



◀ **Copperheads** and their relative the cottonmouth have bright yellow tail-tips as juveniles that they use to lure prey such as small lizards and frogs.



▲ The corn snake is a brightly colored non-venomous snake that may be confused with the **copperhead**.



scarlet snake



scarlet kingsnake



Coral Snake

The non-venomous scarlet kingsnake and scarlet snake both possess patterns similar to the **coral snake**. Both non-venomous species have red heads, and their red and yellow (white) bands never touch.



banded water snake

The banded water snake and brown water snake are large-bodied, non-venomous water snakes that are commonly mistaken for the **cottonmouth**.



brown water snake

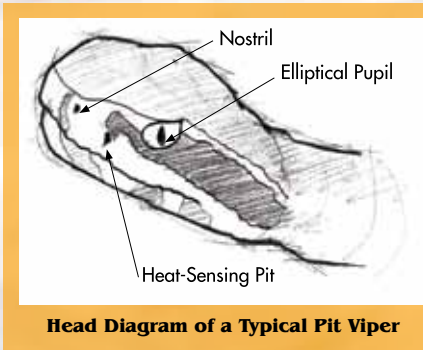


Cottonmouth (Water Moccasin)

Copperhead

The copperhead is South Carolina's most common venomous snake. Found throughout our state, the copperhead can reach a length of 4 feet; however, the average adult length is between 2 and 3 feet. Background color varies from pink to coppery-tan with dark brown hourglass-shaped cross-bands overlying. The head is typically a uniform copper color.

Copperheads occur in a wide range of habitat types including mountain coves, piedmont and coastal plain hardwood forests, longleaf pine forests and swamp forests. Copperheads feed on a variety of prey including small rodents, frogs, lizards and insects.



Head Diagram of a Typical Pit Viper

Coral Snake

The coral snake is South Carolina's only representative of a group of snakes known as elapids. This family of snakes contains some of the world's deadliest snakes including cobras, mambas and the Australian snakes such as the taipan and tiger snake. Coral snakes are not pit vipers, as are our other venomous snakes, and are quite different both in appearance and behavior from these snakes.

Adult coral snakes can reach a length of 2 feet. The bright red, yellow and black bands alternate down the length of the body. Two species of non-venomous snakes are similar in appearance to the

coral snake. The banding patterns for the harmless scarlet snake and scarlet kingsnake differ from those of the coral snake ... on the coral snake the red and black bands never touch and the nose of the coral snake is always black.

Coral snakes can occur in a wide range of habitats; however, they are never found commonly anywhere. The species is very secretive, spending much of its time underground, and loose, sandy soil typifies most of the habitats frequented by the coral snake. The coral snake feeds primarily on lizards and other snakes.

Cottonmouth

The cottonmouth, also known as the water moccasin, is a large snake of wetlands and swamps. Adult cottonmouths are typically 3 to 4 feet in length but can reach lengths in excess of 5 feet. The cottonmouth is variable in coloration ranging from dark brown and black to olive drab and yellow-tan. Dark cross-bands occur irregularly down the length of the body. Juvenile cottonmouths resemble copperheads with their brighter, well-defined pattern.

Cottonmouths are almost always associated with some type of wetland. They occur in riverine swamps and floodplains, lake edges, Carolina bays, and

small stream forests. Cottonmouths eat a variety of prey including rodents, amphibians, fish and other snakes.

Unlike other venomous snakes that generally attempt to escape from humans, the cottonmouth will stand its ground. They typically coil tightly, with the head centered in the coil and the mouth held open showing the white "cotton" lining. Researchers believe this threat display is a warning, and research results indicate that cottonmouths are reluctant to bite humans who approach them.

Venomous Snakes of South Carolina

Venomous Snakes

There are thirty-eight species of snakes found in South Carolina and, only six of these - the coral snake, eastern diamondback rattlesnake, timber (or canebrake) rattlesnake, pigmy rattlesnake, copperhead and cottonmouth - are venomous. All of South Carolina's venomous snakes are pit vipers, with the exception of the coral snake. Pit vipers get their name from the infrared heat-sensing organs (pits) found on their faces between their eyes and nostrils. These pits can detect minute changes in infrared radiation (heat) given off by warm-blooded prey. Pit vipers tend to be ambush predators that sit and wait for prey to come to them. The heat-sensing pits aid these animals in detecting prey as it approaches them. All of South Carolina's pit vipers have vertically elliptical (cat's eye) pupils ... the coral snake and all of our non-venomous snake species have round pupils.

Of the six venomous snake species in South Carolina, two - the eastern diamondback rattlesnake and the coral snake - are considered rare to very uncommon. The mountain form of the timber rattlesnake is also considered rare in our state. The pigmy rattlesnake, while not rare, is considered to be uncommon in South Carolina. Only the copperhead and cottonmouth are common to abundant in our state. Venomous snakes are a component of South Carolina's environment and play a vital role in controlling rodent populations in many habitats. Their venom apparatus, including fangs and venom glands, developed as a means to obtain food and is typically only used in defense as a last resort. The best protection against snakebite is to remain aware and alert while in the woods.

Try to stay on trails that offer good visibility of the ground. Snake chaps (leggings) can provide adequate protection for legs if you are working or hiking in areas where venomous snakes are common. It is best to leave all snakes alone, if you don't know how to identify them, and to avoid trying to kill venomous snakes. Many people are bitten or harmed when trying to approach too close to a venomous snake.

The likelihood of snakebite in South Carolina is extremely low. You are more likely to die choking on food or falling down stairs than from the bite of a venomous snake. In the unlikely event of a venomous snakebite it is best not to try and treat the bite yourself. Keep the victim calm and get him or her to medical attention as quickly as possible.

For more information on venomous snakes and snakes in general you can order the booklet "Snakes of Georgia and South Carolina" for \$5.00 from the S.C. Wildlife Shop. To order, call toll free, **1-888-644-9453 (wild)**.



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Pigmy Rattlesnake

The pigmy rattlesnake is the miniature of the rattlesnake world, with adults seldom reaching over a foot in length. Background color can vary from dark, charcoal gray to light gray and pink. Dark blotches occur down the back of this rattlesnake and often a faint red stripe runs down the spine. The pigmy has a

tiny set of rattles that may be difficult to see without close inspection and often cannot be heard.

Pigmy rattlesnakes are found throughout South Carolina, with the exception of the mountains. They occur in a variety of habitats but are seldom found far from fresh water, such as marshes, swamps and ponds. Pigmies feed on a variety of prey including lizards, frogs and small rodents.



◀ Pink to pinkish red **pigmy rattlesnakes** are not uncommon, especially in the sandhills region of South Carolina.



Pigmy Rattlesnake

Eastern Diamondback Rattlesnake

The eastern diamondback rattlesnake is South Carolina's largest venomous snake. Adults of this species range from 3 to 5 feet in length and occasionally reach lengths in excess of 6 feet. The diamondback gets its name from the series of dark-brown to black "diamonds" running down the rattlesnake's back. Each dark diamond is outlined in yellow to cream-white and sits on a background varying from light brown to olive. The diamondback has a black mask across its eyes, thought to hide its eyes from potential prey.

The eastern diamondback rattlesnake is found in longleaf pine flatwoods, rolling pine-hills and in maritime grasslands of the lower coast. Diamondbacks typically spend winter months in a stump-hole but spend most of their time

above ground during the warmer months of the year. Diamondbacks, like other pit vipers, are ambush predators. They sit and wait, in cover, for prey to come to them. The infrared, heat-sensing pits on their faces help them detect warm-blooded prey. They feed primarily on rabbits, squirrels, cotton rats and other large rodents.

Both the eastern diamondback rattlesnake, and its relative the timber rattlesnake, mate and give birth during late summer and early fall. Gravid females, which will give birth in a given year, do not mate. This unusual life history results in biennial (every other year) reproduction for these species.



Eastern Diamondback Rattlesnake



pine snake

The pine snake is a large, blotched non-venomous snake that can be mistaken for a **rattlesnake**. This species will shake its tail rapidly when disturbed but does not have a rattle.

Timber Rattlesnake

The timber rattlesnake is a large, 3- to 5-foot rattlesnake that is found throughout South Carolina. This species has two different "forms" in our state: the mountain form, often referred to as the timber rattlesnake, and the piedmont-coastal form, referred to as the canebrake rattlesnake. These two forms of this species are different in their appearance and their life history.

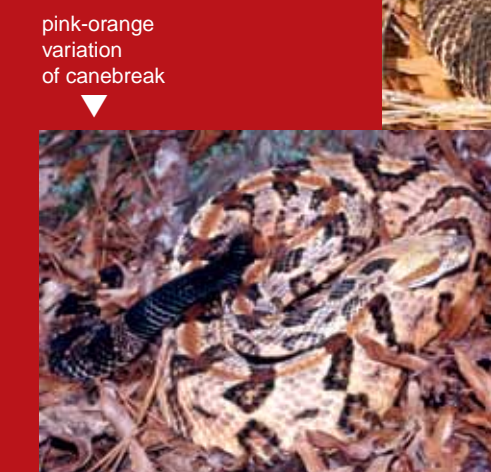
The timber, or mountain form, can vary from a background color of yellow to black, both with dark cross-bands across the back. The canebrake, or coastal form typically has a background color of light tan but can be pink to light orange, with dark cross-bands. The canebrake form typically has a red-brown stripe running down its back. This stripe is missing in the mountain form.



timber rattlesnake



canebrake



pink-orange variation of canebrake

The **timber rattlesnake** is variable in color and can range from normal tan to pink-orange in the coastal plain and from yellow to black in the mountains.

Timber Rattlesnake (Canebrake)