



Terrestrial Caecilians *(Order Apoda/Gymnophiona)*

Limbless Oddities!

Caecilians are a lesser known group of elongated, limbless, wormlike or snakelike amphibians found primarily in tropical to sub-tropical regions worldwide except Antarctica. Species may occur in tropical to sub-tropical regions of the southern United States, Mexico and Central America through much of South America, western and eastern Africa, southern to southeastern Asia, and New Guinea. Most caecilian species have only vestigial eyes designed to detect changes in photo sensory methods (changes between light and dark) and ringed annuli along their bodies to also acting as a lateral sensory system. Most species of caecilians are elongated and limbless with vestigial eyes, and range in color from dark grayish, olive gray, to blackish, or pinkish, bluish, to greenish in color. There are over 155 recognized terrestrial caecilian species found throughout the world, although only a few species are commonly kept in captivity. These include the Cameroon Blue Caecilian (*Herpele squalastoma*) and West African/Gaboon Caecilian (*Geotrypetes seraphini*).

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Amphibia

Order: *Gymnophiona/Apoda*

Families: Caeciliidae, Chikilidae, Dermophiidae, Herpelidae, Ichthyophiidae, Indotyphlidae, Rhinatrematidae, Scolecomorphidae, and Siphonopidae

**Taxonomy subject to change and revision.*

Lifespan and Longevity

If provided the proper care, terrestrial caecilians have the potential of reaching anywhere from 5 to 20 years or more in captivity, although their maximum lifespan remains under study.

Distribution and Habitat

Terrestrial caecilians occupy many tropical to sub-tropical areas throughout the world depending on the species. They may, most generally, be found in humid, moist, tropical rainforests, woodlands and forests, swamps, savannahs, grasslands, to agricultural areas of Mexico, through Central America and South America, tropical western, central, and eastern Africa, through southern to southeastern Asia including south China to Vietnam, New Guinea, and New Zealand.

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Conservation Status

Conservation status dependent upon the species. Some species are IUCN Least Concern (LC). Some are IUCN Near Threatened (NT), Conservation Dependent (CD), Vulnerable (VU), Endangered (EN), to Critically Endangered (CE). Some Not Evaluated for the IUCN Red List (NE) or otherwise Data Deficient (DD).

Experience Level Required

Intermediate/Moderate to Advanced.

Size

Terrestrial caecilians can vary considerably in size depending on the species. Most typically range from 5 to 18 inches, although the largest species may be up to 4 ½ to 5 feet (54 to 60 inches).

Housing and Enclosure

Terrestrial caecilians should be provided a secure, escape proof aquarium or terrarium. Provide a 50/50 split enclosure for most terrestrial caecilians consisting of an aquatic area and a burrowing area with appropriate substrate. A minimum of a 10 to 30 gallon long aquarium or terrarium or larger is of sufficient size depending on the number and species of caecilians being housed. Most terrestrial caecilians rarely, if ever climb, and floor space is more important than height. They can be housed in pairs or multiples provided adequate food and hiding opportunities are provided, and they are monitored. In general, it is also preferable that any caecilians not be housed with fish, since they may compete for food and resources as well as possibly predate upon one another depending on their sizes and circumstances. Water clarity and quality as well as sufficient water temperatures should be monitored and maintained for any caecilians.

Pesticide and chemical free potting soil, peat moss, sphagnum moss, and coconut fibers are acceptable substrates that should be provided in at least 8 to 12 inches to allow for burrowing. Other furnishings to increase safety and security in the enclosure can also be provided, including live plants, rocks, slabs, cork bark, logs, and other suitable hides. Any live plants in the enclosure should be firmly and securely planted to prevent uprooting. Regular misting can also help maintain hydration and humidity. Humidity for most species should remain at around 70 to 80%.

Temperature, Lighting, and Humidity

Terrestrial caecilians have 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. Terrestrial caecilians otherwise do not require any other special lighting or heating unless live plants are also maintained, although water temperatures should be maintained at around 70 to 80 degrees F. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, submersible water heater, or UTH (under tank heating element). They are susceptible to health and husbandry related issues if enclosure temperatures are too cold or too warm for these unusual amphibians. 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

Primarily Carnivorous; Depending on the species, caecilians in the wild are primarily carnivorous to scavengers, feeding on insects, earthworms, other invertebrates, small fish, other small amphibians, and carrion, or dead and decaying animal matter. In captivity, terrestrial caecilians can be fed daily to every other day, and will consume appropriately sized feeder fish, redworms, bloodworms, earthworms, crickets, mealworms, and other feeder insects and larvae,

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as well as some commercially available pelleted fish foods of appropriate nutritional value. Any uneaten foods should be cleaned or removed regularly to maintain water clarity and quality. Ensure that any live foods given are also supplemented with calcium and vitamin D3 for the caecilian's optimal health and well-being. 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

Although rarely aggressive or willing to bite, terrestrial caecilians are delicate and sensitive skinned amphibians that should not really be handled frequently, and are more suitable for viewing. Use a suitable sized aquarium net to move any caecilians when cleaning the enclosure or whenever otherwise necessary.

****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

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.

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