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GECKOS

## Sarasin's giant gecko

# *Correlophus sarasinorum*

*Correlophus sarasinorum* is a large, rare and nocturnal gecko from the humid forests of the far south of New Caledonia. It resembles a sturdy version of its relative *Correlophus ciliatus*, but has larger eyes, often a pale V-marking on the nape and a far more restricted distribution. The species is vulnerable in the wild and rare in enclosures.

Family: Diplodactylidae  Former name: *Rhacodactylus sarasinorum*

KEY FACTS

### THE ANIMAL

| | |
|---|---|
| Adult size | **18-28 cm**<br>total length incl. tail |
| Lifespan | **15-20 years** |
| Active | **At dusk and at night** |
| Lifestyle | **Arboreal** |
| Habitat | **Rainforest** |
| Difficulty | **Intermediate** |

### CARE

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|---|---|
| Min. enclosure | **60 × 45 × 90 cm**<br>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**<br>Ferguson zone 1 |
| Diet | **Insects, fruit and complete diet** |
| Kept | **Singly** |

### BREEDING

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|---|---|
| Reproduction | **Egg-laying** |
| Clutch size | **1-2 eggs** |
| Incubation | **60-90 days**<br>at 22-26 °C |

### PROTECTION AND PAPERWORK

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|---|---|
| CITES | **Not listed** |
| EU annex | **Not listed** |
| IUCN | **Vulnerable (VU)** |

## About the species

*Correlophus sarasinorum* is among the large, nocturnal geckos from New Caledonia. The body reaches 9-14 cm from snout to vent, and the tail is about as long as the body. The base colour is pale to dark brown or grey. There are two marking types: one with a pale V on the nape and one with pale spots or dots on each side in the middle of the back. The toes are relatively large and have adhesive lamellae, so the animal climbs securely on trunks and branches. It is often described as a large *Correlophus ciliatus* with larger eyes.

The species was described in 1913 by the Swiss zoologist Jean Roux as *Rhacodactylus sarasinorum*. The species name honours the Swiss cousins Paul and Fritz Sarasin, who were zoologists, explorers and collectors. In 2012 a revision of New Caledonia's giant geckos moved the species to the genus *Correlophus*, where *C. ciliatus* and *C. belepensis* also belong.

Body length varies quite a lot between localities, and this has led some to suggest that there are several subspecies, but this has not been resolved. The total length is not documented, so the figure in the fact box is an estimate based on body and tail. The weight is not documented.

In captivity the species is far rarer than *C. ciliatus*. There is little experience to build on, and many of the recommendations in this guide are therefore borrowed from the close relative. This is marked in the text.

## Distribution and habitat

*Correlophus sarasinorum* occurs only in New Caledonia in the south-western Pacific and there only in the southernmost part of the main island, Grande Terre, south of Mont Koghis. The type locality, where the first animals were found, is Prony. Since then the species has been found, among other places, in the Rivière Bleue reserve, at Pic du Pin, in Forêt Nord and on the Goro plateau. The species is known from eight localities from Prony to Koghis, often in small, separate forest remnants.

The distribution is small and fragmented. The area in which the species occurs is estimated at about 708 km², but it occupies only about 56 km² of it. The recorded finds all lie in the same southern corner of the island.

> **Native range:** New Caledonia.

### HABITAT

*Correlophus sarasinorum* lives mainly in humid, closed forest, but has also been found in tall maquis scrub at the forest edge and in coastal forest, from about 20 to 600 metres' altitude. By day it hides in crevices and holes in trees, and at night it forages on trunks and branches. It is less markedly arboreal than its relatives and is often found hidden in the leaf litter or under loose bark. It occurs in almost all forest patches with trees of suitable size and is probably very dependent on hollow trees.

The forests in the south often grow on nickel-rich, ultramafic soil, where forest fires and mining have destroyed large areas. The climate is subtropical with humid nights and warm days. There are no measurements of temperature and humidity from the species' habitats, so the values for the enclosure are borrowed from *C. ciliatus*, which lives in the same part of the island.

Read more: Humidity, misting and ventilation

## Care

### THE ENCLOSURE

There is little documented practice for *Correlophus sarasinorum*, so the figures are based on experience with the smaller *C. ciliatus*. An adult should have a tall enclosure of at least 60 × 45 × 90 cm (length × width × height), and larger is better. The species is large and uses both trunks and branches, so height counts for more than floor area.

Furnish it with thick branches in slanting and horizontal layers, cork tubes and pieces of cork bark as sleeping places, and plants with large leaves, so that there are dark and hidden places. The gecko sleeps in tree holes in the wild, so a couple of vertical cork tubes is a good idea. The substrate can be a damp mixture of coconut fibre, unfertilised soil and a little sphagnum with a layer of leaves on top, where the animal can also hide. Avoid fine sand and loose pieces of bark, which the animal can swallow by accident. The enclosure should have good ventilation, so that the air does not become stagnant.

### TEMPERATURE

*Correlophus sarasinorum* needs 22-26 °C by day, and a small area at the top may reach 26-28 °C. At night the temperature should fall to 18-21 °C.

Always keep an eye on the heat. The species comes from forests where the air is humid and the temperature mild, and overheating is a greater risk than cold. Place the enclosure away from south-facing windows, and avoid the temperature staying above 28 °C for any length of time. In most homes extra heat is only needed in winter, and then a weak heat bulb or a heat mat on the side, controlled by a thermostat, can be enough. Measure with a digital thermometer both high and low in the enclosure.

Read more: Heat and temperature

### HUMIDITY AND WATER

The humidity for *Correlophus sarasinorum* should fluctuate as it does in the forest, where nights are damp and days dry out. Mist the enclosure thoroughly in the evening so that the humidity rises to 70-80 %, and let it fall to about 50-60 % during the day. Constantly wet conditions cause mould and skin problems.

The gecko drinks droplets from leaves and glass, but still provide a shallow dish of fresh water, changed daily. A hygrometer shows whether the rhythm holds.

### LIGHTING AND UVB

*Correlophus sarasinorum* is active at dusk and at night and sleeps in tree holes by day. How much UVB it needs is not documented. Based on experience with close relatives, a weak UVB light for shade-dwellers (Ferguson zone 1) is recommended, for example a 5-7 % T5 tube, mounted on one side of the enclosure, so that there is always shade in the rest. It must not give more than a UV index of about 1-2 on the uppermost branches.

Keep the light on for 11-12 hours a day, ideally controlled by a timer, and make sure it is completely dark at night. Do not use strong spotlights.

Read more: Lighting and UVB

### FEEDING

There is no published feeding practice for *Correlophus sarasinorum*. It is omnivorous and eats insects and fruit in the wild. In captivity a good starting point is a ready-mixed powdered diet for fruit-eating geckos, mixed with water to a thick paste. Serve a small dish two to three times a week to adults and more often to young, and remove leftovers after a day.

In addition, give live insects once or twice a week, for example crickets, grasshoppers and dubia roaches. They should be smaller than the distance between the animal's eyes and dusted with calcium with D3. For so large an animal the insects can be a little larger than for *C. ciliatus*. Fresh fruit can be used as a treat, but not as the main food.

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

### BEHAVIOUR AND HANDLING

*Correlophus sarasinorum* is nocturnal and lives hidden. By day it hides, and it becomes properly active only when the light goes off. There is little information on its temperament in captivity, but expect that, like other nocturnal geckos, it becomes stressed by too much handling. Let new animals settle in for several weeks, and wait to pick them up until they are eating steadily. Stick to short, calm sessions close to the floor, and never grab the tail, because it can be dropped and does not grow back.

It is safest to keep the animals singly. A safe way of keeping them in groups has not been documented, and the animals can probably fight as in other giant geckos. Pairs should be kept together only by experienced keepers who have room to separate them.

## Breeding

### SEXUAL MATURITY AND SEXING

There are no reliable figures for age and weight at sexual maturity in *Correlophus sarasinorum*. In the relative *C. ciliatus* the males can be recognised after a few months by a bulge at the base of the tail and a row of pores in front of the vent, and the females are bred only once they are fully grown. It is sensible to follow the same principle here: wait until the female is fully grown and in good condition before breeding her.

### MATING

The mating season for *Correlophus sarasinorum* is not documented. It probably resembles other giant geckos from New Caledonia, where the female gets a winter rest with slightly lower temperature and shorter days before mating in spring. 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 scratches or unrest. The species is rare in captivity, and few animals are being bred.

### EGG-LAYING AND CLUTCHES

The female of *Correlophus sarasinorum* lays one or two eggs at a time, which she buries in soft, moist substrate. How many clutches she lays per year is not documented.

Provide a laying box with moist 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 her plenty of calcium and insects during the season, and watch that she does not lose weight.

### INCUBATION

The eggs of *Correlophus sarasinorum* hatch after about 60-90 days at 22-26 °C. The temperature is borrowed from *C. ciliatus*. Move the eggs carefully to a small box with moist substrate, for example perlite or vermiculite, without turning them, and place them half buried with the top side marked. The box needs a couple of small ventilation holes. Use an incubator if room temperature does not stay stable.

Make sure the substrate does not dry out and that the temperature never rises above about 28 °C. If you are unsure whether an egg is alive, leave it until it is clearly dead.

Read more: Incubating eggs

### REARING THE YOUNG

The rearing of young of *Correlophus sarasinorum* has not been described. In closely related species the young get a small terrarium box with kitchen roll or sphagnum, a twig and a hide and are misted daily. They live off the yolk for the first few days, and after that they get the same powdered diet as the adults and small insects dusted with calcium with D3. Keep the young singly, and weigh them regularly. The same approach can be used here, but remember that it is borrowed from a relative.

## Health and common mistakes

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

- Too much heat. A long time above 28 °C stresses 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 ready-made diet and dust the insects.
- A constantly wet substrate and poor ventilation, which cause mould, fungus and skin problems.
- Remnants of skin stuck to toes and tail tip. Provide a humid hide, and loosen the remnants carefully with lukewarm water.
- 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.

### 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.