



*\*Photo Credit: African Snakebite Institute*

## African File Snakes (*Gonionotophis/ Limaformosa* spp.)

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### **Out of Africa with a VERY Unique File!**

Also sometimes known as the African ground snakes, the African file snakes are relatively medium sized to large, old world snake species indigenous to central, southern, and eastern, to southeastern Africa. These unique snakes, which consist of approximately six species in the genus, as well as several other related species in two or three additional genera, earn their names of “file” snakes due to their highly triangular bodies in cross-section, and their heavily keeled scales and rather elongated and flattened heads, giving them both the appearance and texture of files. Coloration can vary somewhat depending on the species, although typically, file snakes range in color from a uniform blackish to grayish, dark purplish, or grayish brown, or reddish-brown often with a whitish or lighter colored dorsal stripe or keel that is more prominent on younger or juvenile specimens. The eyes also tend to be fairly small as well.

These snakes are primarily nocturnal to crepuscular, and are also rather secretive and semi-fossorial, often burrowing into semi-humid burrows and other retreats during the day. Although these unique snakes are still not quite as widespread in popularity as many other species, the African file snakes have still been making an increasingly noticeable presence in the reptile hobby and industry, and, for the more intermediate level enthusiast looking to try their hand at keeping and breeding yet another underrated and underworked with species, these snakes may be right up one’s ally!

### **Taxonomy**

**Life:** All living, physical, and animate entities

**Domain:** Eukaryota

**Kingdom:** Animalia

**Phylum/Sub Phylum:** Chordata/Vertebrata

**Class:** Reptilia

**Order:** Squamata

**Suborder:** Serpentes

**Infraorder:** Alethinophidia

**Family:** Lamprophiidae

**Subfamily:** Lamprophiinae

**Genus:** *Gonionotophis*

*\*Formerly *Limaformosa*, *Mehelya*, and *Heterolepis**

**Species:** *Gonionotophis/ Limaformosa* ssp.\*

*\*Taxonomy subject to change and revision.*

## **Species**

Approximately six species are currently recognized within the genus *Gonionotophis*, with the Cape File Snake (*G. capensis*) perhaps being the most commonly available species in the reptile industry. Other species which may also be occasionally, but less often seen include the Unicolor File Snake (*G. chanleri*), Crosse's File Snake (*G. crossi*), Mocquard's File Snake (*G. guirali*), Congo File Snake (*G. savorgnani*), and Angolan File Snake (*G. vernayi*). A few other additional species and genera have also been shifted around taxonomically as well. Species placed in the *Mehelya* genus include: Dunder's File Snake (*M. egbensis*), Gabou File Snake (*M. gabouensis*), Unnamed File Snake (*M. laurenti*), Western File Snake (*M. poensis*), and Small Eyed File Snake (*M. stenophthalmus*).

## **Lifespan and Longevity**

With the proper and correct care, African file snakes can be expected to attain longevity of at least 15 to 20 years or more in captivity.

## **Distribution and Habitat**

Depending on the precise species and genus, African file snakes range from central, to southern, eastern, and southeastern Africa, from northern Namibia, through Zambia, Botswana, Zimbabwe, and Mozambique, south through South Africa, Swaziland, northwest and northeastward all of the way to Cameroon and Somalia, respectively. Within this broad range, file snakes are primarily terrestrial to semi-fossorial, being found in semi-humid burrows, leaf litter, rocks, logs, and other ground debris, or other areas of suitable vegetation in semi-dry to semi-tropical savannahs, coastal forests and woodlands, to human habitations and agricultural or cultivated areas within this range.

## **Origin/History**

*Limaformosa* spp. Broadley, Tolley, Conradie, Wishart, J.-F. Trape, Burger, Kusamba, Zassi-Boulou & Greenbaum, 2018; *Gonionotophis* spp. Boulenger, 1893. Different species would have other authors and years first describing them.

It is unclear as to how long African file snakes have been in the pet trade, although most that are available are wild-collected. They would often be heavily parasitized, and would require deworming in order to thrive. True captive breeding of the African file snakes has been achieved, although babies born from wild-collected gravid females would be more common. Babies would also not be easily started in captivity.

## **Experience Level Required**

Intermediate/Moderate.

## **Size**

As adults, African file snakes can be expected to reach lengths of approximately 3 to 5 ½ feet, or 36 to 66 inches. Hatchlings may be about 10 to 16 inches in length.

## **Housing and Enclosure**

***Enclosure System: Primarily Terrestrial to Semi-Fossorial.*** Housing must be sealed, secure, and escape proof. Hatchling and juvenile African file snakes can be housed in a 15 to 20 gallon terrarium or enclosure. Adult file snakes should be housed in a minimum of a 40 to 55 gallon long terrarium or similar sized enclosure. File snakes are primarily terrestrial, and floor space is more important than height. Provide a substrate that can enable burrowing or hiding such as peat or sphagnum moss, cypress mulch, or coconut fibers that retain humidity well. Do not use pine or cedar shavings, as these substrates are toxic to snakes. Provide additional basking and hiding

opportunities using live or artificial foliage, rocks, logs, driftwood, or other hides. Also be sure to include a sturdy water bowl or dish as well. Overall humidity should be about 60-70% for these species.

### **Temperature, Lighting, and Humidity**

Create a thermal gradient (or a warm side) in the cage/enclosure with an appropriate sized UTH (or tank heating pad), ceramic or radiant heat emitter, or incandescent, UVA/UVB, or other heat producing bulb. Ideal temperatures for African file snakes range from about 68 to 75 degrees F on the cool side, as well as for ambient temperatures, and about 75 to 80 degrees F on the warm side. Night lamps and heating can also be used for viewing these species at night when they are most active. Most species of snakes have fairly simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it can be greatly beneficial for their health, immune system, and overall wellness. Also be sure to spot clean the enclosure for urates, feces, or uneaten food at least once 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. African file snakes can be maintained at moderate to somewhat high relative humidity levels from about 60 to 80%, with additional humid hides or retreats to assist with shedding and overall health.

### **Feeding, Diet, and Nutrition**

***Carnivorous;*** In the wild, African file snakes are carnivorous, and will prey upon a variety of smaller vertebrates they can catch and consume, including other snakes, lizards, rodents and other small mammals, small birds, bird eggs, and other smaller vertebrates. They will also include venomous snakes amongst their diets as well, and as with other snake eating species, have developed a resistance to the venoms of these snakes. Hatchlings and juveniles will also occasionally eat smaller frogs, lizards, or other reptiles. In captivity, African file snakes can be given feeder rodents of appropriate size, such as rats or mice, although hatchlings of these species may need to be started off initially with some other alternative feeder sources, such as lizards and/or inexpensive and culled feeder snakes to replicate their ophiophagous, or largely snake eating tendencies.

In most circumstances, African file snakes can be switched over to rodents, and it is recommended to provide humanely pre-killed rodents acquired from a reputable source, as offering live rodents to any snake can carry risk of serious injury or even death to your snake when the rodent bites to defend itself or otherwise gnaws on your animal. A general rule of thumb when selecting feeder rodent sizes for your snake is to provide prey items that are approximately the same width as the snake's widest point. It should also be noted that many snakes may refuse food for longer periods of time over several weeks or months, especially in the fall and winter months or if several other husbandry conditions are not being met. While this can be alarming to new pet owners, it is oftentimes normal, but their overall health and weight should be monitored during these times to make sure they do not lose weight or otherwise deteriorate. Most snakes typically are fed whole prey items, and do not usually require additional calcium or vitamin D3 supplementation unless otherwise directed. Their feeding frequency will also 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**

While not typically aggressive species, and which are usually not willing to readily bite, African file snakes can be shy snakes that can become stressed with overhandling. Some of the defensive

behaviors of these species can include secreting a noxious smelling musk and feces when disturbed, and/or forming a loose ball with their coils, and hiding their heads amongst/underneath them. While not venomous, African file snakes are generally not the most handleable or hands on species to work with and keep in captivity.

**\*\*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:

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