

Mossy Prehensile-tailed Gecko

Rhacodactylus chaboua

Class: Reptilia [1] **Order:** Squamata [1] **Suborder:** Gekkota [1] **Family:** Diplodactylidae [1]

Other names: New Caledonian gecko, short-snouted New Caledonian gecko, Bavay's giant gecko [2] mossy New Caledonian gecko, short-snouted New Caledonian gecko, Bavay's giant gecko, or mossy prehensile-tailed gecko [3]

Other subspecies: *Rhacodactylus auriculatus*, *Rhacodactylus ciliatus*, *Rhacodactylus leachiannus*, *Rhacodactylus sarasinorum*, *Rhacodactylus trachyrhynchus* [4]

Other Relatives: Gargoyle Gecko, Crested Gecko, Giant Gecko, Sarasin's Gecko, Rough-snouted Gecko. [4]



Zoo Geckos 2.2 – male/female

Peaches 0.1 – Hatch: Jan 01, 2014, AQ: April 04, 2015

Plum 0.1 – Hatch: Dec 01, 2011, AQ: April 04, 2015

Conan 1.0 – Hatch: Jan 01, 2008. AQ: April 04, 2015

Blintz 1.0 – Hatch: Jan 01, 2013, AQ: April 04, 2015

Blintz is a program animal

Status

R. chaboua is currently being evaluated by CITES as a possible candidate for protective status. [3]

Geographic Region

This species is endemic to New Caledonia [1].

Habitat

They live at elevations up to 500 m [1].

This species inhabits gallery and closed forests [1].

Characteristics

Size: 5-6 in or 13-15 cm

Longevity: Wild

Captivity 20-30 years [5]

Physical Description

- *R. chaboua* gets its common name from the moss or lichen-like pattern it displays. Colors range from rusty red and brown to green or grey. There has been some notation that color could possibly be a geographic indicator in this species as the geckos from the outer islands most often display the lighter gray patterns. It commonly reaches a snout to vent length (SVL) of 5.5 in (14 cm). [3]
- There are currently 2 main varieties of chahouas available, "Mainlands" and "Pine Islands". The Pine Island variety tends to grow somewhat larger than the Mainland variety. Both varieties are highly variable in color and pattern, but tend to be primarily colored in hues of green, brown, and grey [6].
- *R. chaboua* has a **prehensile** tail that allows it to grip branches and other things for balance while it is climbing.

Dimorphism

Males: Possess larger preanal pores and a visually distinct **hemipene** pocket, which makes them easy to sex once they reach 12 to 15 grams. [4]

Females: Smaller preanal pores and lacking hemipenes. [4]

Diet: omnivores

Diet in the Wild: They are opportunistic omnivores. Typically feeding on crickets and soft fruits [7].

Diet in the Zoo: Rhexipashy meal gecko replacement.

Behavior

- *Nocturnal*, night-active
- *Arboreal*, tree-dwelling. It shelters by day in tree crevices and holes and forages at night in the canopy [1].

Reproduction

- *R. chaboua* are *Oviparous* meaning they lay eggs.
- *R. chaboua* lays two well calcified eggs that become adhered to one another shortly after laying. This is known as "egg gluing". *R. chaboua* is the only *Rhacodactylus* gecko that lays adhering eggs. The eggs are generally laid on top of the substrate (generally behind loose tree bark).
- They can produce approximately 4-5 clutches in a season, laying two highly calcified eggs every 5 weeks [7].



- Females have also been known to guard their eggs [7].
- The eggs hatch 90-120 days after being laid. [3]

Conservation

- **Use & Trade:** Most of them that are in the pet trade are captive-bred, but there are always some that are taken from the wild. They live a long time in human care, which can cause problems with people abandoning them.
- **Threats:** It is presumed to have suffered a substantial past reduction in population size and extent through habitat loss, mainly associated with logging and the clearance of lowland forests for agriculture [1].
 - This species remains relatively common at a few sites but at others there are clear indications that the populations are declining, e.g. on Dôme de Tiébaghi closed forest habitat occupied by *Rhacodactylus chahoua* is being lost to expansion of the nickel mine and degraded by mining activities [1].
 - The primary threat to this species is the continued loss or degradation of forest habitat. This is a particular risk near settlements and along river valleys where agricultural activities are intensifying, and on Ile des Pins where there is the additional effect of increased tourism. Mining is a much lesser risk to *Rhacodactylus chahoua* than other lizard species as only a very small proportion of its known occurrence (two locations: le Art and Dôme de Tiébaghi) is on the ultramafic surface where nickel occurs. Other threats to this species include habitat loss or degradation from wildfires (particularly Iles Belep) and the effects of introduced ungulates (deer and pigs). Predation by introduced mammals is a constant threat, especially rats as they are abundant in lowland forest habitats and capable of foraging in the canopy. It is expected that the introduced ant, *Wasmannia auropunctata*, will be a substantial threat as it is known to have a detrimental impact on lizard populations (Jourdan et al. 2000, 2001). Illegal collection and trafficking of *Rhacodactylus chahoua* is a risk at accessible locations. [1]
 - A potentially high degree rainforest populations on New Caledonia are threatened by the large invasion of introduced fire ants (electric ant), causing the significant decline numbers of many endemic species [7].
- **Predators:** Large mammals such as primates, wild cats and dogs will eat them if they find them. Snakes as well as larger lizards will also eat them if given the opportunity.

Did You Know?/Fun Facts

- *R. chahoua* has a very velvety look and feel to its skin compared to its relatives.
- They also use **camouflage** to blend in with their environment to hide from predators.

Glossary: List of definitions of the most important recurrent technical terms used in the text.

- **Prehensile** – Adapted for seizing or grasping especially by wrapping around.
- **Camouflage** – Something (such as color or shape) that protects an animal from attack by making the animal difficult to see in the area around it.

References

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- [2] Snipview, "Rhacodactylus chahoua," Snipview, 2015. [Online]. Available: http://www.snipview.com/q/Rhacodactylus_chahoua. [Accessed July 2015].
- [3] Wikipedia, "Rhacodactylus chahoua," Wikipedia, 2015. [Online]. Available: https://en.wikipedia.org/wiki/Rhacodactylus_chahoua. [Accessed July 2015].
- [4] Guyco Gecko, "The Geckos of New Caledonia," Guyco Gecko, 2012. [Online]. Available: <http://www.guycogecko.com/thegeckos.html>. [Accessed 20 7 2015].
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