

\*Photo credit: Smithsonian's National Zoo.

# Tentacled Snake (Erpeton tentaculatum)

# **Aquatic Oddities**

Tentacled snakes, which are also known as simply the tentacle snakes, are a highly unusual species of strictly aquatic, rear-fanged (or ophistoglyphous) colubrid snake found in southeastern Asia. Perhaps the most notable feature of this unusual species are its pair of extended, fleshy appendages at the end of their snouts. Although the function and purpose of these "tentacles" is not yet fully clear or understood, it is most widely believed that they serve as external mechanosensory organs in their murky, aquatic environments. Tentacled snakes are relatively small to medium sized, dorso-ventrally flattened snakes with wide, flattened heads, and can range in color from light to dark grayish, brown, or tan, and may be seen in blotched or striped phases. Being a fully aquatic species, tentacle snakes seldom if ever come onto land, and during times of harsh conditions, may aestivate in the mud or substrate. Tentacled snakes are primarily ambush predators of small fish, and occasionally small, aquatic reptiles and amphibians, and use their semi-prehensile tails to anchor themselves on aquatic vegetation. Tentacled snakes occasionally appear in the pet trade, but captive breeding of this species still remains quite uncommon. For the more intermediate to advanced enthusiast looking for a very unique and different species, the tentacle snake may be the right choice for them.

#### **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: Colubridae/Homalopsidae

**Genus:** Erpeton

**Species:** Erpeton tentaculatum\*

\*Taxonomy subject to change and revision.

## **Lifespan and Longevity**

Captive longevity is also not fully understood, although this species is likely to attain typical colubrid longevity in captivity of at least 10 to 15 years or more.

### **Distribution and Habitat**

Tentacled snakes are a highly unusual species of aquatic snake which occurs in the murky freshwater to brackish water environments of southeastern Asia, from Thailand and Cambodia, to Vietnam. Within this range, these odd species are almost strictly aquatic, and may be found in the murky lakes, slow moving rivers and streams, rice paddies, and brackish water swamps and other freshwater to coastal to brackish wetlands.

#### **Origin/History**

Erpeton tentaculatum Lacépède, 1800.

Unfortunately, little is known about the history of these unusual aquatic snakes in herpetoculture, although they probably have been imported from Indonesia and other areas of their natural ranges for many decades. Captive breeding of tentacled snakes has been achieved in some zoos, but most in the pet trade are probably still imports.

# **Experience Level Required**

Intermediate/Moderate to Advanced.

#### <u>Size</u>

Adult tentacled snakes typically reach and seldom exceed 20 to 30 inches, although some have been known to reach up to 36 inches. This species is ovoviviparous, although the size of neonates and juveniles is not well known.

#### **Housing and Enclosure**

Enclosure System: Primarily Aquatic. Tentacled snakes are strictly aquatic species of snakes, and should therefore be housed accordingly in an aquatic setup. They do not require any dry land space. A single adult tentacled snake can be housed in a 15 to 20 gallon long aquarium, but this species can also be maintained in small groups of up to 4 to 5 snakes in up to a 55 to 60 gallon aquarium. Although they are aquatic, a secure, tight fitting glass or Plexiglas lid that allows for adequate ventilation should still be provided to prevent potential escape. Water depth in the aquarium should be at least 6 to 12 inches in order to provide proper amounts of space for these snakes with at least 6 inches of air space. Maintaining adequate water quality is another important aspect in maintaining these snakes, and a pH of 5.0 to 6.6 should be maintained using an aquarium buffer or conditioner. Testing kits that can monitor for pH, ammonia, nitrate, nitrite, and other water quality aspects can be purchased locally or commercially. These levels should be maintained at as close to zero as possible, although most healthy specimens can tolerate spikes in these ranges. If adequate water quality is not maintained for these snakes, bacterial and/or fungal health issues can arise. Appropriate amounts of nitrite and nitrate balances should also be maintained. A suitable water filtration system is also required for these snakes to maintain sanitary conditions and suitable water clarity and quality. For filtration, a submersible water filter with adjustable flow settings, or sump filters with in-tank overflow bulkheads. Using sump filters to conceal the aquarium heaters are often recommended, as they provide better protection from, and reduces the risk of injury and/or escape.

Additional furnishings should also be provided in the enclosure to provide for suitable hiding and anchoring opportunities for these snakes. In this regard, driftwood, rocks/stones, logs, and/or live or artificial plants can be used, but any furnishings should be securely fastened, anchored, or otherwise of sufficient weight to prevent free floating. Tentacled snakes can be maintained on aquarium gravel or sand, but avoid bright or artificially colored, coral, or aragonite based substrates. Conversely, these snakes can also be maintained on a bare substrate for easier cleaning, maintenance, and regular water changes.

# Temperature, Lighting, and Humidity

For heating, a submersible water heater may be used to maintain water temperatures between 77 and 82 degrees F. Do not allow water temperatures to drastically rise or fall below this gradient.

Additional lighting is not required, although ambient lighting, or florescent lighting can also be used and can greatly benefit the overall health and well-being of these snakes in captivity. Additional incandescent lighting and/or under tank heating elements (UTHs) are typically not necessary if a submersible water heater is used. 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. Overall relative humidity is not as applicable for tentacled snakes, as this species is primarily aquatic.

## Feeding, Diet, and Nutrition

Carnivorous to Piscivorous; Tentacled snakes are almost strictly a piscivorous species in the wild, feeding on small fish, but will also occasionally feed on small aquatic reptiles and amphibians, such as frogs and their tadpoles, if they can capture and consume them. In captivity, tentacled snakes can be fed a variety of live, feeder fish of appropriate size including bettas, rosy barbs, rosy red minnows, South American cichlids, platies, mollies, swordtails, and feeder goldfish. Some of these feeder fish may result in nutritional deficiencies in such as thiamin deficiencies, increased parasite and/or fungal loads, or copper toxicity. Feeding frequency depending on the size of the snake and the size of the fish given and their nutritional content and value, although generally, these species of snakes tend to have higher metabolisms and require more frequent feeding than many other snakes. A feeding regime of at least two to three weekly is recommended. Feeder fish can also be left and maintained in the snake's enclosure as well. 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 the tentacled snake is a rear fanged, and mildly venomous species, their venom is very fish and other prey species specific, and their delivery system is quite primitive and inefficient. While there is always a small chance of developing an allergic reaction to the venom of this, or any such species, some careful and cautious handling is always recommended. For the most part, tentacled snakes should not be considered dangerous or medically significant to humans. These snakes are typically a placid species that very seldom, if ever attempt to bite when handled. However, due to their aquatic habits and physiology, they should be considered more as display animals than those that can be handled frequently. If these snakes are to be handled, which should be done so sparingly, care should be taken to ensure that their musculature and weight is adequately supported when out of the water, to prevent internal and/or external injury, and they do not become desiccated as a result of prolonged handling. Overall, handling these snakes should be minimized to when it may be absolutely necessary, such as moving or transferring them to another enclosure, or periodically examining them for fungal or other health related issues.

\*\*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

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