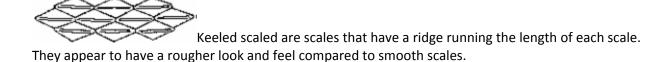
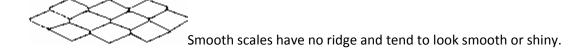
## **Snakes of Massachusetts**

Of the roughly 3,000 known species of snake found worldwide, only 15% are considered dangerous to humans. Luckily here in Massachusetts we only have two types of dangerous venomous snakes. Many people I've spoken to who have lived here their whole life weren't even aware that we do have two venomous snakes here. The two snakes we do have that are dangerous are the copperhead and the timber rattlesnake. Your chances of coming across one of these two snakes are incredibly low. I have come across copperheads in the Hudson Valley area of New York but having lived, camped, and hiked for 40+ years I have never come across either above mentioned snakes in Massachusetts. Both species are shy and reclusive but like all snakes, they will bite people only in self defense. Their venom toxicity is on the low side of the scale when compared to other venomous snakes that live in the United States. Research also suggests that only one person has ever died of snakebite in Massachusetts, and that was more than 200 years ago.

We have 14 species of snakes that are native to Massachusetts. None of the 14 are what is termed as aggressive or territorial. Most are less than 3 feet long and several only grow to one foot or less. All snakes have teeth and the majority of non-venomous snakes leave nothing more than small superficial wounds that can be just washed with soap and water if at all. Some snakes are egg layers others are live bearers. A snake is generally considered mature at one year of age. Most of our snakes will live 15-20 years. Snakes are beneficial to our environment because they keep down the number of rodents and other garden pests. Snakes lack chewing teeth so they constrict or overpower their prey and swallow it whole. The two venomous snakes kill their prey by injecting venom to kill or incapacitate then swallow them. There are two general types of scales that help in classification and description of the snake.





The first five snakes are the most common and account for the vast majority of snake encounters here in Massachusetts. They are the garter snake, ringneck snake, water snake, milk snake, and the black racer. Many of the snakes can have a very different appearance from one to another and striking color and pattern differences.

**Garter Snake**: Easily recognizable by its pattern of yellow stripes usually on a black or brown background but may be also somewhat green or reddish. Although the pattern can be variable, it usually consists of a narrow stripe down the middle of the back and a broad stripe on each side. Between the center and each side stripe are two rows of alternating black spots. A dark line separating the yellow side stripe from the belly is not particularly bold as it is in the ribbon snake. Stripes may be tan, yellow or orange. A garter snake will occasionally appear more checkered than striped. The scales are keeled and the belly is yellow or pale green.





**Ringneck Snake:** Gets its name from the yellow band around its neck. Its back is black, slate gray or brown with smooth scales. A complete yellow ring just behind the head, along with smooth scales, distinguishes it from a redbelly or juvenile brown snakes. The belly is bright yellow or rarely orange, and may occasionally bear a few small black spots.





**Northern Water Snake:** This snake is quite variable in color and pattern. Background color ranges from light gray to dark brown. It is almost always patterned with reddish-brown, brown or black crossbands near the head and alternating back and side blotches farther down the body. The pattern generally becomes less noticeable as the water snake grows larger, and often results in a uniformly dark thick bodied snake. Body scales are strongly keeled and the belly is patterned with black or orange crescents.





**Milk Snake:** This snake has a light gray to tan body covered with reddish-brown blotches bordered in black and is boldly patterned. Larger blotches on the back alternate with smaller ones on each side. The head will usually have a light colored "Y" or "V" within a reddish-brown patch. The scales will give it glossy appearance. The belly is most unique with an irregular checkerboard pattern of black on white. Similarity of the back patterns causes some to confuse it with the copperhead. The copperhead lacks any pattern on the head. Tail rattling defensive measure in leaves may also lead some to mistake it for a rattlesnake, although the two species look quite different.





**Black Racer:** The black racer is the only large black snake in New England with smooth scales. Its chin, throat and jaw are white or gray and the belly is generally dark (gray, bluish, or black) from the throat back. It will usually have a shiny appearance. Black Racers are much faster than other snakes and will usually flee from danger. If cornered they put up an energetic fight, striking hard and repeatedly. They will also rattling their tails among dry leaves as a defensive measure and sound convincingly like rattlesnakes. A juvenile racer is gray with large brown, black or reddish blotches down the back, small spots along the sides and large dark eyes. The pattern fades with age, disappearing when the snake reaches 25-30 inches in length. The Black Racer can grow to 6 feet long.





## Here are the other 9 less common snakes of Massachusetts.

**Black Rat:** Massachusetts' largest snake, the black rat snake can reach a length of eight feet. The adult snake is black with a white or creamy yellow chin and throat. The identification difference between a black rat snake and black racer is the belly of a rat snake is a mixture of light and dark, giving a somewhat blotchy appearance. Light areas are often apparent between scales, and the scales on the back are weakly keeled. A juvenile rat snake is gray with light spots running down the middle of the back, and has white eyes. This pattern darkens with age and is generally undetectable once the snake reaches a length of three feet. Exceedingly rare in Massachusetts, black rat snakes have been found only in the Connecticut Valley and southern Worcester County, where they occupy rocky ledges and forested hillsides. Rat snakes will readily climb trees to raid bird and squirrel nests. They are exceedingly common in the Hudson Valley area of New York where I have camped. Their status in Massachusetts is "Threatened" and are illegal to harass, kill, collect or possess.





**Brown Snake:** The brown snake is dark brown to grayish brown in color. It generally has a broad light stripe bordered by dark spots down the back. The belly is pink or sandy straw colored, sometimes with rows of small black spots. As a juvenile it has a light ring around the neck which fades at maturity. However, unlike the ringneck snake, the brown snake has keeled scales. The young are darker than the adults and the spotted pattern is almost invisible.





**Eastern Ribbon Snake:** The eastern ribbon snake is a very slender, striped snake similar in appearance to the garter snake but with a much longer tail. Tail length for the ribbon snake generally accounts for one third or more of total body length. It is boldly patterned with three yellow stripes on a reddish-brown background. A distinct dark band separates each side stripe from the belly. The ribbon snake has keeled scales and a belly that is pale yellow or pale green.





**Smooth Green Snake:** The smooth green snake is consistent shade of green above, white to pale yellow on its belly and is unpatterned. The smooth green snake is very difficult to confuse with any other snake in Massachusetts due to its green color. Young snakes are darker in color more closely resembling a grey olive color but still have no patterning what so ever. The smooth green snake has scales that are not keeled.



**Redbelly Snake:** The redbelly snake generally describes the color of the underside, although the color can vary from yellow (rarely), to orange to red. The overall color of this snake is also variable, and it can be brown, bronze, slate gray or, rarely, black. It has three light spots located just behind the head and may be fused into a ring. The redbelly has keeled scales, distinguishing it from the smooth-scaled ringneck snake.



**Worm Snake:** This small burrowing snake shares a superficial resemblance to an earthworm. The worm snake is an unpatterned brown snake with a pink belly, pointed head and small eyes. Smooth scales give it a shiny, iridescent quality, and readily distinguish it from brown and redbelly snakes that have keeled scales. Common online research will state that in Massachusetts, worm snakes have been found only in the southern Connecticut Valley where they prefer areas with sandy soil but I have found one on two different occasions in central Massachusetts. Their status is "Threatened" and are Illegal to harass, kill, collect or possess.





**Eastern Hognose Snake:** This snake has an upturned snout resembling a snake of the viper family. Generally a well-patterned snake, its background color can be yellow, gray, pinkish brown, olive or black, patterned with large rectangular spots down the middle of the back alternating with dark spots on each side but can be extremely variable in appearance. Occasionally the pattern is obscured by overall dark coloration. Individuals of this species may appear all black. Body scales are keeled and the underside of the tail is usually lighter than the rest of the belly. Hognose snakes appear to be immune to poisons produced by toads, their preferred prey. The hognose is equipped with large teeth in the back of their mouths, apparently to puncture inflated toads so that they may be more easily swallowed. Many of these harmless snakes are killed by people who are convinced that they are venomous and dangerous. When confronted, the hognose snake will suck in air, spread the skin around its head and neck like a cobra, hiss, and lunge as if to strike. Despite this rather convincing show, hognose snakes almost never bite. They will often feign death if provoked enough. They are illegal to harass, kill, collect or possess in Massachusetts.





## The last two native snakes for our list are the copperhead and the timber rattlesnake. These are the only two venomous snakes native to Massachusetts.

Copperhead: The copperhead is a venomous snake with a broad triangular head, vertically elliptical pupils. The body is pinkish to grayish brown with brown or reddish-brown crossbands that are narrow on the back and widest on the sides. They have a heat sensitive pit between each eye and nostril. Small dark spots commonly occur between crossbands on the back. The unpatterned head is dull orange, copper or rusty-red. Body scales are keeled and the belly is pink or light brown with dark blotches along the sides. When young, a copperhead has a yellow tipped tail. Copperhead bites usually occur when people unknowingly step on or touch unseen snakes. Despite the venomous nature of copperhead bites, they are rarely fatal. In Massachusetts, copperheads are so rare and reclusive that people almost never encounter them. They are increasingly common as you progress down the eastern side of the country to Florida. The summer camp that my two boys attend in 2011 just over the border of New York had 4 incidents of a copperhead bite. Each incident occurred after dusk. The copperhead hunts small amphibians and rodents when nightfall begins. Each bite was caused by the person accidentally stepping on the snake while it was trying to hunt for food. Their status in Massachusetts is "Endangered" and are illegal to harass, kill, collect or possess.



**Timber Rattlesnake:** A venomous snake, the timber rattler is equipped with a broad triangular head, vertical pupils and heat sensitive pits. The body color may be yellow, gray, dark brown or black. It has dark, V-shaped crossbands across the back. The pattern may not be obvious if the body is very dark. The head is usually unpatterned and is covered with many small scales. A distinct rattle on the end of a darkly colored tail produces a buzzing sound when vibrated. When young, the rattlesnake has only a small button on the tail. Body scales are strongly keeled and the light colored belly is flecked with dark spots. When threatened, they vibrate their tails to produce a loud buzzing sound that is difficult to miss. They are not particularly aggressive and bites are rare. In Massachusetts, rattlesnakes are so rare that they are almost never encountered by people. Their status in Massachusetts is "Endangered" and are illegal to harass, kill, collect or possess.



By: Steve Lockwood, Cubmaster Pack 180

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