Familiar shapes to most people, snakes are legless vertebrates whose long bodies are covered with scales. The scales can be smooth or contain a ridge which gives the snake a rough appearance. Snakes periodically shed their skin as they increase in size. There are 17 species of snakes found in New York State—three are venomous, most are rarely seen.

Snakes are carnivorous and swallow their prey whole. Depending on the species, they will dine on everything from earthworms, slugs and insects to small birds, mammals, frogs, salamanders, fish and even other snakes. While most of New York’s snake species kill prey by seizing them with their jaws and swallowing them whole, a few species, such as the black rat snake and milk snake, may kill by wrapping their body around the prey to constrict it.

Snakes reproduce either by live birth or by laying eggs in hollow logs, sawdust piles or mulch. The eggs incubate unattended. In the winter, snakes must retreat to a subterranean (underground) site where they are protected from freezing.

Valued for their ability to kill rodent and insect pests, snakes are also very interesting creatures to watch. Most snakes found around homes are seeking food, shelter or mates and will move on if they can’t find what they are looking for. While most snakes prefer to retreat or hide quickly when approached by people, many will strike at larger prey or threatening humans. Except for the venomous species, snakes’ teeth are quite small and hardly able to break a person’s skin. However, larger snakes are capable of drawing blood and as such, people should exercise caution around all snakes, whether venomous or not. Being careful around snakes not only protects yourself, but protects the snakes as well.

Venomous Snakes

While New York is home to three species of venomous snakes, most people will probably never see them. Distinguishing a venomous snake from a harmless one can be difficult. One characteristic many look for is the presence of a pit between the nostril and the eye, but if you don’t know how to identify snake species and you’re close enough to see the pit, you’re too close. A second characteristic to look for is the shape of a snake’s head. Venomous snakes have broadly triangular heads; however, this characteristic can be deceiving because many of the non-venomous species can flatten and widen their heads when provoked, giving their heads a triangular appearance as well. If you’re in doubt, leave the snake alone. It will most likely move off in a different direction.

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The common garter snake is New York's most common snake species, frequently found in lawns, old fields and woodland edges. One of three closely related and similar appearing snake species found in the state, the garter snake is highly variable in color pattern, but is generally dark greenish with three light stripes—one on each side and one mid-dorsal. The mid-dorsal stripe can be barely visible and sometimes the sides appear to have a checkerboard pattern of light and dark squares. This species consumes many kinds of insects, slugs, worms and an occasional small frog or mouse. Length: 16 to 30 inches.

The black rat snake is our longest snake, reaching six feet in length. Its scales are uniformly black and faintly keeled, giving it a satiny appearance. In some individuals, white shows between the black scales, making the snake look blotchy. Sometimes confused with the milk snake, the young black rat snake, which hatches from eggs in late summer, is prominently patterned with white, grey and black, but lacks both the “Y” or “V” on the top of the head, and the reddish tinge to the blotches. This is a woodland species, but is found around barns where it is highly desirable for its ability to seek and destroy mice and rats, which it kills by coiling around them and squeezing. Around farmyards, its eggs are often laid in shavings piles used for livestock bedding.
The timber rattlesnake, a threatened species, is a stocky, venomous snake. It is quite variable in color, ranging from yellow with a series of V-shaped crossbands, to almost solid black. The tail ends in a broad, loose series of rattles that make a distinct buzzing sound when shaken, warning all of their presence. Only occasionally seen, this species is most frequently encountered on rocky slopes within hardwood forests.

Their preferred prey are small rodents up to the size of chipmunks or squirrels. The heat-sensitive pits between the eyes and nose help this snake catch prey even at night. Young are born live in late summer and follow the scent trail of their mother back to the den to hibernate for the winter. Length: three to four feet, rarely to five feet.

The copperhead is an attractively-patterned, venomous snake with a pinkish-tan color superimposed on darker brown to chestnut colored saddles that are narrow at the spine and wide at the sides. The top of the head is usually copper in color, hence its name. Although not as widespread, this species is found in habitat similar to that of the timber rattlesnake. The copperhead primarily eats small rodents, but will take anything from caterpillars to small birds. The young are born live and have a sulphurous-yellow tip on their tail that is used as a lure to entice prey. Length: two to three feet, rarely to 40 inches.
Northern Water Snake

The northern water snake is a moderately heavy-bodied snake with irregular reddish brown bands across its lighter-colored back. The blotches along the spine alternate with smaller blotches along the sides. All are edged with a darker brown or black. Older individuals often appear uniformly dark brown to almost black. This species is found in or near water and feeds primarily on frogs and small fish. Its proximity to water and often defensive behavior cause many people to mistake it for a cottonmouth or water moccasin, a venomous species that has a northern limit of southern Virginia. Length: 18 to 48 inches.

Milk Snake

Milk snakes are proportionately slender animals, with greyish-white bodies that have a series of reddish-brown blotches with black edges. The blotch on the top of the head surrounds a lighter-colored Y- or V-shaped mark. Locals often mistakenly refer to these snakes as spotted adders. Milk snakes are frequently found in and around barns, outbuildings and houses where they are attracted to mice. This search for small rodents was misunderstood by early farmers who believed the snakes sucked milk from their cows. Constrictors, these snakes kill their prey by coiling around it and squeezing. Length: two to three feet, rarely to four feet.

Hognose Snake

The hognose snake is a thick-bodied species with a strongly upturned snout. Color varies considerably from blotched browns and yellows to almost uniformly black. When startled it can widen its neck like a cobra and emit a loud hissing sound. This may be followed by rolling over on its back and “playing dead.” The display is mostly bluff, but gives the snake the common name of puff adder. The hognose feeds almost exclusively on toads and is most frequently found in sandy habitats. Length: 20 to 33 inches, rarely to 45 inches.