



*Photo Credit: Pangea Reptile

Bauer's Chameleon Gecko (*Eurydactylodes agricolae*)

Unique New Caledonian Alternatives

Bauer's chameleon geckos are a small genus of arboreal, nocturnal to crepuscular geckos indigenous to the island of New Caledonia. Also collectively known by their genus as the "chameleon geckos", these medium sized geckos, as with many other species of geckos, may defend their territories, as well as defend themselves by making high pitched vocalizations such as chirping and clicking. They also use their semi-prehensile tails, and enlarged toe pads and microscopic hairs on each lamellae, known as setae, for being able to climb and grip onto many different surfaces, also as with many geckos. Four species are currently recognized in this genus, with the most commonly available species in the hobby and industry being the Bauer's Chameleon Gecko (*Eurydactylodes agricolae*) and the Vieillard's Chameleon Gecko (*E. vieillardii*). These geckos, with their relatively large, lidless eyes, can be quite variable in coloration, ranging from dark greenish, to greenish-brown, yellowish, to grayish brown, oftentimes with a mosaic of darker mottling or reticulate patterning, and relatively long, thickened, and semi-prehensile tails. These unique gecko species are indigenous to the same island of New Caledonia as many, more popular species, such as crested geckos, and gargoyle geckos, and for the intermediate level enthusiast seeking a group of geckos to work with from this same area that are just a little bit different and more unique, this genus should most definitely be considered!

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Squamata

Suborder: Lacertilia

Infraorder: Gekkota

Family: Diplodactylidae

Genus: *Eurydactylodes*

Species: *Eurydactylodes spp.**

**Taxonomy subject to change and revision.*

Lifespan and Longevity

Longevity of species in this genus is still relatively uncertain, although these geckos have the potential to reach at least 10 to 12 years or slightly more in captivity.

Distribution and Habitat

Chameleon geckos are indigenous only to the islands of New Caledonia near Australia, where they may occur on the islands of Grand Terre (or Provence Sud), and the Isle of Pines, although reports also exist for Kotomo Island as well. Different species within this genus may occupy different specific ranges in New Caledonia. During the day, these geckos occupy the thick vegetation near the forest floor, while at night, while they spend more of their time basking and foraging in the shrubs and lower canopy at night.

Origin/History

Eurydactylodes agricolae Henkel & Böhme, 2001.

The resemblance of *Eurydactylodes* geckos to chameleons as well as their diurnal activity made them a suitable pet for many. Thus, these geckos have been in the international pet trade since at least 2017, as well as a potential target for illegal collection and trafficking.

Experience Level Required

Intermediate/Moderate.

Size

Chameleon geckos are slightly sexually dimorphic in size, with females being slightly larger than males. These geckos may range from about 4.7 to 5.5 inches in total snout-to-tail length. Maximum snout-to-vent length ranges from 2.0 to 2.3 inches snout-to-vent length (SVL).

Housing and Enclosure

Enclosure System: Primarily Arboreal. Housing must be sealed and escape proof, and the size of the enclosure recommended will depend on the age and size of the gecko. For hatchlings up to 6 months or so, a 10 gallon tall aquarium, terrarium, or similar enclosure is recommended. Once a gecko reaches or exceeds six months or so, a 20 gallon tall terrarium or enclosure should be used. Chameleon geckos are arboreal, and height is more important than floor space. Provide plenty of live or artificial plants, branches, cork bark, or other furnishings for ample climbing and hiding opportunities. Substrates that retain and hold humidity well are recommended, and naturalistic substrates can include sphagnum moss and fir shavings, organic potting soil, natural moss, or similar substrates. To maintain humidity and hydration, daily or regular misting is necessary. They will drink the condensation from the enclosure's furnishings and walls, and a small water dish can also be provided, and must be kept clean, but will usually be seldom used.

Temperature, Lighting, and Humidity

Chameleon geckos have fairly simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it in moderated amounts can be greatly beneficial for their health, immune system, and overall wellness. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, or UTH (under tank heating element). Ideal temperatures for these geckos range from 72 to 80 degrees F, or otherwise at room temperature. Do not keep them at over 80 degrees F or below 65 degrees F as nighttime temperatures. Also be sure to provide a daily photoperiod or light cycle of at least 10 to 12 hours. Spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. Bauer's chameleon

geckos require moderate to high levels of humidity, which should be at, or within about 60 to 75%.

Feeding, Diet, and Nutrition

Omnivorous and Frugivorous; In the wild, chameleon geckos are omnivorous to frugivorous, meaning they eat insects and various fruit and other plant matter. In captivity, many commercially available diets are available that contain most, if not all of the essential nutrients, vitamins, and minerals required for their optimal health and nutrition. These diets are quite simple to use and prepare for your animal(s) as instructed. Feeder crickets, or other small insects of appropriate size can also be given, but should be no larger than the animal's snout to eye. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. Food should be offered in a small dish mounted off of the enclosure's floor, particularly for largely arboreal species that seldom come to the enclosure floor. Be sure that calcium and vitamin D3 supplementation needs are still being met with any diets used for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD) and other growth and nutritional deficiencies. Their feeding frequency will depend on the age, size, and overall health of your animal. Use care as to not overfeed them, as obesity and other health related issues can become an issue. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

Once they are old enough and acclimated to handling, chameleon geckos can become very mellow and are able to be handled for short periods of time. They are soft and delicate skinned animals, however, and care should be taken to not drop or otherwise injure, or handle them roughly. They can still also be stressed by overhandling as well. These geckos are typically not fast moving, and do not often bite, and also do not easily drop their tails. They can, however, sometimes secrete a pungent smelling, sticky substance when agitated, and some care should be taken to not expose this substance to eyes or mucous membranes.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact:

Eric.S.Roscoe@gmail.com

Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility. We cannot make any claims or guarantees regarding any information in this care sheet therein. This care sheet may be reprinted or redistributed only in its entirety.

***Copyright, 2023**