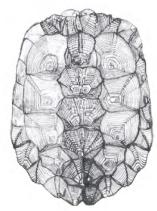


urtles are unmistakable in appearance, their unique double-shelled armor distinguishes them from all other vertebrates. In New York State, there are 11 species of freshwater or land turtles and one saltwater/brackish water species.

Slow-growing, long-lived reptiles, turtles can take five to 20 years to reach sexual maturity, and can live up to 70 to 80 years.

In New York State, turtles nest from late May to early July, depositing eggs in sand, gravel, lawns, cropland, sphagnum moss or sedge tussocks. Eggs incubate for about two to three months, with hatchlings beginning to emerge in mid-August. However, sometimes the late hatchlings overwinter in the nest, emerging after the spring thaw.

For many turtle species, the sex of the turtle is determined by the temperature at which the eggs incubate. Warmer temperatures usually produce all females; cooler temperatures usually produce all males. Identifying the sex of a turtle is commonly done by looking at the shape of the bottom shell—flat for females; concave for males.



Carapace of Wood Turtle

rical pattern. Growth of the shell is often marked by a series of concentric rings or annuli, which can be counted to determine age. However, since growth nearly stops after the turtle reaches maturity, this method of determining age works best for the first 10 to 20 years. Although a turtle's shell may protect it from many predators, it does not protect against cars and trucks. Many individuals are crushed each year, especially females searching for a nest site in the gravel along roadways. Combined with habitat fragmentation by roads and developments, this has led to significant declines of many turtle populations.

plastron.

Turtles' shells are import-

ant for defense, protecting

these generally slow-moving

reptiles from many predators.

The upper shell is called the

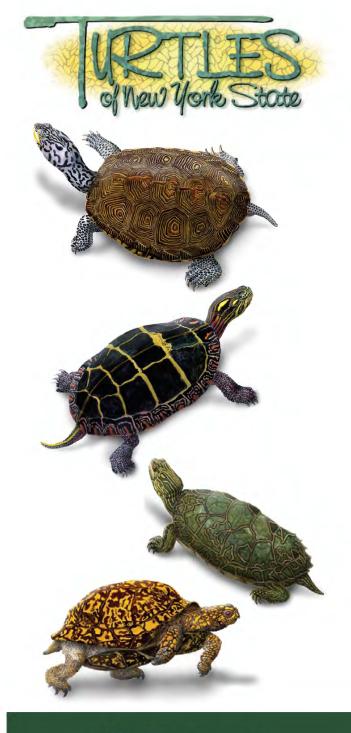
carapace; the lower shell is the

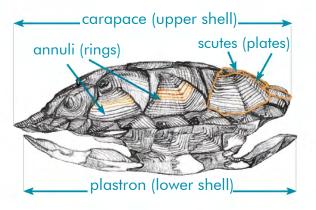
pace and plastron are covered

plates) laid out in a symmet-

with a series of scutes (or

For most species, the cara-

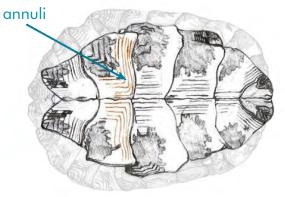




Wood Turtle Shell

By Alvin R. Breisch and John L. Behler Turtle art by Jean Gawalt / Layout & Design by Frank Herec

Plastron of Wood Turtle



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Department of Environmental Conservation

Spotted Turtle (Special Concern) Shell length: 3.5 - 5.5 inches



One of New York's most attractive freshwater turtles, the spotted turtle has yellow polka dots sprinkled across its neck,

head and carapace. Spotted turtles frequent shallow wetlands with generally clear water and soft, muddy substrates, such as swamps, marshes, bogs, fens, wet meadows, vernal pools, tidal wetlands, slow-moving woodland streams, flooded ditches and adjacent fields and forests. They feed on spotted salamander and wood frog egg masses, tadpoles, snails, slugs, worms, small crustaceans and aquatic insects.

Common Map Turtle

Shell Length: male 4 - 6 inches; female 7 - 11 inches



The map turtle's name comes from the "topographic map-like" pattern on its carapace. The smooth carapace has a keel down its midline, with the rear edge flared

and serrated. Males are decidedly smaller than females and have a more distinct keel. This species is found primarily in bays of Lake Ontario and in large rivers (like the Hudson), preferring stretches that are slow-moving with soft bottoms and good basking sites. With its massive head and powerful jaws, females are well designed to crush large snails, freshwater clams and crayfish. The diminutive male eats aquatic insects, small snails and crustaceans.

Common Musk Turtle

Shell length: 3 - 5 inches



Also known as a "stinkpot," the common musk turtle has four musk-producing glands on the underside of the carapace margins, allowing it to emit a foul odor when

disturbed. It has a smooth, high-domed carapace, and often looks like an oval, algae-covered stone. The plastron is small, cross-like, and hinged in front. There are barbels on the chin and throat. Males have a thick tail that ends in a blunt nail. Stinkpots are found in slow-moving, muddy-bottomed rivers and big streams, and the shallow, weedy coves of lakes and large ponds. They eat algae, snails, leeches, worms, aquatic insects, crayfish, small fish and tadpoles, as well as carrion.

Spiny Softshell (Special Concern)

Shell length: male 5 - 9 inches; female 7 - 19 inches



As its name implies, the spiny softshell turtle has a soft, flattened, leathery shell. It has a very long neck, and a snorkel-like snout with large nostrils. The carapace lacks scutes, and has short spiny projections along the

front edge. The feet are fully webbed. Males are considerably smaller than females, and have a long, thick tail. Females have very short tails which are often tucked under the carapace. Spiny softshells occur in rivers, lakes, protected bays and river mouths that have soft mud or sand bottoms and sparse aquatic vegetation. They avoid areas with rocky bottoms. Spiny softshells eat crayfish, aquatic insects, snails, tadpoles and small fish.

Blanding's Turtle (Threatened)

Shell length: 6 - 11 inches



Recognized by its bright-yellow throat and chin, the Blanding's turtle has a smooth, helmet-shaped carapace

decorated with streaks. Its plastron is hinged like a box turtle's, allowing it to partially close its shell as protection from predators. The Blanding's turtle prefers areas of vernal pools and shrub swamps with thick emergent vegetation, but can also occur in shallow weedy coves and backwaters of lakes and rivers. Adult turtles may travel a distance to nest in plowed fields, pastures, lawns and road berms. They eat crayfish, tadpoles, frogs, small fish, leeches, aquatic insects, snails, slugs, worms, berries and aquatic vegetation.

Bog Turtle (Endangered)

Shell length: 3 - 4 inches



Our smallest turtle, the bog turtle is a secretive species, inhabiting bogs, fens and wet meadows with slow moving rivulets and

soft muddy bottoms. It is an attractive turtle, with large yellow to orange-red "ear" marks that contrast with its black neck and head, and a mahogany starburst pattern often seen on each scute of its carapace. The bog turtle primarily eats slugs, worms, insects, seeds and berries. Due to habitat loss, this turtle has become extirpated from many sites.

Box Turtle (Special Concern) Shell length: 4.5 - 6 inches



New York's most terrestrial turtle, the box turtle spends most of its time wandering open fields and forests, only retreating to shallow pools or

wetlands to soak during very hot and dry periods. It can completely close its shell, distinguishing it from other turtle species. The box turtle's highdomed carapace is brightly highlighted; the plastron is hinged. Males and females can be told apart by eye color—usually brown for females, red for males. Box turtles eat a variety of fleshy fruits such as strawberries and raspberries, mushrooms and

Diamondback Terrapin

Shell length: male 4 - 5.5 inches; female 6 - 9 inches



Restricted to saltwater and brackish habitats, the diamondback terrapin can be seen floating in quiet bays with just its head above the surface; its

white "lips" are a good field mark. This turtle comes to shore to nest in the coastal dunes above high tide levels. Prized by the gourmet, it is occasionally harvested in New York. Terrapins eat clams, mussels and snails.



Shell length: 3 - 5 inches



New York State's rarest turtle, the mud turtle has a smooth, oval, dark carapace without a keel. The plastron has two well-developed hinges.

Both sexes have nail-tipped tails. Mud turtles are found in freshwater and brackish water marshes, small ponds, water-filled ditches, creeks and swamps. They prefer shallow, quiet waters with a soft bottom and emergent vegetation.

Painted Turtle

Shell length: 5 - 7 inches

other soft vegetation, worms, slugs and snails. They will also scavenge dead birds and mammals.

Wood Turtle (Special Concern) Shell length: 6 - 8 inches



The wood turtle gets its name from its preferred wooded habitat, as well as from the color of its carapace—the prominent annuli

give it the sculpted appearance of weathered tree rings. Wood turtles are usually found in or along clean, fast-flowing trout streams, foraging during the summer in the woodlands bordering the streams. Like other turtles, females move into open areas for nesting. Wood turtles eat berries, mushrooms, small fish, slugs, worms and tadpoles. They have also been known to feed on carrion.



Snapping Turtle Shell length: 10 - 16 inches

Easily recognized by its large head, long saw-toothed tail, stocky legs with large claws, and the jagged, saw-toothed rear edge on its dark shell, the snapping turtle is our largest freshwater turtle. Known for its defensive nature, this turtle will attack on land, but prefers to flee in water. Highly aquatic, this species is found in freshwater and brackish marshes, ponds, lakes, rivers and streams. Snappers often scavenge, but they also take live food ranging in size from small invertebrates to young waterfowl or small fish.



species, the painted turtle is often seen basking in large numbers on logs and stumps in marshes, ponds and lakes, disappearing into the water quickly when disturbed. Bright stripes

on the neck and spots on the head can be seen when the turtle is basking. The dark carapace is bordered with red. The plastron is plain yellow in the Eastern painted turtle, and has a dark central blotch in the Midland painted turtle. Males have long claws on their front feet; females have longer shells. Painted turtles eat a variety of invertebrates, tadpoles and vegetation, but will also scavenge carrion.