

Wild Things in Your Woodlands

Wood Turtle (*Glyptemys insculpta*)



The wood turtle is a medium-sized turtle (5.5-8 in) with a rough carapace, or upper shell, and scutes that look like irregularly shaped pyramids of grooves and ridges. The carapace is grayish-brown, often with black or yellow lines on the larger scutes. The plastron, or lower shell, is yellow with oblong dark patches on each scute. The wood turtle has dark skin above, and yellow, orange, or reddish skin under the chin, throat, tail and forelimbs. A number of features can identify males and females. The most obvious feature is the concave plastron in the male, to facilitate mating. Females have a flat plastron. Males also have a thick tail, long front claws, and a wider and more robust head than females.

March and April are months when the natural world comes alive with activity. Like other hibernating animals, wood turtles emerge and become active at this time. While they spend much of the cooler spring and fall months in the water, they do make occasional trips to forage on land. Wood turtles are observed most easily in the spring because they are moving about on land and herbaceous vegetation has not begun to grow yet. They remain active throughout spring and summer and enter hibernation in September or October. During the summer months they spend quite a bit of time on land, however, they generally return to water at night and will enter the water during periods of drought.

Wood turtles are widely scattered across New York State (see <http://www.dec.ny.gov/animals/7479.html> for distribution map), except on Long Island. They are most common in the Hudson River Valley. Wood turtles require clean rivers and streams, as well as adjacent areas of floodplain, forest, and fields for summer foraging. They hibernate beneath stream banks in among the exposed tree roots, or buried under the muddy bottom of slow-moving streams. Mating often takes place in the spring, while the turtles are still in the water. In June, the female will find a suitable site on land, excavate a nest cavity in the soil, and lay 4-12 eggs. Nest sites are near water, elevated at least 3 feet above the normal water level, and located in well-drained soils with little vegetation and good exposure to sun. Railroad rights-of-way, shale banks, exposed hillsides, and sandy patches all make good egg-laying sites. After an incubation time of about 70 days, the hatchlings emerge in late August or early September.

Wood turtles are opportunistic omnivores, feeding on a wide variety of animal and plant materials, including earthworms, snails and slugs, insects, amphibians, small fish, dead animals, algae, moss, grass, berries, and fungi. Some wood turtles occasionally exhibit a feeding behavior

referred to as “stomping.” As a turtle searches for food, it will stomp on the ground alternately with its front feet, creating vibrations in the ground. Earthworms respond, rising to the ground’s surface, and are consumed by the turtle.

The wood turtle is a species of special concern in New York and several other northeastern states. Wood turtle populations have declined because turtles are taken from the wild for pets and because their overland movements make them susceptible to road mortality. Because they take 14-18 years to mature and produce eggs, loss of adults from breeding populations, whether from increased road mortality or by collection for the pet trade, can significantly affect the sustainability of wood turtle populations.

The best way to maintain habitat on your land for wood turtles is to protect and enhance riparian habitats, stream water quality, and adjacent woodland habitats. Maintain natural vegetation along stream edges and in flood plains. To protect your stream habitats, minimize use of riprap for shoreline stabilization and minimize the number of road crossings over streams. The more stream crossings, the greater the likelihood that streams will be directly altered or polluted. Borders of large rocks also can prevent turtles from moving between the stream and upland habitats. Actions that alter undercut banks or remove existing logs within a stream may reduce hibernation sites. You may be able to enhance hibernating sites by placing a couple large logs in suitable streams, provided that the flow of water is not significantly altered. Applying best management practices during timber harvests and careful placement of skid trails and log landings can prevent sediments from entering the water. Log landings that receive a great deal of sunlight may make good nesting sites following a timber harvest. Logging during the winter while turtles are hibernating will help avoid direct injury.

Streamside habitats within our woodlands attract a great variety of wildlife species. Take a walk this spring and you may discover a wood turtle moving about. By taking extra steps to protect these habitats you will create the opportunity to observe a variety of wildlife species during the spring, and throughout the year.

Kristi Sullivan coordinates the Conservation Education Program at Cornell’s Arnot Forest. You can find more information on managing habitat for wildlife, as well as upcoming education programs at the Arnot Forest by visiting arnotconservation.info

Is there a certain species of wildlife that you would like to see featured in an upcoming “Wild Things” column? If so, email Kristi Sullivan at kls20@cornell.edu