Turtles of Rhode Island

Turtles are some of Rhode Island's most charismatic animals. They are typically well-loved and appreciated, but their needs are not often well understood. Habitat loss, fragmentation and poaching threaten the seven native turtle species that live in our state. Some spend their lives in ponds and streams, while others live almost entirely on land. Four species of sea turtles pass by our coasts; Kemp's ridley (*Lepidochelys kempii*), leatherback (*Dermochelys coriacea*), loggerhead (*Caretta caretta*) and green sea turtles (*Chelonia mydas*). All of the turtles that spend even a fraction of their lives around our state depend on us to protect their populations and their habitats.

THREATS TO TURTLES

Habitat Loss and Fragmentation: Human development has divided turtle habitat into small pieces, resulting in islands of resources separated by roads and other uninhabitable landscapes. This is especially detrimental to turtles since they require both wetland habitats and adjacent upland habitats for nesting. Because they take so long to reach sexual maturity and many populations are isolated, removing just one reproductive adult has the potential to destroy an entire population. Stay vigilant on roads during the spring, especially around wetlands, as turtles move frequently to nest and access resources during this time. **If you find an injured turtle, contact the Wildlife Rehabilitator's Association of Rhode Island: (401) 294-6363.**

Disease: Turtles can be affected by Ranavirus, an infectious disease in reptiles, amphibians and fish. There are several different kinds of Ranavirus that impact species at different levels. This disease is responsible for many recent massive amphibian mortality events around the world and is believed to be transferrable between taxa. To learn more about how to prevent the spread of wildlife disease while recreating in or around water, click here.

Predators: Natural nest predators include coyotes, snakes, rats, raccoons, opossums, and crows. However, when populations of these predators increase due to human influence, these subsidized predators create an additional, unnatural threat to turtles.

Turtles as Pets: As easygoing as these animals are, many people idealize keeping them as pets. However, it is not only illegal to remove reptiles from the wild to keep as pets, but they are also very difficult to care for. Without the proper accommodations and diet, they can develop life-threatening deformities and illnesses.

Releasing a non-native turtle into the wild can devastate our native species. They can introduce new diseases and potentially outcompete our native turtles. The red-eared slider is a non-native turtle that was introduced to Rhode Island by irresponsible pet owners and has now become established in the state.

Some species of turtles are highly sought after in the pet trade and poachers illegally collect them to sell. Diamondback terrapins were on the brink of extinction in the early 1900's due to high-volume harvest for the food and pet trade. While they are now protected, poachers continue to put pressure on their populations, as well as many of our other native species.

BE A CITIZEN SCIENTIST

Turtle sightings can be securely submitted to the RI DEM Division of Fish & Wildlife through the **HerpObserver App** or by calling the RI Division of Fish & Wildlife Field Office: (401) 789-0281.

To protect our turtles from poaching, we encourage you to not post photos and locations of turtles online.

TURTLES THROUGH THE SEASONS

Winter: Turtles brumate (enter a dormant state) during this time. Their bodies slow down and they find a safe place to rest during the winter. Aquatic turtles bury themselves on the bottom of wetlands and breathe through pores around their cloaca. Terrestrial turtles hide beneath mud and leaf litter.

Spring: Turtles emerge from brumation and can be seen basking in the sun. This is turtle nesting season, so they are frequently seen crossing the road to find mates and reach nesting sites during this time.

Summer: In hot and dry weather, turtles will estivate (a form of summer hibernation). When temperatures get too high, turtles will hide in cool, damp places.

Fall: Most eggs hatch in late summer or early fall. Young typically disperse at this time to find new territories and adults prepare to brumate once more.

HELPING A TURTLE CROSS THE ROAD

- When helping a turtle cross a busy road, be careful, gentle and quick.
- Use both hands, one on each side of the shell, between the front and back legs.
- Carry the turtle across the road in the direction it was heading and place it a few feet off the road.
- For large snapping turtles, gently shepherd the turtle across the road using an object such as a stick or a broom.
- **NEVER** pick a turtle up by its tail, as this is painful and can cause injury to the turtle.
- **NEVER** relocate a turtle. This is stressful to the turtle, can transfer diseases and can ultimately lead to the turtle's death. Turtles know their home range. Relocating a turtle to a new area will confuse it and cause it to try to return home. This could result in a turtle crossing more dangerous roads, increasing its chances of being hit by a car.

DID YOU KNOW?

- The top of a turtle's shell is called the carapace, the bottom is called the plastron.
- Box turtles can lay fertilized eggs up to four years after mating.
- For many species of turtles, egg temperature determines the sex of the hatchling.
- During the winter, when turtles brumate, their bodies slows down; they require very little oxygen and energy to live.
- Musk turtles are also called stinkpots because they have a foul-smelling odor.
- Diamondback terrapins have special glands that allow them to secrete salt to regulate their salinity.
- Turtles are tough and can survive injuries that would be fatal to most other animals.

Turtle Species Profiles

Peter Paton

EASTERN BOX TURTLE *(Terrapene carolina carolina)*

Habitat: The Eastern box turtle is a Species of Greatest Conservation Need in Rhode Island. It is a terrestrial turtle that spends most of its time on land rather than in the water. These turtles favor open woodlands, but can be found in floodplains, near vernal pools, ponds, streams, marshy meadows, and pastures.

Diet: Insects, crayfish, snails, slugs, worms, fish, amphibians, carrion, fruits, wild berries, fungi, leaves, and grasses.

Reproduction: In Rhode Island, box turtles reach sexual maturity by about 10 years of age. Females nest in June and lay an average of 5 eggs in open areas with sandy or loamy soil. Eggs hatch around late summer.

IDENTIFICATION

Appearance: Highly domed black or pale brown carapace with elaborate yellow or orange markings. Plastron hinged and color variable yellow, black or marked with both. Heavily scaled legs are black and orange or yellow. Females usually have brown eyes and a flat plastron. The males have orange/red eyes, and a concave plastron. There is no dramatic difference in size between males and females.
Carapace Length: ≈ 4.5 - 6in
Similar species: A wood turtle's carapace is much flatter and black or dark brown. Head is black and color is less ornate.

Gabrielle De Meillon

EASTERN PAINTED TURTLE *(Chrysemys picta picta)*

Habitat: Painted turtles 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. They nest in slightly moist, loamy or sandy soils during late spring.

Diet: Aquatic insects, snails, slugs, crayfish, tadpoles, mussels, small fish, carrion, and aquatic plants.

Reproduction: In Rhode Island, females typically lay one clutch of 5 to 6 eggs per year. Depending on when eggs hatch, they will either disperse in the fall or overwinter in the nest cavity, emerging the following spring.

IDENTIFICATION

Appearance: Smooth dark green or black carapace with red markings on outer edge. Plastron yellow or pale orange. Skin dark green or black. Red and yellow stripes on necks, tail and head. Males have longer, thicker tails and long front claws that are used during courtship. Females are generally larger than males.
Carapace Length: ≈ 4 - 10in
Similar species: Non-native red-eared sliders have a red bar behind each eye and a marked plastron.

*CARAPACE = TOP OF SHELL PLASTRON = BOTTOM OF SHELL

Dean Birch

COMMON SNAPPING TURTLE *(Chelydra serpentina)*

Habitat: Snapping turtles can be found in most permanent or semi-permanent bodies of fresh or brackish water, including rivers, streams, pools, bogs, lakes, and marshes. The snapping turtle is almost entirely aquatic and frequents well-vegetated wetlands with soft muddy bottoms.

Diet: Fish (bullheads, sunfish, and perch), aquatic invertebrates, crayfish, live vertebrates, carrion, waterfowl and plant material (cattail roots and water lilies).

Reproduction: In Rhode Island, snapping turtles reach 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 typically hatch after 2+ months of incubation, usually in early September.

IDENTIFICATION

Appearance: Largest turtle species in RI (can weigh up to 35+ pounds). Carapace dark green to black, often covered in algae. Rear edges of carapace are serrated. Plastron small and brown, black or tan. Limbs are heavily scaled, and skin is brown, black or tan. Tail long and "saw-toothed" and head large with flexible neck. Males are much larger than females.

Carapace Length: ≈ 20in

Similar species: Eastern musk turtles do not grow as large and have a hinged plastron and white markings on face.

Gabrielle De Meillon

NORTHERN DIAMONDBACK TERRAPIN

(Malaclemys terrapin terrapin)

Habitat: Diamondback terrapins are State Endangered in Rhode Island and are uncommon in the state. Their population has suffered greatly due to poaching, overharvest and habitat loss. They are found in estuaries, coves, barrier beaches, tidal flats, and coastal marshes. They spend the day feeding and basking in the sun and bury themselves in the mud at night.

Diet: Crustaceans, crabs, gastropods, mussels, clams, periwinkles, some plant material, carrion, fish, and marine worms. To regulate their internal salinity, they excrete salt from glands located behind each eye and drink fresh water, including rainfall, when available.

Reproduction: Diamond-backed terrapins reach sexual maturity at about 6 years old. Females lay a clutch consisting of 4 to 18 eggs. Some females will lay more than one clutch in a season and hatching usually occurs in late August. The young spend the earlier years of life under tidal wrack (seaweed) and are very rarely observed.

IDENTIFICATION

Appearance: Carapace light brown or beige with black concentric rings, grooves and ridges. Plastron pale or beige brown. Skin light gray marked with small black spots and irregular lines. Females are much larger than males.

Carapace Length: ≈ 9in

Similar species: No other species have light gray skin.

Mary Gannon

SPOTTED TURTLE *(Clemmys guttata)*

Habitat: Spotted turtles are sensitive to disturbance and are listed as a Species of Greatest Conservation Need in Rhode Island. They are usually found in shallow, well-vegetated wetland habitats, such as vernal pools, marshes, swamps, bogs and fens.

Diet: Filamentous green algae, aquatic grasses, small crustaceans, spiders, earthworms, insect larvae, fish, tadpoles, salamanders and small snakes.

Reproduction: Spotted turtles reach sexual maturity at 7 to 10 years of age in our area. Females lay an average of 4 eggs in moist Sphagnum moss, grass tussocks, hummocks or loamy soil. In Rhode Island, females probably do not lay eggs more than once a season, and females do not lay eggs every year.

IDENTIFICATION

Appearance: Carapace and skin black with small yellow dots. Plastron orange to yellow with black markings. Beak, chin and underparts brown to orange. Males generally have a concave plastron, brown eyes and a brown or black jaw. Females have a flat plastron, orange eyes, a yellow beak and an orange chin.

Carapace Length: ≈3.5 - 5.5in

Similar species: Painted turtles lack spots on carapace and grow larger.

Gabrielle De Meillon

EASTERN MUSK TURTLE *(Sternotherus odoratus)*

Habitat: The musk turtle, aka the stinkpot, is usually found in sluggish permanent water bodies, including rivers, streams, swamps, ponds, lakes, ditches or canals. Wetlands with muddy bottoms are also preferred.

Diet: Snails, clams, aquatic insects and larvae, caddisfly larvae, dragonfly nymphs, beetles, leeches, minnows, tadpoles, worms, fish eggs, fish, carrion, algae, seeds and plants.

Reproduction: Female musk turtles reach sexual maturity at 9 to 11 years of age and males at 3 to 4 years. There can be one or two clutches per year, each containing from 1 to 9 eggs. Nests are usually in rotting stumps, fallen logs, shoreline debris or vegetation mats. Eggs hatch in late summer.

IDENTIFICATION

Appearance: Carapace dark green or black, often covered in algae. Plastron brown or yellow and hinged. Skin gray or black with two distinct yellow or white stripes above and below each eye. Excrete foul odor from glands near rear of shell. 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.

Carapace Length: ≈ 3 - 5in

Similar species: Small snapping turtles have a rougher appearance to their carapace and lack markings on face.

Peter Paton

WOOD TURTLE *(Glyptemys insculpta)*

Habitat: Wood turtles are rare in Rhode Island and are listed as a Species of Greatest Conservation Need. For part of the year they live in streams, slow rivers, shoreline habitats and vernal pools but during the summer, they roam widely across terrestrial landscapes.

Diet: Grass, moss, berries, mushrooms, strawberry greens, flowers, fungi, insects and insect larvae, worms, snails, slugs, tadpoles, frogs, fish and carrion.

Reproduction: Wood turtles reach sexual maturity around 10 years of age. During late spring, one clutch of 4 to 12 eggs is typically laid in nesting sites consisting of sandy soil or gravel. Eggs hatch in late summer and young move to water.

IDENTIFICATION

Appearance: Carapace light brown to black and fairly flat with sculpted, pyramidal bumps. Plastron yellow/red with irregular black patches. Head black, neck and underparts orange/red. Males have a longer tail and concave plastron.

Carapace Length: ≈ 5.5 - 8in

Similar species: Eastern box turtles have a highly domed and ornamental carapace.