



## Turtles in Rhode Island



Rhode Island's varying landscapes provide suitable habitat for a wide array of wildlife, including seven different species of native non-marine turtles; the Eastern Box Turtle (*Terrapene carolina carolina*), the Northern Diamond-backed Terrapin (*Malaclemys terrapin terrapin*), the Spotted Turtle (*Clemmys guttata*), the Wood Turtle (*Clemmys insculpta*), the Eastern Painted Turtle (*Chrysemys picta picta*), the Stinkpot or Musk Turtle (*Sternotherus odoratus*) and the Eastern Snapping Turtle (*Chelydra serpentina serpentina*). The exotic Red-eared Slider (*Trachemys scripta elegans*) is a common pet animal and occasionally observed in the wild. In addition, four species of marine turtles, including the Kemp's Ridley Seaturtle (*Lepidochelys kempii*), Leatherback Seaturtle (*Dermochelys coriacea*), Green Seaturtle (*Chelonia mydas*), and Loggerhead Seaturtle (*Caretta caretta*), occur as occasional transients in offshore waters.

Like lizards and snakes, turtles are reptiles that hatch from leathery eggs. They are cold-blooded; that is, their body temperature is regulated by the climate and not by internal metabolism like mammals and birds. Therefore, turtles are commonly observed basking in the sun to get warm but also avoid extreme temperatures. Many of Rhode Island's turtle species spend much time in the water – some even hibernate under water. They can do this because their metabolism slows dramatically in cold weather and because they can continue respiration under water by absorbing oxygen through the mouth. Turtles are characterized by a long life span – some individuals have lived more than 100 years. However, even though turtles have a hard protective shell that protects them from danger, they are often eaten by birds, raccoons, skunks, minks, coyotes, dogs and even people. Pollution, pesticides and automobiles also threaten them.



Turtles are docile, peaceful creatures that are declining in Rhode Island, primarily because of relentless urban development and other types of habitat destruction. Through education and land preservation, turtle populations have a chance to remain at healthy levels and persist among Rhode Island's diverse fauna.



## **Native Species**

The Rhode Island Natural Heritage Program and the Rhode Island Endangered Species Program have compiled a list of State endangered, protected and species of concern wildlife. Of seven species of native turtles, the Spotted Turtle is protected, the Wood Turtle is protected and also a species of concern, the Northern Diamond-backed Terrapin is considered State endangered and protected, and the Eastern Box Turtle is protected. The status “protected” means that these animals may not be possessed without a permit issued by the Rhode Island Division of Fish and Wildlife. In addition, sale of native wildlife is not allowed in Rhode Island.

### **Spotted Turtle (*Clemmys guttata*)**



Spotted Turtles are small (3.5” to 5.5”) and black with some small yellow dots on their upper shells (carapace), heads, legs, and tails. Males generally have a concave underside shell (plastron), brown eyes and a brown or black jaw, while females have a flat plastron, orange eyes, a yellow beak and an orange chin.

Spotted Turtles range from southern Ontario as far south as northern Florida and westward to central Ohio. They are usually found in shallow well-vegetated wetland habitats such as vernal pools, marshes, swamps, bogs, and fens. Many Spotted Turtle habitats dry up in summer. At

these times the turtles move into shaded uplands or bury in cool mud to aestivate or pass the summer much like hibernating.

Spotted Turtles are omnivorous (eating vegetation and protein/meat) feeders that can take live animals or carrion. Their diet consists of filamentous green algae, aquatic grasses, small crustaceans, spiders, earthworms, insect larvae, fish, tadpoles, salamanders, and snakes.

Spotted Turtles mature in about 7 to 10 years. Females can lay a clutch consisting of 1 to 8 eggs and prefer moist *Sphagnum* moss, grass tussocks, hummocks or loamy soil for nesting substrates. In our area, female Spotted Turtles are not known to lay eggs more than once a season, and some females do not lay eggs every year.

### **Wood Turtle (*Clemmys insculpta*)**



Wood Turtles are usually about 5.5” to 8” in length with a somewhat flat shell that has obvious sculpted pyramidal bumps on each dorsal scute. The neck, legs, and plastron are yellow or orange and the carapace can be light brown to black. The Wood Turtle has a black head with black eyes.

The males of this species have long front claws, a long tail and a deeply concave plastron.

The range of the Wood Turtle extends from Nova Scotia southward to Virginia (in the mountains), and as far west as Wisconsin. They live in streams, slow rivers, shoreline habitats, vernal pools (in early spring), and during summer they roam widely across terrestrial landscapes.

Wood Turtles feed in water or on land and are omnivorous. A Wood Turtle’s diet includes berries, mushrooms, grass, moss, strawberry greens, flowers, fungi, insects and insect larvae, worms, snails slugs, tadpoles, frogs, fish and carrion.

Sexual maturity is reached at 10 years for the Wood Turtle. Eggs are generally laid in one clutch of 4 to 12 eggs in sandy soils or gravel.

**Northern Diamond-backed Terrapin (*Malaclemys terrapin terrapin*)**



As its name suggests, the Diamond-backed Terrapin has a very distinctive appearance. It is a relatively large aquatic turtle, usually about 4” to 9” long, and has light gray skin marked with small black spots and some irregular small black lines. The carapace is often a light brown or beige color with black concentric rings groves and ridges and the plastron is usually pale beige or brown. Females are much larger than males in this species.

The Diamond-backed Terrapin ranges along the coast from Massachusetts to the Florida Keys and westward to southern Texas. This species of turtle can be found in estuaries, coves, barrier beaches, tidal flats, and coastal marshes. They spend the day feeding and basking and bury themselves in the mud at night. The young spend the earlier years of life under flotsam and tidal wrack and are very rarely observed.

Because the Diamond-backed Terrapin lives in brackish wetlands, its diet is much different than that of other Rhode Island turtles. Terrapins feed on crustaceans, crabs, gastropods, mussels, clams, periwinkles, some plant material, carrion, fish, and marine worms. Because they ingest salt from their environment when feeding, they are able to regulate their internal salinity by excreting salt from glands located behind each eye.

There is only one population of the State endangered Diamond-backed Terrapin in Rhode Island because the numbers were historically depleted due to habitat destruction and harvesting for

food. Diamond-backed Terrapins mature at about 6 years of age and females lay a clutch consisting of 4 to 18 eggs. Some females can lay more than one clutch in a season. Hatching occurs during the late summer.

**Eastern Box Turtle (*Terrapene carolina carolina*)**



The Eastern Box Turtle is easily distinguishable from other turtle species in Rhode Island. Its shell is highly domed (like an army helmet) and hinged underneath at the front and the back. Therefore, the turtle not only can retreat into its shell but also can close it entirely.

The Eastern Box Turtle is a terrestrial turtle and, unlike many of the other turtles of the State, prefers to spend most of its time on land rather than in the water. The Eastern Box Turtle's carapace measures only about 4.5" to 6." Although highly variable, the coloration generally ranges from pale brown or yellow to black with blotchy markings. The front legs are heavily scaled and the skin is black, reddish brown, tan, or gray. The females of the species have brown eyes and a convex plastron or under shell, while the males have orange eyes, a concave plastron and a longer, thicker tail. There is no dramatic difference in size between males and females.

The range of the Eastern Box Turtle extends from southern Maine to Florida and westward to Michigan. These turtles favor open woodlands but can be found in flood plains, near vernal pools, ponds, streams, marshy meadows, and pastures. Although they are a terrestrial turtle, it is not uncommon to find them soaking in the water of a pond, stream, or puddle. Eastern Box Turtles often maintain permanent home ranges that can be only a few acres in total extent. If removed from familiar territory, they often try to return home and can perish trying to traverse inhospitable areas like roads.

The Eastern Box Turtle is omnivorous, similar to other local species. Young box turtles are more carnivorous, but as they age they incorporate more plant material into their diet. Box turtles feast on insects, crayfish, snails, slugs, worms, fish, amphibians, carrion, fruits, berries (elderberry, black cherry, wineberry, strawberries, blackberries and mayapple), fungi, leaves, and grasses.

Eastern Box Turtles reach sexual maturity at four or five years and two clutches of eggs are produced a year in loamy soil or in the woods. The clutch is generally 3 to 8 eggs (average 4 or 5). A female may lay fertilized eggs up to four years after one successful mating. The young are rarely seen in the wild; their cryptic coloration helps them to hide from predators.

When young, box turtles risk predation by coyotes, dogs, snakes, rats, raccoons, opossums, and crows. Once they are full-grown however, they have fewer enemies. However, the human population produces the most harmful effects on box turtles. We buy and sell them as pets, eat them, destroy their habitat, use pesticides, and crush them with vehicles. In an attempt to conserve them, most states have passed laws that make it illegal to own box turtles.

### *Eastern Painted Turtle (Chrysemys picta picta)*



The Eastern Painted Turtle is a colorful and familiar species that can often be seen basking in the sun. It is a small to medium sized aquatic turtle (4" to 10") with a smooth dark green or black carapace with red markings at the outer edge.

The plastron is usually yellow, beige or pale orange. The skin

is dark green or black with red and yellow stripes on the neck tail, and head. The females of this species have shorter and thinner tails, short front claws, and are larger than the males. The males have long, thicker tails and long front claws that are used during courtship.

Painted turtles constitute the most widely distributed group of North American turtle species. They range across the entire continent, but the eastern subspecies (*picta picta*) is found from Nova Scotia to North Carolina and inland to Alabama. Typical habitats include permanent ponds, woodland pools, slow rivers, marshes, bogs, streams, wet meadows, and creeks. Painted turtles also occasionally enter brackish tidal waters.



The Eastern Painted Turtle is an omnivore, eating aquatic insects, snails, slugs, crayfish, tadpoles, mussels, small fish, carrion, and aquatic plants. These turtles may also become more herbivorous with age.

Painted turtles reach maturity when they are about 4.5” to 6” in carapace length. Females can produce two clutches a year, each consisting of 5 to 6 eggs, and use a sunny place near water for egg deposition. Slightly moist loamy or sandy soils are preferred for nesting substrate. Some painted turtle eggs hatch in the late summer with the young subsequently dispersing in fall; others eggs may hatch but the young remain in the nest cavity to overwinter there, only emerging the following spring. Therefore, it is not unusual to see recent hatchlings during May, nearly a full calendar year after egg deposition!

*Stinkpot/Musk Turtle (Sternotherus odoratus)*



The Musk Turtle is a primarily aquatic species with a dark green or black shell. They are among the smallest of Rhode Island turtles, with a carapace length of about 3” to 5”. The plastron is brown or yellow in color. The skin on the head, neck and limbs is gray or black and there may be an irregular pattern of yellowish spots or streaks on the legs or underside of the neck. On either side of the head from neck to snout, there are two distinct yellow or white stripes, one above and one below the eye. The male Stinkpot has a long thick tail that ends in a spine and two raised patches of scales behind the knees. A male’s plastron is also more concave than that of a female. Musk Turtles have a hinge in their plastron, but they cannot entirely withdraw their body into their shells as can a box turtle. They can exude a pungent scent from glands located at the rear of their shell.

Stinkpots range along the Atlantic coast from Ontario to Florida and westward to the Mississippi River and central Texas. The Stinkpot is usually found in sluggish permanent water bodies, including rivers, streams, swamps, ponds, lakes, ditches, or canals. Wetlands with muddy bottoms are preferred.

The Stinkpot is mostly carnivorous, although it also eats vegetation. It is essentially a bottom feeder on snails, clams, aquatic insects and larvae, caddisfly larvae, dragonfly nymphs, beetles, leeches, minnows, tadpoles, worms, fish eggs, fish, carrion, algae, seeds, and plants.

Female Stinkpots reach sexual maturity at 9 to 11 years of age and males at 3 to 4 years. Nests are usually in rotting stumps, fallen logs, shoreline debris, vegetation mats, and there can be one or two clutches per year, each containing from 1 to 9 eggs.



*Eastern Snapping Turtle (Chelydra serpentina serpentina)*



The Eastern Snapping Turtle is the largest freshwater turtle in Rhode Island. Snapping Turtles are distinctive and ancient-looking turtles that can be as large as 20” and weigh up to 35 pounds, although some individuals are even larger. Males are much larger than females in this

species. The carapace of a Snapping Turtle is serrated at its posterior margin and may have keels on the dorsal scutes. The tail is long and “saw-toothed” and the head is large with a hard beak. The shell is usually dark green to black and is sometimes covered with algae. The skin is usually brown, black or tan. Unlike other turtles of Rhode Island (although the Stinkpot is similar) the plastron of the snapper is very small and the limbs are much more exposed. The legs are large and heavily scaled and the feet are webbed with long claws.

The Eastern Snapping Turtle ranges from the eastern United states and southern Canada southward to the Gulf of Mexico and west to the Rocky Mountains and can be found in most permanent or semipermanent bodies of fresh or brackish water, including rivers, streams, pools, bogs, legs, lakes, and marshes. The Eastern Snapping Turtle frequents well-vegetated wetlands with soft muddy banks or bottoms and is almost entirely aquatic.

Snapping Turtles are omnivores, feeding on fish (bullheads, sunfish, perch), aquatic invertebrates, crayfish, live vertebrates, carrion, and plant material. They are highly herbivorous and can be seen “grazing” on cattail roots (*Typha*) and water lilies (*Nymphaea*).

The Snapping Turtle reaches sexual maturity between 5 and 7 years of age. They typically lay eggs in soil, lawns, fields, and leaf or twig piles and deposit between 11 and 83 eggs in one or two clutches per year. Snapping Turtle eggs usually hatch after 2+ months of incubation, usually in early September.

## **TURTLES IN TRAFFIC**

The sight of a turtle attempting to cross a busy road is, unfortunately, becoming increasingly common as increased development spreads into their natural habitats. **Helping a turtle cross the road is a humane thing to do and might even save the turtle's life! However, TAKING THEM IN THE CAR AND DRIVING THEM TO A SUPPOSED "BETTER HOME" CAN BE DETRIMENTAL!** Many individual turtles have a very specific home range that they

occupy their entire  
are bringing the turtle  
it to your favorite  
you could be giving it  
it possible that the



lives. You may think you  
to "paradise" when you take  
brook or pond but in reality  
a death sentence. Not only is  
turtle may not find suitable

food and habitat in the new "home" but many turtles will try to get back to the area they were moved from. In such instances, they may travel until they are exhausted or exposed to numerous additional threats, or they may cross several roads and get crushed anyway!

## Touching Turtles



From the smallest Spotted Turtle to the largest Snapping Turtle, turtles are significant and familiar creatures in Rhode Island ecosystems. They are gentle, docile and beautiful to contemplate but they should be observed from a distance for several reasons. All wildlife is better off left alone, and turtles are particularly adapted to a slow pace of life in quiet natural landscapes. They often languish in the hands or homes of humans. Pursuit or handling can cause great stress and even harm to the animal. Turtles are susceptible to becoming overheated – they will die if carried in a hot car or exposed to full sun for any length of time. Turtles are not aggressive in their natural habitats, but provocation or handling of large turtles can result in a strong bite. Except to remove a turtle from a hazardous situation (as when crossing a road), handling of large turtles is not necessary and is not recommended. Also, some diseases and parasites carried by wild animals can be transmitted to humans.

On a side note, it is often thought that turtles do not have feeling in their shells. However, turtles have many nerves in the carapace and the plastron. Because of this misunderstanding, many people unknowingly injure turtles by carving or painting their shells and then releasing them into the wild. If you know someone who harms turtles in this way, relay to them the knowledge that this behavior is actually harmful. Hopefully, it won't happen again.

Some interactions with turtles are inevitable. Turtles will sometimes go after the bait on a fishing line and get hooked. If this happens, be gentle with the turtle. Cut the barb off the hook and try to

ease it out. If you can't get the hook out without hurting the turtle badly, cut the line off and leave the hook in place.

If you have a turtle in your yard and you don't want it there, chances are it's just passing through. Turtles have a good sense of direction - so, if you just leave it alone, it will continue on its way.



So just remember, if you have to help a pokey turtle cross a busy road, be careful, gentle and quick. And fear not turtles that you see from a distance, because a turtle (even a large snapper) will not pursue you or your family.

## **Turtles as Pets**

The state of Rhode Island has passed legislation making it illegal to possess most of its native turtle species. However, the Eastern Snapping Turtle can be legally removed from the wild. This doesn't mean that you should walk outside and take a adolescent Snapping Turtle and raise it as a pet, but it DOES mean that you can (using the proper harvesting techniques) take a Snapping Turtle home to EAT! Some people enjoy cooking the turtles as turtle soup or various other dishes. Diamond-backed Terrapins, Spotted Turtles, Eastern Box turtles, and Wood

Turtles cannot be taken home for any purpose. Turtles can be difficult to care for properly. They get suffer from stress when cooped up in a small area and are susceptible to disease and dietary deficiencies. If they survive, some grow too large to be kept in standard tanks.



## **Turtles are Special**

Without some sort of protection, some turtle species in Rhode Island would likely disappear. Hopefully, the more outreach and education that is provided to the citizenry of this state, the more likely it will be that we can help our turtle populations thrive here. Turtles are a special part of Rhode Island's wetland, woodland, and shoreline ecosystems. By caring about the environment at home in Rhode Island and teaching our children to do the same, we can all; humans, animals and plants alike, only benefit.

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