Sea snakes are completely adapted to an aquatic life and spend almost all of their life inside the water. They are one of the most aquatic vertebrates to still breathe air. Although mostly passive, sea snakes have one of the most potent venom if threatened. Sea snakes live in tropical areas in the Pacific and Indian Ocean. They favor estuaries with shallow waters near land, even though most sea snakes can’t even travel on land. They have a flipper-like tail that they use to navigate in the water which makes them look similar to eels. Some sea snakes prefer hard environment like coral, and others prefer soft environments like mud, in either case they eat fish, eels, and sometimes fish eggs. (Contact Irritants).

### General Facts

The Sea snake is 1-3 feet long on average, but big ones can be up to 4-5 feet. There are over 65 species with distinct characteristics like feeding habits specializing in eggs or land capabilities. The scientific name is *hydrophiidae*, but it is split into a second category, *lacticaudidae*. The true *hydrophiidae* snakes must remain in the water, but *lacticaudidae* can partially survive on land. Most are bottom feeders, but some feed at the surface of the water. One of their main sources of food is eel, and the snakes are such good hunters that scientists track them just to get information on the elusive eels they could never find. (Arne).

### Venom

Sea snakes have more potent venom than the venom from land. Although it is strong, sea snakes venom is used to quickly kill prey, not for self-defense; therefore, when a sea snake bites a human it will only be venomous 20% of the time. Most of the people bitten by sea snakes are the fishermen who accidentally capture them as the snake feels threatened. In ordinary circumstances the sea snakes are passive and cower away from humans as they don’t want to be attacked. Unfortunately the bites that are still venomous will cause swellingness, aches and spasms around the bite. Although they lack hemotoxin, which disturbs blood clotting and destroys tissue, their bite still contains myotoxin and neurotoxin. Myotoxin and Neurotoxin focus on paralysis and the blocking of neural connections. The bite is very painful and will eventually cause respiratory paralysis. Luckily most of the time snakes bite the lower half of the body so the venom takes longer to get to vital organs. Although very powerful, the bites result in only 3% fatality rate. (Phillips).

A close up of a sea snakes tiny but deadly fangs (bugsinthefishnews.info).

### Habitat

About 65% of sea snakes live in the coral reefs. They prefer tropical waters where the water is warm. (Vagapiuide). Almost every species lives in salt water. Some live on the west coast southern of California, but most live around Australia and the eastern parts of Asia and Africa. Their unique body is perfect for the rocky crevices of a coral reef since they can easily fit between the rocks to find food or escape big prey.

A Sea Krait, one of the most common Sea Snakes, with a basic pattern (Coralreefs.blogs.rice.edu).

### Adaptations

Sea snakes can stay underwater for up to two hours despite them being air-breathing. All sea snakes have a flipper as their tail to help them paddle through the water more efficiently. Many snakes have a tail with similar attributes as their head so that the tail can hopefully trick predators into attacking it. (Rasmussen). The tail has the same color scheme as the head as well as any independent colors the head may have. This tail that mimics the head not be the perfect part to lose as the fake head and flipper is the same thing, but the snake just wants to survive as long as it can.

A snake to show how the head and tail look similar (www.arkive.org).

### Risks to Sea Snakes

Sea snake populations have replenished over the years since the tropical areas where they are located have set out laws to protect them. Near Australia they are protected under Western Australia’s Wildlife Conservation act (Sea Snakes). Also, in the Philippines there are laws to prevent overhunting to harvest sea snakes for their skin and meat. Unfortunately, the sea snakes second favorite place to live is the mud, and pollution has forced the sea snakes out of that territory. Unfortunately, due the pollution and coral bleaching, which effects their main living space, the snakes have less and less places to live. Ultimately the sea snakes most feared predator is the human. (Vagapiuide).

### References