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Western Banded Geckos (*Coleonyx* spp.)

Native Geckos of the Southwest

Western banded geckos are a genus of small to medium sized, primarily nocturnal to crepuscular genus of geckos found in dry, rocky arid to semi-arid environments of the southwestern United States and northern Mexico. Approximately seven (7) subspecies are recognized, and several with additional subspecies and localities. Unlike most other gecko species, banded geckos are fairly small, terrestrial geckos lacking enlarged toe pads and have moveable eye lids. Ground color for most species ranges from a cream to pale yellow or sandy yellow with several rows of darker brown to pinkish brown banding, speckling, and/or mottling. As with several other species of geckos found elsewhere in the world, banded geckos also have a thick fleshy tail that are used to store fat during prolonged dry periods. Their tails can also be lost through caudal autotomy as a means of startling and/or distracting predators long enough for the gecko to escape. Within several weeks to months, a new tail will then regrow, but will remain somewhat more vestigial and limited in function. As with many other geckos, banded geckos are also able to vocalize by creating squeaking or clicking sounds when they are defensive, handled, or become territorial. Banded geckos are a small, docile genera of geckos that can be kept readily in captivity and do well overall for the beginning to intermediate 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: Gekkonidae

Subfamily: Eublepharinae

Genus: *Coleonyx*

Species: *Coleonyx* spp.*

*Taxonomy subject to change and revision.

Lifespan and Longevity

If provided the proper care, banded geckos can attain longevity of 8 to 12 years or more.

Species

There are nine (9) species of banded gecko, with the most commonly recognized species being the Texas banded gecko (*C. brevis*), Yucatan banded gecko (*C. elegans*), Reticulated banded gecko (*C. reticulatus*), and western banded gecko (*C. variegatus*).

Distribution and Habitat

The banded geckos are a genus of small to relatively medium sized, terrestrial geckos indigenous to the western and southwestern, to extreme south-central United States, through Mexico, and into much of Central America, including Guatemala, Belize, and to Costa Rica. Within this range, banded geckos occupy primarily terrestrial environments including dry, semi-arid and/or rocky grasslands, scrublands, open forests and savannahs, and semi-deserts, where they shelter during the day underneath rocks, other debris, or in burrows.

Origin/History

Coleonyx spp. Gray, 1845; Coleonyx brevis Stejneger, 1893; Coleonyx reticulatus Davis & Dixon, 1958; Coleonyx variegatus (Baird, 1858). Subspecies would have a few other first describing authors and years.

There is not much specific information available as far as when any of the Coleonyx species of geckos first were kept or first entered the herpetocultural hobby. However, they have likely been present for several decades since at least the 1960's or 1970's when other Eublepharid geckos (such as leopard geckos) also became popular. These American geckos have since had a relatively strong following of reptile keepers and enthusiasts maintaining the several different species and subspecies in captivity.

Experience Level Required

Novice/Beginner to Intermediate/Moderate.

Size

Banded geckos range from about 1.5 to 2.5 inches in total snout to tail length as hatchlings, and seldom more than 3.5 to 6.5 inches as adults in snout to tail length depending on the species. Maximum snout-to-vent length varies somewhat depending on the species, but ranges from 3.0 to 4.7 inches (SVL).

Housing and Enclosure

Enclosure System: Primarily Terrestrial. Housing must be sealed and escape proof. Hatchling banded 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. 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 play sand mixtures, crushed walnut shells, or 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 75 to 80 degrees F on the cool side and ambient temperatures, and 88 to 90 degrees F on the warm, basking side. Banded 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. 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. Banded geckos should be maintained at relatively low to moderate humidity levels of 40 to 55 %, with an additional humid hide being strongly recommended.

Feeding, Diet, and Nutrition

Insectivorous; In the wild, banded geckos are primarily insectivorous, meaning they eat insects and other invertebrates. In captivity, feed banded 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. Banded 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

Many banded geckos are generally tolerant of moderate levels of handling and interaction even as juveniles. Handle your gecko 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. Most adult banded geckos will settle down considerably and become quite docile and 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

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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.

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