



*Ryan Boyd

New Caledonia Giant Gecko (*Rhacodactylus leachianus*)

Geckos the Size of Fore Arms!

The New Caledonian giant gecko, “Tree Devil”, Leach’s giant gecko, or “Leachie” is a large, arboreal gecko species, and among the largest geckos in the world! Leachies display what is known as “island gigantism” where individuals, or populations of said individuals are larger than similar species which may be found on the mainland or other surrounding areas. Mainland New Caledonian leachies are also larger than individuals on surrounding islands. As with many other geckos, they also have enlarged toe pads for climbing and adhering to surfaces using weak van der Waals forces that are also a large focus of biomimicry. Leachies also have semi-prehensile tails that they use to grip onto branches, and if this tail is lost or dropped, will re-grow as in most other geckos. Once thought to be extinct in the wild, they were re- discovered in 1994, and are now a very popular staple in the pet trade. The Leachie is a medium sized to large robustly built gecko that can be brown, tan, to yellowish brown with “dirty” cream colored to white spots, loose skin, and a relatively short tail. Leachies are a large, and popular gecko choice that can make for great pets for the more intermediate pet owner and enthusiast.

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: *Rhacodactylus*

Species: *Rhacodactylus leachianus**

*Taxonomy subject to change and revision.

Lifespan and Longevity

If provided the proper care, New Caledonian giant geckos can attain longevity of 15 to 20 years or more.

Distribution and Habitat

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These large geckos are native to New Caledonia north east of Australia, as well as several of the smaller surrounding islands. They are an arboreal species of gecko which make their habitats in the canopies of lowland tropical forests and woodlands within this range.

Conservation Status

IUCN Red List Least Concern (LC).

Experience Level Required

Intermediate/Moderate.

Size

New Caledonian geckos begin and average about 3 to 4 inches as hatchlings. They are among the largest gecko species in the world, and average from about 12 to 14 inches as adults. Some can reach up to 18 inches in length.

Housing and Enclosure

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 to 30 gallon tall terrarium or enclosure should be used. New Caledonian giant 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, 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

New Caledonian giant geckos, or leachies, 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 85 degrees F or below 65 degrees F. 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.

Feeding, Diet, and Nutrition

Omnivorous to Frugivorous; In the wild, New Caledonian giant geckos are omnivorous to frugivorous, meaning they eat insects and various fruit and other plant matter. They have also been known to consume smaller geckos and other smaller vertebrates. 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.

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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

Leachies are geckos in which temperaments and response to handling vary greatly from individual to individual. Some tolerate moderate levels of handling even as hatchlings, while others display "cage aggression" and may require more effort and patience to handle. Gloves may be worn when handling a more cage aggressive leachie. In general however, leachies tend to be not as readily handleable as their smaller relative the crested gecko. Handle any of these geckos gently and deliberately but do not drop or injure the animal. Take care to not grab your gecko by its tail or it may detach if your gecko perceives you as a predator or a threat.

****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 the Madison Area Herpetological Society at info@madisonherps.org

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