

Ophichthus ophis (Spotted Snake Eel)

Family: Ophichthidae (Snake Eels)

Order: Anguilliformes (True Eels and Morays)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Spotted snake eel, *Ophichthus ophis*.

[<https://biogeodb.stri.si.edu/Caribbean/en/thefishes/species/2850>, downloaded 4 March 2017]

TRAITS. The spotted snake eel, *Ophichthus ophis*, has a stout cylindrical body; the actual body is shorter than the tail, which makes up 60-70% of the total length (Smithsonian Tropical Research Institute, 2015). Male spotted snake eels can reach up to 210cm long, with a large mouth that has an irregularly shaped lip. Located at the roof of the mouth, they have one row of very short conical teeth. Its body is white with relatively large black spots, and smaller spots along the dorsal fin and neck (Fig. 1) (Smithsonian Tropical Research Institute, 2015). The tail of *Ophichthus ophis* is pointed and sharp in comparison to the more commonly known moray eels; the spotted snake eel uses its tail to burrow backwards into the mud and silt on the sea floor to form its protective burrow (Encyclopedia Britannica, 2017).

DISTRIBUTION. The spotted snake eel occurs in parts of the western Atlantic Ocean and Caribbean Sea (Fig. 2), from Florida to Suriname (IUCN Red List, 2015).

HABITAT AND ACTIVITY. *Ophichthus ophis* dwells at a depth of 20-50m (Wikipedia, 2015). It burrows vertically into the sea bottom, leaving only its head visible (Fig. 3), and lives in these permanent burrows (Fishbase, 2017). The spotted snake eel is a nocturnal animal that waits for sunset to hunt prey (IUCN Red List, 2015).

FOOD AND FEEDING. Spotted snake eels are nocturnal hunters and wait in ambush in their burrows for prey to swim by (Wikipedia, 2015). They feed on small fish and squid (Fig. 4) that usually pick off algae growing on rocks and corals. They are rarely hunted by other animals since most of their time is spent in their burrows.

POPULATION ECOLOGY. The spotted snake eel is a solitary animal (Velasquez, 2012). They hunt alone, and rarely interact with other marine organisms (IUCN Red List, 2015). Their population size is currently unknown as they are rarely seen. They have relatively long life spans, since they are rarely captured by larger fish; their life span is 8-10 years, and can reach up to 20 years (Shorefish, 2017).

REPRODUCTION. Adult spotted snake eels spawn during spring and summer. Once the male spotted snake eel fertilizes the female's eggs, they hatch into larvae that are transported by the water currents to Bermuda waters where the subtropical conditions are ideal for juvenile transformation (IUCN Red List, 2015). They take approximately one year to reach adulthood, but have not then reached their full size.

APPLIED ECOLOGY: *Ophichthus ophis* is not a threatened species, it is listed as Least Concern (IUCN Red List, 2015). Some people consume these eels, but they can cause ciguatera poisoning (Wikipedia, 2015). This is a toxin present in the flesh of reef fish and therefore not appropriate for consumption (Wikipedia, 2017). They are easily manageable and found in aquariums as exotic pets (Fishbase, 2017).

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Posted online: 2017



Fig. 2. Distribution of the spotted snake eel.

[biogeodb.stri.si.edu/Caribbean/resource/images/automaps/2850, downloaded 4 March 2017]



Fig. 3. Spotted snake eel partially protruding from its burrow.

[www.natuurlijkmooi.net/caribische_zee/vissen/ophichthis_ophis.htm, downloaded 4 March 2017]



Fig. 4. Spotted snake eel hunting small fish.

[www.fishbase.org/ophichthus-ophis/fishery/en, downloaded 4 March 2017]

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