

Leachie Gecko (*Rhacodactylus leachianus*)

Difficulty: Intermediate

Leachie geckos (*Rhacodactylus leachianus*) are a nocturnal, omnivorous, arboreal lizard native to the islands of Grande Terre and Isle of Pines in New Caledonia, as well as certain small nearby islands. Grande Terre is the territory of *R. l. leachianus*, while Isle of Pines is home to *R. l. henkeli*. Their preferred habitat is the forest canopy, descending rarely.

Leachie geckos are the largest geckos in the world, with the *R. l. leachianus* growing 14-17" / 36-43cm long and *R. l. henkeli* averaging 9-12" / 23-30cm long. They have a large triangular head, blunt snout, lidless eyes, vertical pupils, loose velvety skin, sticky toe pads with claws, and a short tail. They have a mottled pattern that gives the impression of moss or lichen, but coloring varies by subspecies. *R. l. henkeli* is the most colorful, with green, brown, gray, white, orange, and pink on their color palette. Meanwhile, *R. l. leachianus* sticks to brown, black, and gray.

Like other New Caledonian geckos, leachie geckos are fairly easy to care for, as far as reptiles go. When you pay attention to providing appropriate leachie gecko care, you may expect a lifespan of 20-30 years.

Shopping List

- Front-opening 48"L x 24"W x 48"H terrarium
- 40w incandescent heat lamp, x2
- 5.5" dome lamp fixture, x2
- Rheostat
- 22" Zoo Med or Arcadia T5 HO forest UVB bulb
- 24" Arcadia or Vivarium Electronics T5 HO hood
- Power strip with digital timer
- Digital thermometer/hygrometer with probes, x2
- Pressure sprayer
- Coconut fiber substrate, 60qts
- Environmental enrichment
 - artificial or (nontoxic) live foliage
 - thick vines
 - branches
 - cork hollows
 - magnetic ledges
- Magnetic gecko ledge, large
- Gecko cups, 1oz
- Crested gecko meal replacement powder (Leapin' Leachie, Pangea, Repashy)
- Calcium powder, no D3

Housing

Leachie geckos are quite active, and require an enclosure that is large enough to give them adequate opportunity to explore, hunt, and generally exercise natural behaviors. They are also arboreal, which means that they are a tree-dwelling species, and need a terrarium that provides a generous amount of climbing space. Where possible, larger is always better!

- The minimum recommended enclosure size for *R. l. leachianus* is 48”L x 24”W x 48”H / 120 x 60 x 120 cm or equivalent.
- The minimum recommended enclosure size for *R. l. henkeli* is 36”L x 18”W x 36”H / 90 x 45 x 90 cm or equivalent.

Can multiple leachie geckos be housed in the same enclosure?

It’s best not to house multiple leachie geckos together.

Lighting & UVB

Leachie geckos are nocturnal, which means that they are primarily active at night. This means that they are likely to prefer cooler temperatures, are exposed to low levels of indirect UVB during the day, and have exceptional night vision.

At minimum, lighting should be provided for 12 hours/day. However, if you wish to provide seasonal cycles to stimulate natural hormonal cycling, you can either manual switch between 14 hours/day during summer and 10 hours/day during winter, or use a smart timer such as [Kasa](#) to sync your lights with your local sunrise and sunset times.

UVB Lighting

Leachie geckos are capable of surviving without UVB lighting as long as they get a certain amount of dietary vitamin D3, but they can’t thrive unless it is provided as part of their environment. UVB lighting can be tricky, because in order to get the right strength of UVB (measured by UV Index, or UVI), distance must be considered.

As a rough estimate, to provide appropriate UVB to a leachie gecko in a 36-48” tall enclosure, you will need one 22” [Zoo Med T5 HO Reptisun 5.0](#) or [Arcadia Forest 6%](#) UVB bulb in an [Arcadia](#) or [Vivarium Electronics](#) fixture for best results. Place the basking branch so the gecko can’t get closer than 9-12” below the lamp.

(These recommendations are approximations. It is strongly recommended to use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 2.0-3.0 in the basking area at the top of the enclosure.)

Heating

Humans are warm-blooded, which means that our body temperature is automatically regulated. Leachie geckos, however, are cold-blooded, and they need to move between areas of different temperatures in order to regulate their body temperature. In the wild, leachie geckos depend on sunlight for the warmth they need. In captivity, sunlight can be replicated with a white incandescent heat lamp.

- **Basking area temperature:** 86-88°F (30-31°C)
- **Ambient temperature:** 72-78°F (22-26°C)
- **Nighttime temperature:** 66-72°F (19-22°C)

A cluster of two 40w white incandescent bulbs such as the [Exo Terra Daytime Heat Lamp](#) should be plenty to achieve the basking temperatures that you need for a leachie gecko. However, exact results will vary based on your room temperature. If you notice that the basking area is too warm, dial down the heat down with a rheostat or switch to lower wattage bulbs. If your basking area is too cool, you will need higher wattage bulbs.

The basking area should be a sturdy branch directly under the heat lamp. Because your leachie gecko is arboreal and will be living in a tall enclosure, the warmest temperatures will be at the top (near the heat lamp), and the coolest temperatures will be toward the bottom. You will need thick vines, branches, and foliage at all levels to allow for proper thermoregulation. **Leachie geckos are very sensitive to heat stress, and require access to areas of cooler temperatures in order to stay healthy!**

To track basking temperature, use a digital probe thermometer, with the probe zip-tied to the basking surface under the heat source. Most reptile-brand digital probe thermometers function well.

Humidity

Leachie geckos do best in a high-humidity environment, with an **average humidity of 60-80%** as measured by a digital probe hygrometer with the probe placed in the middle of the enclosure. Humidity levels that are consistently too high or low can cause health problems for your gecko. However, it is natural for humidity to be lower in the warm area and higher in the cool area. It is also normal and healthy for humidity levels to rise at night and fall during the day. Levels as low as 50% during the day and 100% at night are fine.

To raise the humidity in your gecko's enclosure (and provide an extra source of drinking water), use a pump-style pressure sprayer such as the [Exo Terra Mister](#) to wet down the enclosure every evening, and again in the morning if needed. Alternatively, you can automate this process by installing an automatic misting system such as [Mistking](#).

Substrate

Because leachie geckos are arboreal (tree-dwelling), they don't spend much time on the ground. Although it's not necessary to use bedding for them, it's very useful for helping to stabilize humidity. It also acts as a cushion if they fall from their perch, which does happen occasionally.

It's best to use a moisture-retentive substrate that is similar to the soil in a leachie gecko's natural habitat. Here are some reliable options: [Lugarti Natural Reptile Bedding](#), [Zoo Med Reptisoil](#), [Zoo Med Eco Earth](#), [Exo Terra Plantation Soil](#), [The Bio Dude Terra Fauna bioactive kit](#). Alternatively, you can create your own tropical mix with 60% organic topsoil, 40% coconut fiber.

For best results, add a generous layer of leaf litter on top.

Feces and urates should be removed daily, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced once every 3-4 months, depending on your needs.

Décor

Decorations play a vital role in your gecko's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nicer! Without décor, your terrarium is just a glass box with dirt

and a feeding ledge. Just because leachie geckos can climb up glass doesn't mean they shouldn't have other climbing materials available. They also need places to hide that are not on the ground.

Branches, braided vines, magnetic ledges, cork hollows, and live or artificial foliage work well as décor in a leachie gecko terrarium. Arrange these items in a way that encourages your gecko to climb and explore, and provides a variety of options for places to sleep during the day.

Food

Leachie geckos are *omnivores*, which means that they need a balanced diet of both plant- and animal-based foods to get the nutrition that they need. In the wild, they eat mostly fruit and insects. How often leachie geckos need to eat in captivity depends on age:

- **Juveniles (0-12 months)** — CGD daily, insects every other day
- **Adults (>12 months)** — CGD every other day, insects 1-2x/week

Crested gecko diet (CGD) must be offered via a wall-mounted feeding ledge, not placed on the ground. Personally I prefer magnets to suction cups.

Best crested gecko diet powders: Pangea, Repashy, Black Panther Zoological, Leapin' Leachie, Zoo Med, Lugarti

Best feeder insects for leachie geckos: crickets, dubia roaches, discoid roaches, grasshoppers/locusts

Pinky mice and small lizards such as house geckos can be used as occasionally (<1x/month) treats.

The key to providing a healthy, balanced diet for your pet is VARIETY. Provide as varied of a diet as you possibly can, and you will be rewarded with a healthier pet that always looks forward to mealtime. I prefer to use a rotation of at least 3 different kinds/flavors of CGD.

Supplements

Crested gecko diet is already fortified and balanced with a variety of vitamins and minerals. However, feeder insects need to be "dusted" with a light coating of calcium powder to balance the calcium-phosphorus ratio.

There are many options, but Arcadia CalciumPro Mg or Miner-All Outdoor are both solid calcium supplements. For best results, use as directed by the label.

Drinking Water

Although your gecko will get drinking water from daily mistings, it's best to always keep a bowl of clean water available on the feeding ledge. This bowl should be scrubbed out with veterinary disinfectant weekly for good hygiene.