



**Photo Credit: Don Schmidt*

Sunbeam Snake *[Xenopeltis unicolor]*

Like Beams of Light

Sunbeam snakes are a species of harmless, nonvenomous snake belonging to their own monotypic family, and genus, *Xenopeltis* that consist of presently three species. They are a relatively primitive, fossorial genus of snakes with somewhat flattened, wedge shaped heads designed for burrowing and little to no neck delineation. Ground color ranges from a solid dark brown to blackish, with highly iridescent scalation, which lends to this species' common name. Juveniles for the most part appear similar to adults, except with more prominent whitish to cream colored scales on the nape forming a ring. Unfortunately, sunbeam snakes are not currently frequently kept or bred in captivity, with most specimens that are available being of wild caught or imported origin. Sunbeam snakes are very secretive, nocturnal to crepuscular snakes found in dark, moist, and humid microhabitats including under rocks, logs, leaf litter, and other natural or artificial vegetation and debris, making them exceptionally unusual and intriguing snakes to maintain for the intermediate level enthusiast.

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: Xenopeltidae

Genus: *Xenopeltis*

Species: *Xenopeltis unicolor**

**Taxonomy subject to change and revision.*

Lifespan and Longevity

Captive longevity is uncertain, as many specimens reach early mortality. However, they likely can attain captive longevity of at least 10 to 15 years or more with proper care and captive breeding techniques.

Distribution and Habitat

Sunbeam snakes primarily terrestrial to fossorial species of snakes which are indigenous to the humid, moist microhabitats of southern to southeastern Asia, including China, Indonesia,

Myanmar, Laos, Cambodia, Thailand, Malaysia, Sumatra, Java, the Philippines, and surrounding countries. They occupy open woodlands and clearings, gardens and residential areas, and agricultural areas such as rice paddies within this range.

Origin/History

Xenopeltis unicolor Reinwardt, 1827.

While it is unclear as to when sunbeam snakes first entered the herpetocultural hobby, they would not often be captive-bred but rather heavily imported. This made these snakes susceptible to overstress and improper environmental conditions during shipping and transport at their wholesale facilities. However, specimens which survive importation would be able to acclimate relatively well if properly housed. They would still, however, be difficult to breed in captivity.

Experience Level Required

Intermediate/Moderate to Advanced.

Size

Most adult sunbeam snakes reach approximately 3 feet, or 36 inches, with some specimens occasionally reaching larger sizes.

Housing and Enclosure

Enclosure System: Fossorial to Somewhat Terrestrial. Housing must be sealed and escape proof. Hatchling and juvenile sunbeam snakes can be housed in a 10 gallon terrarium or enclosure. Adult sunbeam snakes should be housed in a minimum of a 20 to 30 gallon long terrarium or enclosure. Sunbeam snakes are highly fossorial and thus should be provided with at least 6 to 8 inches of substrate medium to allow burrowing, and to maintain adequate humidity levels. Substrates that can work well for this species can include cypress mulch, orchid bark, sphagnum moss, or peat moss. Substrate should be kept moist and be prevented from drying out, but also not be overly wet. Do not use pine or cedar shavings, as these substrates are toxic to snakes. Provide a shallow water bowl or dish and additional hide box at all times in the enclosure as well. Artificial foliage, driftwood, and other cage furnishings can provide additional hiding and basking opportunities. Floor space is more important than height since sunbeam snakes are primarily terrestrial and fossorial.

Temperature, Lighting, and Humidity

Create a thermal gradient (or a warm side) in the cage/enclosure with an appropriately sized UTH (or tank heating pad), ceramic or radiant heat emitter, or incandescent, UVA/UVB, or other heat producing bulb. Ideal temperatures for sunbeam snakes range from 75 to 80 degrees F on the cool side and 80 to 88 degrees F on the warm side. 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. Sunbeam snakes require high relative humidity, and should be maintained at 80 to 100% relative humidity overall. Providing sufficient humid hides or retreats can also assist with shedding and overall health. 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.

Feeding, Diet, and Nutrition

Carnivorous; In the wild, sunbeam snakes are carnivorous, and will prey upon rodents and other small mammals, smaller reptiles, amphibians, and other small vertebrates. In captivity, sunbeam snakes can be given feeder rodents of appropriate size, such as rats or mice, although they may require scenting. In most circumstances, 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

Sunbeam snakes are a species which can become stressed quite easily due to handling, on top of the importation and transportation process if recently imported. Due to this, providing solitude and limited handling is best recommended with regards to sunbeams. When they are threatened or disturbed, they may thrash about, emit a vile, noxious smelling musk while defecating to deter predators, rapidly vibrate their tail tips to create an audible buzzing sound, and/or try to bite when handled. However captive bred and born animals, and those that fare importation can acclimate fairly well to 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

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