



*Photo Credit: Rob Hoke/Herpetoculture Magazine

Cave Geckos (*Goniurosaurus* spp.)

Velvety and Vibrant!

Also sometimes known as the “Asian geckos”, cave geckos are a genus of relatively small to medium sized terrestrial geckos with brightly colored patterns and appearances that can vary tremendously depending upon the species. Species maintained in captivity can include *Goniurosaurus hainanensis*, *Goniurosaurus lichtenfelderi*, *Goniurosaurus luii*, *Goniurosaurus araneus*, *Goniurosaurus catbaensis*, *Goniurosaurus bawanglingensis*, *Goniurosaurus huuliensis*, *Goniurosaurus orientalis*, *Goniurosaurus splendens*, *Goniurosaurus yamashinae*, and *Goniurosaurus kuroiwae*. Cave geckos can vary greatly in their colors and appearances, although most species have vibrant reddish to reddish-orange eyes and irises, and a ground color ranging from blackish, dark brown, to bluish black, or purpleish-black with variable amounts of yellowish, orangish or yellowish-orange, to white or cream colored dorsal bands and/or stripes sometimes thickly bordered with black. There may also often be dark mottling on the skin and head as well. Although relatively little is still known about the habits and natural history of these geckos in the wild, they have quickly become an increasingly popular and sought after species to maintain in captivity, as they have proven to be not overly difficult to maintain and enjoy.

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: Gekkonidae

Subfamily: Eublepharinae

Genus: *Goniurosaurus*

Species: *Goniurosaurus* spp.*

*Taxonomy subject to change and revision.

Lifespan and Longevity

Although this species' lifespan and longevity is still uncertain, if provided the proper care, cave geckos can potentially attain longevity of 10 to 12 years or more as pets.

Distribution and Habitat

Cave geckos are nocturnal and crepuscular species, and as their common names may imply, are found within primarily terrestrial environments and habitats, including caves, rocky and semi-arid deserts and scrublands, and savannahs of eastern to southeastern Asia, including China, Vietnam, Japan, and surrounding countries. Their range is also dependent upon the exact species as well.

Origin/History

Goniurosaurus hainanensis Barbour, 1908.

Since the 1990s, cave geckos could often be found at various reptile shows or online animal shops. They are the only *Goniurosaurus* species regularly available in the commercial pet trade, and captive bred individuals have become the standard for potential owners. Wild populations of *Goniurosaurus* spp. are threatened by poaching and other environmental threats.

Experience Level Required

Intermediate/Moderate.

Size

Cave geckos range from about 3.5 to 4.5 inches in total snout-to-tail length as hatchlings, and about 8.0 to 10.0 inches as adults in total snout-to-tail length. Some species can become slightly larger as well. Snout-to-vent length varies depending upon the exact species, but ranges from about 3.9 to 5.1 inches snout-to-vent length (SVL).

Housing and Enclosure

Enclosure System: Primarily Terrestrial. Housing must be sealed and escape proof. Hatchling and juvenile cave geckos can be housed in a 5 to 10 gallon or similar sized terrarium or enclosure, while adults will require at least a 20 gallon long enclosure. Up to a 30 or 40 gallon long enclosure may be used depending on the species and number of animals housed. These active, nocturnal to crepuscular geckos are primarily terrestrial, and floor space is more important than height. Provide a substrate that holds humidity reasonably well but is not readily ingestible such as crushed walnut shells, cypress mulch, or other natural bark substrates. Provide a hide box and artificial foliage, driftwood, rocks, or logs for ample basking and hiding opportunities. A humid hide can also be provided for additional humidity. For moisture, provide a small bowl or dish of fresh water two to three times per week and mist once to twice weekly.

Temperature, Lighting, and Humidity

Create a thermal gradient, or a warm side to the enclosure, and maintain these geckos at ideal temperatures ranging from 65 to 75 degrees F on the cool side and ambient temperatures, and 75 to 80 degrees F on the warm, basking side, but do not exceed 80 degrees F for prolonged periods of time. Cave geckos are primarily crepuscular to nocturnal, 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). 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. Maintain these geckos at a rotating 50 to 90% levels of humidity. 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

Insectivorous; In the wild, cave geckos are primarily insectivorous, meaning they eat insects and other invertebrates. In captivity, feed cave geckos a variety of appropriately sized feeder insects such as crickets, roaches, mealworms, superworms, and waxworms. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. Cave geckos also require additional calcium and vitamin D3 supplementation 1 to 2 times weekly or as otherwise directed 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

Most cave geckos are generally shy species of geckos that should be provided ample hiding opportunities and are usually not tolerant of frequent or prolonged levels of handling and interaction. If they are handled, be sure to do so gently and deliberately, but do not drop or injure the animal. Do not grab your gecko by its tail or it may detach if they perceive you as a predator or threat. Adult cave geckos may settle down somewhat and become at least somewhat less shy and more easily handled. Allow them to walk in between or from hand to hand.

****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**