

Chinese Cave Gecko (*Goniurosaurus* sp.)

Difficulty: Moderate

Chinese cave geckos are a group of 13 species of geckos under the genus *Goniurosaurus*. All of them are nocturnal, insectivorous, semi-arboreal lizards native to Asian from northeast Vietnam through southwest China to Japan. They prefer primary and secondary forest habitats with small bodies of moving water near rock formations.

These geckos range from as small as 5.5" to as long as 9.5" (14-24cm). Although exact appearance varies by species, there are some consistencies across the *Goniurosaurus* genus: orange/red eyes, vertical pupils, eyelids, bumpy skin, pink-gray belly, no sticky toes, and a subtly segmented tail. Coloring is generally dark brown to black with white and/or yellow markings. Most have a banded pattern on the body, but some have stripes and others are almost completely patternless.

G. hainanensis is the most common Chinese cave gecko species in the pet trade, but there are others available. They tend to be fairly hardy pets, but this is not an excuse to slack on their husbandry. If you pay attention to providing high-quality Chinese cave gecko care, you may expect your pet to enjoy a lifespan of 10-12+ years.

Shopping List

- Front-opening 24"L x 18"W x 18"H terrarium, preferably larger
- 40w white incandescent heat bulb
- 12" Zoo Med Naturalistic Terrarium Hood
- Small heat mat
- On/off (proportional) thermostat
- Arcadia ShadeDweller UVB kit
- Power strip with digital timer
- Digital probe thermometer/hygrometer
- Handheld pump sprayer
- Coconut fiber substrate, 15+ quarts
- Leaf litter
- Hides/caves, x2
- Terrarium wall covering, preferably textured
- Environmental enrichment
 - live tropical plants
 - branches
 - cork hollows
 - cork flats
- Food and water dishes
- Calcium powder supplement with low vitamin D
- Multivitamin powder supplement
- Veterinary disinfectant

Housing

Chinese cave geckos need an enclosure that is large enough to give them adequate opportunity to explore, hunt, and generally exercise natural behaviors. Considering that a Chinese cave gecko can grow up to 9.5"/24cm long, the minimum recommended enclosure size for housing a single animal is 24"L x 18"W x 18"H / 60 x 45 x 45cm or similar. However, larger is always better!

Can multiple Chinese cave geckos be housed in the same enclosure?

Yes, but it's not required for their wellbeing. Females can be successfully housed in groups, although you should have a spare enclosure on hand in case separation becomes necessary due to severe conflict. Males don't get along as a rule, so it's best never to house them together. Females should not be housed with a male unless you intend to breed.

A 24x18x18 enclosure can house a pair of geckos, while a 36x18x18 (90 x 45 x 45cm) enclosure can house up to 4.

Lighting & UVB

Chinese cave geckos are nocturnal, which means that they are primarily active at night. However, they still need a light on during the day to help regulate their day/night cycle. Lights should be left on for 12 hours/day.

UVB Lighting

Because they are nocturnal, technically Chinese cave geckos can survive without UVB lighting as long as they get plenty of supplemented vitamin D3. However, you are still going to get the best results from using UVB lighting rather than relying on supplements.

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 Chinese cave gecko in an 18" tall enclosure, you will need one of the following:

- Arcadia T5 SO ShadeDweller Max kit — 6-8" / 15-20cm
- Arcadia T5 SO ShadeDweller kit — 8-12" / 20-31cm

The recommended distances listed above are to be measured from the gecko's back to the UVB lamp. The bulb itself should be roughly 1/2 of the enclosure's length, no more than 2/3. These UVB bulbs must be replaced every 12 months in order to remain effective.

(These recommendations are approximations. It is strongly recommended to use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 1.0-2.0 in the basking area at the top of the enclosure.)

Heating

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- Arcadia T5 SO ShadeDweller Max kit — 4-8" / 10-20cm
- Arcadia T5 SO ShadeDweller kit — 8-10" / 20-25cm

The recommended distances listed above are to be measured from the gecko's back to the UVB lamp. The bulb itself should be roughly 1/2 of the enclosure's length, no more than 2/3. These UVB bulbs must be replaced every 12 months in order to remain effective.

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Humidity

Chinese cave gecko humidity levels should be maintained between 50-90%, being lower during the day and higher at night. Ambient humidity should be tracked via digital probe hygrometer with the probe placed in the middle of the setup.

To raise the humidity in your enclosure, you can use a pressure sprayer like the Exo Terra Mister to mist the habitat every evening and morning, as well as possibly in the middle of the day. Alternatively you can install a Mistking automatic misting system. The enclosure should be well ventilated enough to dry out a bit between mistings.

It's good practice to use a reptile humidifier/fogger at night to help maintain high nightly humidity levels. Make sure to use reverse-osmosis or distilled water, and thoroughly clean out and sanitize the humidifier with veterinary-grade disinfectant like Rescue or F10SC weekly to prevent illness.

A "humid hide" containing moistened substrate should be available in the middle to cool end of the enclosure at all times. Check this hide daily for mold and clean/replace substrate material/remoisten as needed.

Substrate

Substrate is an important part of a Chinese cave gecko terrarium because it helps maintain humidity. It's best to use a moisture-retentive substrate that is similar to the soil in the gecko's natural habitat.

Here are some reliable options: DIY tropical mix (60% organic topsoil + 40% coconut fiber), Zoo Med Reptisoil, Zoo Med Eco Earth, Exo Terra Plantation Soil, The Bio Dude Terra Firma bioactive kit, Josh's Frogs Tropical BioBedding bioactive kit

Only 2-3" / 5-7cm should be needed, unless you are planting live plants directly into the substrate. Then 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!

Here are some ideas to get you started: cork hollows, cork flats, commercial hides/caves, flat rocks, low sturdy branches, live tropical plants, bark background panels

Arrange these items in a way that encourages your gecko to climb and explore, and offers plenty of shade/hiding opportunities.

A bioactive setup with live plants is a good way to help maintain healthy humidity levels, but keep in mind that this also requires specialized substrate, CUC microfauna, and ~6500K LED plant lighting, as well as unique maintenance requirements.

Food

Chinese cave geckos are insectivores, which means that they need a varied diet of insects to get the right nutrition. Juvenile cave geckos should be fed daily, and full-grown adults should be fed every other day. Offer as many insects as the gecko is capable of eating in a 15-minute period, with each feeder being no larger than the gecko's head.

Best feeder insects for Chinese cave geckos: crickets, dubia roaches, discoid roaches, mealworms, hornworms, silkworms, black soldier fly larvae

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.

Supplements

Feeder insects need to be “dusted” with a light coating of calcium powder before every feeding to balance their calcium-phosphorus ratio, and adding a multivitamin to the routine helps prevent deficiencies from developing.

There are many options, but Repashy CalciumPlus LoD is a solid all-in-one supplement for getting started. For best results, use as directed by the label.

Drinking Water

Although your gecko will likely get drinking water from routine mistings, it's best to always keep a bowl of clean water available. This bowl should be scrubbed out with veterinary disinfectant such as [Rescue](#) or [F10SC](#) weekly for good hygiene.