

# Purpose

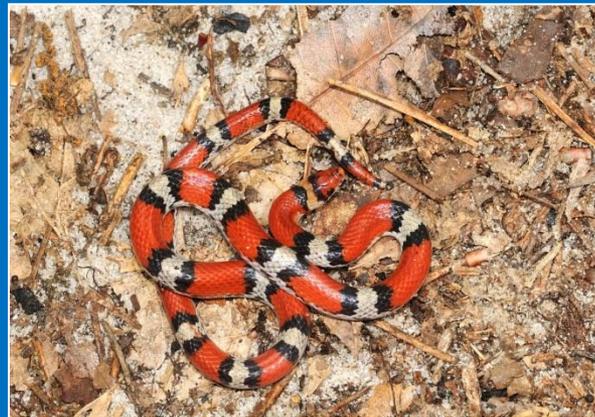
The purpose of this presentation is to familiarize Navy personnel with snake species (venomous and non-venomous) potentially occurring at Naval Station Mayport and initial first aid procedures in the event of a venomous snakebite.



This presentation was developed by the Department of Defense Partners in Amphibian and Reptile Conservation (DoD PARC) group.

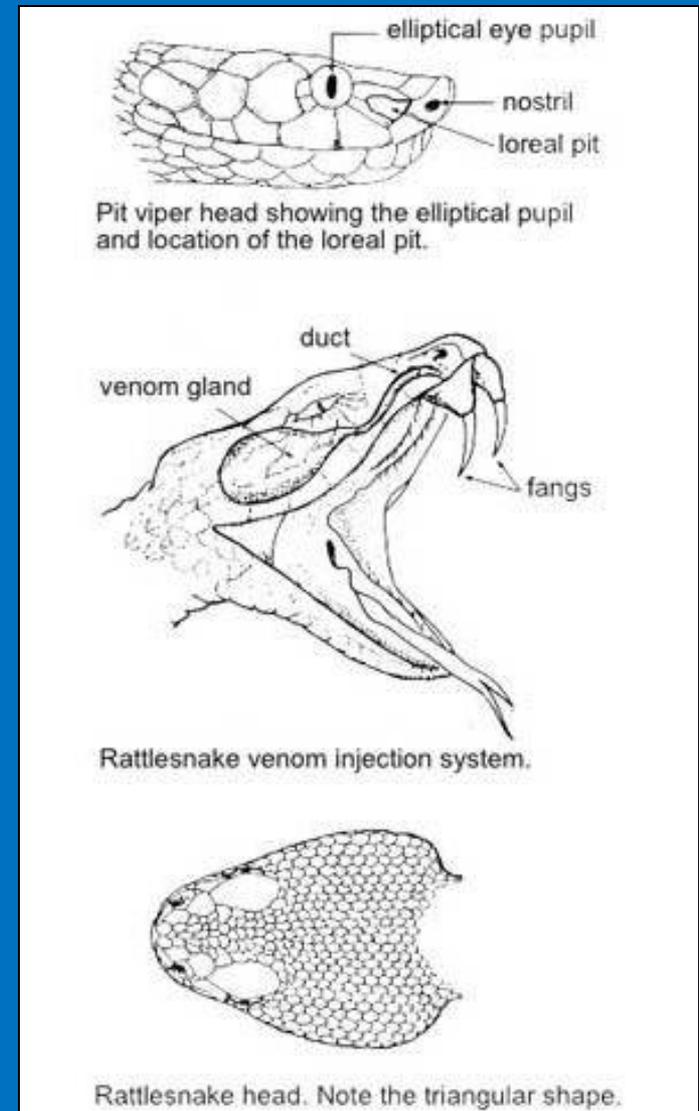
# General Characteristics of Snakes

- No legs, ears or eyelids
- Adapted to live in most habitats of the planet (deserts, forests, prairies, oceans)
- Great variation in size and color
- Approximately 52 species of snakes live in Florida
- Five species of venomous snake have been documented in Duval County, Florida



# Features of Rattlesnakes and Cottonmouths

- Elliptical eye pupil
- Pit organ
- Fangs
- Triangle shaped head
- Rattle on end of tail (Rattlesnakes Only)



# Venomous Snakes of Naval Station Mayport

The Eastern Diamond-backed Rattlesnake, Timber/Canebrake Rattlesnake, Pigmy Rattlesnake, Cottonmouth and Harlequin/Eastern Coral Snake are five species of venomous snakes that have the potential to occur on Naval Station Mayport and associated parcels. Of these species, the Pygmy Rattlesnake is confirmed present on Naval Station Mayport (main base area) and the Eastern Diamond-backed Rattlesnake is confirmed present at the Naval Station Mayport Naval Fuel Depot.



# Cottonmouth or Water Moccasin (*Agkistrodon piscivorus*)

Venomous



**Length:** Reaches a total length of 6 feet, although most individuals are closer to half this size.

**Color:** A brown, olive or black snake with wide dark crossbands on body. The head has a solid dark brown band that extends from the nostril, through the eye, to the side of the neck. Younger snakes have a yellow tail.

**Behavior:** When disturbed, it may quickly slither towards cover if available. If not, it will coil up, flatten its head, and open its mouth to expose the white interior.

**Habitat:** In habits marshes, swamps, rivers and streams.



# Eastern Diamond-backed Rattlesnake (*Crotalus adamanteus*)

**Venomous**



**Length:** Average adult size is 3-6 feet.

**Color:** A large, heavy-bodied snake with a row of large dark diamonds with brown centers and cream borders down its back. The head has a light bordered dark stripe running diagonally through the eye and there are vertical light stripes on the snout.

**Behavior:** When disturbed, this snake may rattle and strike but will slowly retreat if given the opportunity.

**Habitat:** Inhabits pine flatwoods, longleaf pine and turkey oak, sand pine scrub areas, and coastal barrier islands. These habitats contain palmetto thickets and Gopher Tortoise burrows in which the Diamond-backed Rattlesnake may seek refuge.



# Timber/Canebrake Rattlesnake (*Crotalus horridus*)

**Venomous**



**Length:** Adults most commonly 4.5 feet long, sometimes up to 6 feet.

**Color:** A tan, gray or yellowish colored snake with black chevron-shaped markings, orange or rust-brown stripe down the middle of the back, and a black tail.

**Behavior:** Well camouflaged, and therefore very seldom observed. Tends to coil in a certain location for an extended period of time and await the passage of potential prey. When disturbed, it may slowly slither towards cover, but will often remain motionless in the hope that it is overlooked, and may only rattle as a last resort.

**Habitat:** Occurs in or near forested habitats. On the Coastal Plain this snake inhabits low flatwoods, river floodplains and pocosins.



Venomous

# Pigmy Rattlesnake (*Sistrurus miliarius*)



**Length:** Adults reach a total length of approximately 3 feet.

**Color:** Body is light gray or light brown, with a row of dark brown or black spots that runs along the middle of the back, directly below which is another row of similarly-colored spots that runs along the lower side. Often there is a light brownish-orange stripe that runs along the middle of the back



**Behavior:** Active during the day and night. Typically found under clumps of grass and vegetation during the daytime.

**Habitat:** Inhabits mixed pine and hardwood forested areas and scrub habitats.

# Harlequin/Eastern Coral Snake (*Micrurus fulvius*)

Venomous



**Length:** Adults are generally 20 - 36 inches long.

**Color:** A moderately slender snake with a black snout and red, yellow and black bands encircling the body.

**Behavior:** Very secretive and seldom encountered. Typically active during the early morning. Generally not aggressive. Venom is highly toxic and bites should be considered serious.

**Habitat:** Inhabits pine and deciduous forests with sandy soils.

## Non-venomous

## Water Snakes

Brown Water Snake



There are three species of non-venomous water snakes that look similar and occupy the same habitats as the venomous Cottonmouth in Duval County, FL. Reference Slide 3 above to determine if an encountered snake is venomous or non-venomous or contact installation Environmental office.

Southern Water Snake



Florida Green Water Snake



# Snake Bite Prevention

Hands, feet, and ankles are the most common sites for venomous snake bites. Below are some common sense rules can prevent most snake bites:

- **If a snake is encountered, leave it alone and move away.**
- Always wear hiking boots when walking in areas where you cannot clearly see where you are placing your feet.
- Always stay on paths. Avoid walking in tall grass, weeds, and heavy underbrush where snakes may be present.
- Always look for concealed snakes before picking up rocks, sticks, or firewood.
- Baby coral snakes, rattlesnakes, copperheads and cottonmouths are venomous and can bite. Leave them alone.
- Never handle freshly killed snakes.
- Teach children to respect snakes and to leave them alone. Curious children who pick up snakes are frequently bitten.

Source: University of California Statewide IPM Program;  
<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74119.html>

# Initial First Aid Procedures for a Venomous Snakebite

- Transport the victim to the nearest emergency medical facility.
- Try to calm the victim.
- Remove bracelets, rings, and constrictive clothing.
- The bitten appendage should be immobilized with a sling or similar type of device and try to keep the bite area lower than the victim's heart.
- Wash the area with soap and water.
- If a snakebite occurs, and it is uncertain whether the snake is venomous or non-venomous, attempt to safely take a photo of the snake (e.g., staying outside its strike range – a minimum of five feet) and promptly send it to a wildlife expert for identification. Do not attempt to capture or kill the snake.

Disclaimer: the producers of this presentation are not liable for any harm or injuries that occur as a result of a venomous snakebite under any circumstances, whether it be purely accidental or otherwise.