the world from a branch.

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

Distribution and habitat

The species is found only in New Caledonia in the south-west Pacific. It lives in the southern part of the main island, Grande Terre, including Rivière Bleue, the Pourina valley and the mountains Koghis and Ouin, and on the Île des Pins south of the main island. There are also populations on the Belep Islands north of Grande Terre, and it has recently been found at Néhoué in the north.

The range is small and fragmented. The total area in which the species occurs is estimated at just under 6,000 km², but it occupies only about 44 km² of that. Records outside New Caledonia on the map come from captive animals or misidentifications.

> **Native range:** New Caledonia.

HABITAT

The gecko lives in humid forest from about 150 to 1,000 metres above sea level: coastal forest, dense rainforest and montane forest. By day it hides in hollows in tree trunks, in crevices and in dense foliage, and at night it forages up in the canopy and the lower shrubs.

The climate is subtropical and mild, not tropically hot. In summer the temperature typically lies between 22 and 28 °C, and in winter the nights in the mountains can fall below 15 °C. The air is humid, and dew and rain fall at night, while the foliage dries out during the day. This pattern of humid nights and drier days is what you need to imitate in the enclosure.

Care

THE ENCLOSURE

An adult needs a tall enclosure of at least 45 × 45 × 60 cm (length × width × height), and bigger is always better. A pair or a small group needs at least 60 × 45 × 90 cm. Height matters more than floor area, because the gecko lives up in the branches. Juveniles do best in a smaller enclosure or a faunarium, where they easily find their food, and are moved up when they weigh around 10-15 g.

Furnish it with plenty of sloping and horizontal branches, cork tubes and cork bark at different heights, so the animal can leap and climb. Live or artificial plants with large leaves, for example rubber plant, pothos and bromeliads, provide cover and hold humidity. Ideally, make a densely planted zone at the top where the gecko can sleep in the foliage during the day.

As substrate, a damp mixture of coconut fibre, soil without fertiliser and a little sphagnum works well, ideally as a bioactive substrate with springtails and woodlice. Avoid fine sand and loose pieces of bark, which the animal may swallow by accident. The enclosure needs good ventilation, preferably with mesh openings both at the bottom and in the top, so that the air does not become stagnant and musty.

Read more: Humidity, misting and ventilation Read more: Terrarium construction and bioactive substrate Read more: Feeder animals: keeping and breeding

TEMPERATURE

Correlophus ciliatus is happy at ordinary room temperature. By day the enclosure should be 22-26 °C, and a small area at the top may reach 26-28 °C. At night the temperature may fall to 18-21 °C, and a drop of a couple of degrees is healthy.

Heat is the greatest danger to the species. Above 28 °C it becomes stressed, and a longer time at 30 °C or above can kill it. So keep the enclosure away from south-facing windows, and keep an eye on the temperature on hot summer days. In most homes extra heat is unnecessary. If it is cold in winter, a low-output heat mat on the side or a low-wattage heat bulb controlled by a thermostat can supply what is missing. Always measure with a digital thermometer both at the top and at the bottom.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity should fluctuate as it does in the rainforest. Mist the enclosure thoroughly with lukewarm water in the evening, so that the humidity rises to 70-80 % or more, and lightly again in the morning if you like. During the day it should fall to around 50-60 %, so that the substrate and the branches can dry out. Constantly wet conditions cause mould, fungus and skin problems.

The gecko drinks droplets from leaves and glass and seldom uses a water bowl, but still put in a shallow bowl of fresh water, changed daily. A hygrometer shows whether the rhythm is holding. An automatic misting system can help, but the ventilation then needs to be extra good.

LIGHTING AND UVB

The species is active at dusk and at night and can live without UVB when it receives vitamin D3 through its food. A weak UVB light does make the animals more active and gives safer calcium metabolism, so it is recommended. Use a UVB tube for shade-dwelling species (Ferguson zone 1), for example a 5-7 % T5 tube, mounted over the mesh lid on one side of the enclosure so that the UV index is no higher than about 1-2 on the uppermost branches. There must always be shade in the rest of the enclosure.

Keep the light on for 12 hours a day in summer and 10-11 hours in winter, preferably controlled by a timer. Do not use strong spotlights or coloured night lights. At night it must be dark.

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

FEEDING

The staple diet is a ready-mixed powdered diet for fruit-eating geckos, mixed with water into a thick paste. Quality products such as Pangea and Repashy are developed specifically for this species and contain fruit, protein, calcium and vitamins in the right proportions. Offer a small dish 3 times a week to adults and every other day to juveniles, and remove leftovers after a day. The dish can with advantage be placed on a holder high up.

In addition, give live insects 1-2 times a week: crickets, grasshoppers, dubia roaches or waxworms as a treat. The insects should be smaller than the distance between the animal's eyes and dusted with calcium with vitamin D3. Most geckos love the hunt, and it keeps them fit.

Fresh ripe fruit such as banana, mango, fig and papaya can be given now and then as a treat, but should not be the staple diet, because it contains too little calcium. Avoid citrus fruit.

BEHAVIOUR AND HANDLING

Correlophus ciliatus is calm and can become quite tame, but it is not a pet to be handled every day. Many animals are jumpy, especially when young, and leap from hand to hand. Sit low when you hold it, ideally on the floor or over a bed, and let it walk freely from hand to hand instead of gripping it. Never grab the tail. Short sessions of 5-10 minutes a couple of times a week are plenty, and new animals should be left in peace for a few weeks to settle in.

Males must never be kept together, because they fight. One male can be kept with one or more females, and females can usually live together if there is space and many hiding places. Watch for bites and missing tails, and separate the animals if there is unrest. Kept alone, the species does perfectly well. By day the gecko often sleeps in the foliage and only becomes active when the lights go out. It may chirp or bark faintly when it feels threatened.

Breeding

SEXUAL MATURITY AND SEXING

Males can be recognised from about 4-6 months of age, when they have a clear bulge with two hemipenal pouches at the base of the tail and a row of pores in front of the vent. Reliable sexing requires a magnifying glass and an animal of at least 10-15 g. Males mature early, but females should not be bred until they are at least 18 months old and weigh 40 g or more. Young, light females are drained of calcium and can suffer lasting damage.

MATING

The breeding season follows day length and warmth and typically lasts eight to nine months from spring. Put the male in with the female in her enclosure and keep watch, especially the first nights. Mating can look violent, because the male bites the female on the neck, and small scrapes may occur. A single mating can be enough for several clutches, because the female can store sperm for months, so the male can safely be removed again after one to two weeks.

Give the female a rest period of two to three months in winter, when she is kept alone at a slightly lower temperature and shorter days. This gives her time to rebuild her calcium reserves.

EGG-LAYING AND CLUTCHES

About 30-45 days after mating, the female lays her first clutch of almost always two eggs, and then a new clutch every four to six weeks for the rest of the season. This typically amounts to 5-9 clutches a year. The eggs are white, leathery and about 2 cm long.

Put a lay box with damp sphagnum or coconut fibre in the enclosure, for example a plastic box of 20 × 15 cm with a hole in the lid. Otherwise the female buries the eggs in the substrate under a plant. Keep an eye on her calcium sacs, the small white pouches in the roof of the mouth, which should be visible. Give her plenty of calcium and insects throughout the season, and stop breeding if she loses a marked amount of weight.

INCUBATION

Carefully move the eggs to a small box with damp perlite, vermiculite or an artificial substrate such as HatchRite, without turning them. Lay them half-buried in the substrate and mark the top with a pencil. The box should have a couple of small air holes and stand at 22-26 °C. Room temperature may be enough, otherwise use an incubator.

At 25-26 °C the eggs hatch after about 60-70 days, and at 22 °C it can take up to 120 days. Above 28 °C the embryos easily die. Eggs that collapse and turn yellow or mouldy are usually not fertile. Leave them until you are sure, and remove them only when they are clearly dead.

Read more: Incubating eggs

REARING THE YOUNG

The hatchlings weigh about 1.5-2 g at hatching and shed their skin on the first day. Move them to a small faunarium with kitchen roll or sphagnum, a couple of branches and a plant, and mist daily. They live off the yolk for the first few days and begin to eat after three to five days.

Give them the same powdered diet as the adults and small crickets dusted with calcium with vitamin D3, three to four times a week. Keep the hatchlings singly or in small groups of the same size, and separate them at once if one lags behind or is missing its tail. Weigh them every other week. Young geckos grow steadily and weigh about 10-15 g after five to six months and are fully grown after a year and a half to two years.

Health and common mistakes

Correlophus ciliatus is hardy, and most problems are caused by too much heat or wrong feeding. The typical mistakes are:

- Heat above 28 °C, for example in an enclosure by a window in summer. It causes stress, loss of appetite and, in the worst case, death.
- Too little calcium and vitamin D3, especially in young animals and breeding females. It causes metabolic bone disease with soft jaws, bent limbs and tremors. Use a good prepared diet and dust the insects.
- A constantly wet substrate and poor ventilation, which cause fungus, mould and skin problems.
- Shed skin stuck on toes and tail tip. Provide a humid hide, and gently loosen the remnants with lukewarm water.
- Floppy tail, where the tail flops over the body when the animal hangs head-down on the glass. Plenty of branches and plants, so the animal does not sleep on the glass, prevent it.
- Dropped tails after handling or fighting. It 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 experienced with reptiles if the gecko loses weight, does not eat for several weeks or looks limp.

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.