Sea Snakes/Hydrophiinae
By Iman Jerki-Hassaine

Abstract
Hydrophiinae, also known as sea snakes, are a subfamily of venomous snakes that inhabit marine environments for most or all of their lives. These cold-blooded reptiles are usually found in warm coastal waters such as the Pacific and Indian Ocean. They have no gills and have successfully adapted to marine life for the most part. Sea snakes have long, flattened bodies, along with a paddle-shaped tail for swimming. Terrestrial snakes are their ancestors, and sea snakes are renowned for having a more toxic venom in comparison to land snakes, despite the fact that they are not as aggressive and rarely attack humans. Also, in contrast to land snakes, these snakes are ovoviviparous and give birth to live young instead of laying eggs. Sea snakes are a good indicator of how the coral reefs and other precious ecosystems are doing, they prove that the reefs are healthy and intact.

Bodily Characteristics
Most sea snakes are 2-3 feet long. Their slender bodies help them move quickly. The forked tongue of a sea snake is specially adapted to allow them to smell underwater. Like other reptile they breathe air and must resurface to do so every 30 minutes to 2 hours. They have a cylindrical lung that runs along their body and oxygen diffuses from sea water into their skin into blood vessels and carbon dioxide diffuses out. Similar to terrestrial snakes, sea snakes shed as well, and they shed more often to rid themselves of algae, barnacles, and bryozoans and other marine organisms.

Sea Snakes have to be aggrivated, by being picked up or trod upon, to want to bite a human such as in the case of the woman being bitten in Australia in October 2012. (Mesner, 2012).

Reproduction
All sea snakes, with the exception of sea kraits, are ovoviviparous or give birth to live young. Sea kraits return to land to give birth. Sea snakes mating seasons differ based on their species and where they’re located in the world. Female sea-snakes may attract more than one suitor and mate in open water. After the female gives birth to live young at sea, she then leaves the young and they live without any parenting. Sea snakes usually reproduce about once a year and females give birth between four and eleven months. (http://www.mesa.edu.au/, 12/06/12).

Different Species and Extinction
Sea Snakes are by far the most successful living marine reptiles, with similar to 60 species that comprise a prominent component of shallow-water marine ecosystems throughout the Indo-West Pacific (Sanders, 2010). They are the only reptile that can give birth at sea. ‘True’ sea snakes and sea kraits are the most common and make up 80% of sea snakes, with the other 20% being file snakes, mangrove snakes, and salt marsh snakes. True land snakes are the largest group of sea snakes and are said to have evolved from Australian terrestrial land snakes and can be found in Australian waters. (http://www.alithesea.com, 2013). Tiger sharks are the sea snake’s only main predator, and storms and currents kill more of the species than anything else by carrying them into colder waters, exhausting them, or washing them up on shore (Hill, 2007).

Human Contact and Preying Methods
Sea snakes are shy and mostly avoid human contact. Their bites include a small amount of venom. As carnivorous predators, they cruise along coral reefs hunting fish, eels, shrimp, or even fish eggs depending on the species; hunting requires touching and smelling rather than mere eyesight. A bite is never an accident and the short fangs (2.5-4.5 mm) can penetrate the skin so the poison will enter the blood. If provoked, the sea snake may become very aggressive, especially during the mating season in the winter. Sea snake venom is more toxic than land snake venom, however the bite is less painful. Powerful neurotoxins contained in it causes blurred vision, drowsiness and respiratory paralysis and have the ability to kill someone within hours (library.thinkquest.org, 2000).

References
Shown are the fangs and where they are located on a venomous snake. (topnews.in, 2008)

Human Contact and Preying Methods
Sea snakes are shy and mostly avoid human contact. Their bites include a small amount of venom. As carnivorous predators, they cruise along coral reefs hunting fish, eels, shrimp, or even fish eggs depending on the species; hunting requires touching and smelling rather than mere eyesight. A bite is never an accident and the short fangs (2.5-4.5 mm) can penetrate the skin so the poison will enter the blood. If provoked, the sea snake may become very aggressive, especially during the mating season in the winter. Sea snake venom is more toxic than land snake venom, however the bite is less painful. Powerful neurotoxins contained in it causes blurred vision, drowsiness and respiratory paralysis and have the ability to kill someone within hours (library.thinkquest.org, 2000).

Different Species and Extinction
Sea Snakes are by far the most successful living marine reptiles, with similar to 60 species that comprise a prominent component of shallow-water marine ecosystems throughout the Indo-West Pacific (Sanders, 2010). They are the only reptile that can give birth at sea. ‘True’ sea snakes and sea kraits are the most common and make up 80% of sea snakes, with the other 20% being file snakes, mangrove snakes, and salt marsh snakes. True land snakes are the largest group of sea snakes and are said to have evolved from Australian terrestrial land snakes and can be found in Australian waters. (http://www.alithesea.com, 2013). Tiger sharks are the sea snake’s only main predator, and storms and currents kill more of the species than anything else by carrying them into colder waters, exhausting them, or washing them up on shore (Hill, 2007).

Human Contact and Preying Methods
Sea snakes are shy and mostly avoid human contact. Their bites include a small amount of venom. As carnivorous predators, they cruise along coral reefs hunting fish, eels, shrimp, or even fish eggs depending on the species; hunting requires touching and smelling rather than mere eyesight. A bite is never an accident and the short fangs (2.5-4.5 mm) can penetrate the skin so the poison will enter the blood. If provoked, the sea snake may become very aggressive, especially during the mating season in the winter. Sea snake venom is more toxic than land snake venom, however the bite is less painful. Powerful neurotoxins contained in it causes blurred vision, drowsiness and respiratory paralysis and have the ability to kill someone within hours (library.thinkquest.org, 2000).

Different Species and Extinction
Sea Snakes are by far the most successful living marine reptiles, with similar to 60 species that comprise a prominent component of shallow-water marine ecosystems throughout the Indo-West Pacific (Sanders, 2010). They are the only reptile that can give birth at sea. ‘True’ sea snakes and sea kraits are the most common and make up 80% of sea snakes, with the other 20% being file snakes, mangrove snakes, and salt marsh snakes. True land snakes are the largest group of sea snakes and are said to have evolved from Australian terrestrial land snakes and can be found in Australian waters. (http://www.alithesea.com, 2013). Tiger sharks are the sea snake’s only main predator, and storms and currents kill more of the species than anything else by carrying them into colder waters, exhausting them, or washing them up on shore (Hill, 2007).

Human Contact and Preying Methods
Sea snakes are shy and mostly avoid human contact. Their bites include a small amount of venom. As carnivorous predators, they cruise along coral reefs hunting fish, eels, shrimp, or even fish eggs depending on the species; hunting requires touching and smelling rather than mere eyesight. A bite is never an accident and the short fangs (2.5-4.5 mm) can penetrate the skin so the poison will enter the blood. If provoked, the sea snake may become very aggressive, especially during the mating season in the winter. Sea snake venom is more toxic than land snake venom, however the bite is less painful. Powerful neurotoxins contained in it causes blurred vision, drowsiness and respiratory paralysis and have the ability to kill someone within hours (library.thinkquest.org, 2000).

Different Species and Extinction
Sea Snakes are by far the most successful living marine reptiles, with similar to 60 species that comprise a prominent component of shallow-water marine ecosystems throughout the Indo-West Pacific (Sanders, 2010). They are the only reptile that can give birth at sea. ‘True’ sea snakes and sea kraits are the most common and make up 80% of sea snakes, with the other 20% being file snakes, mangrove snakes, and salt marsh snakes. True land snakes are the largest group of sea snakes and are said to have evolved from Australian terrestrial land snakes and can be found in Australian waters. (http://www.alithesea.com, 2013). Tiger sharks are the sea snake’s only main predator, and storms and currents kill more of the species than anything else by carrying them into colder waters, exhausting them, or washing them up on shore (Hill, 2007).

Human Contact and Preying Methods
Sea snakes are shy and mostly avoid human contact. Their bites include a small amount of venom. As carnivorous predators, they cruise along coral reefs hunting fish, eels, shrimp, or even fish eggs depending on the species; hunting requires touching and smelling rather than mere eyesight. A bite is never an accident and the short fangs (2.5-4.5 mm) can penetrate the skin so the poison will enter the blood. If provoked, the sea snake may become very aggressive, especially during the mating season in the winter. Sea snake venom is more toxic than land snake venom, however the bite is less painful. Powerful neurotoxins contained in it causes blurred vision, drowsiness and respiratory paralysis and have the ability to kill someone within hours (library.thinkquest.org, 2000).