



RUTLEDGE PARK
HISTORIC DRUID HILLS



Eastern Box Turtle

Overview

The eastern box turtle its name from being the official state reptile of North Carolina.

Scientific name:

Terrapene carolina Carolina

It belongs to a group of turtles called **hinge-shelled turtles**, commonly called **box turtles**.

It is only one of two species of land turtles that live in the United States. All other species of turtles in the U.S. are water dwelling (the water is their natural habitat).

Habitat

Eastern box turtles are **indigenous** to the eastern part of the United States.



A significant example of this is that Rutledge Park has chosen the Tulip Poplar leaf and bloom to use in its logo and as the tulip poplar tree as the official tree of the park. The tulip poplar is “native” to the eastern United States just like the eastern box turtle. The color of

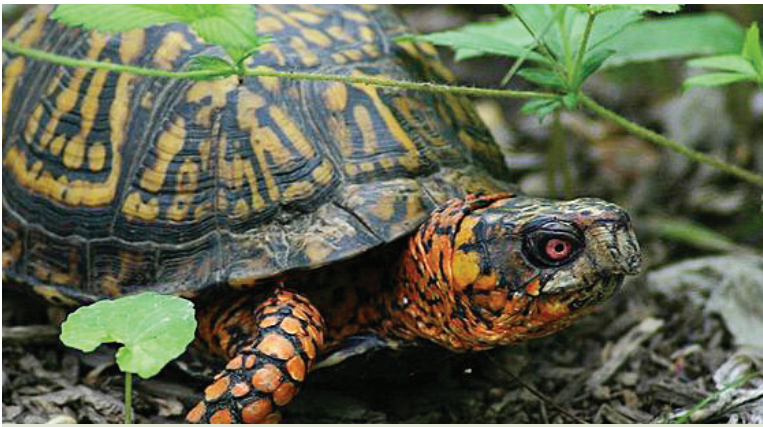
the eastern box turtle’s skin has been described as resembling fallen and dry tulip poplar leaves. So it would make sense that the two of them would be native to overlapping regions in the U.S. The eastern box turtles has evolved to blend in or camouflage with its native forested landscapes.

Eastern box turtles prefer to live on forest floors, and prefer flat low areas over hillsides or ridges. They like their habitats to be moist, but with good drainage. But, they can also be found in open grasslands, pastures, or under fallen logs or in moist ground, usually moist leaves or wet dirt. They have also been known to take “baths” in shallow streams, ponds, or puddles, and during hot periods may submerge in mud for days at a time.

From birth until their death, they typically do not travel very far from where they were born, unless the environment becomes unfavorable.

What does indigenous mean?

It means “native” or belonging to by birth and possessing the characteristics of that region.



Red eyes of the male Eastern Box Turtle



Note the growth rings on the shell

Brown eyes of the female Eastern Box Turtle

- 🐢 The shell is usually black and brown on color, sometimes including some orange and yellow spots or streaks. The patterns on the shells show a very wide variety.
- 🐢 On average, adult turtles grow between 4.5 to 6 inches, sometimes as large as 7 inches.
- 🐢 Males will have red irises.
- 🐢 Females will have light brown to dark brown irises.
- 🐢 They have a hard, sharp beak they use for feeding on a wide variety of foods.

Description

Whereas other water-dwelling species of turtles have elongated, low shells, the eastern box turtle has a very high domed shell. The dome of the shell is called a **carapace**. The plate underneath the turtle that protects its belly is called the **plastron**. Unique to eastern box turtles, the plastron has a hinge that allow the turtle to not only pull its arms and legs inside the protection of its shell, but it can shut itself completely in very tightly and protect itself from predators.

In the wild, they can live up to 100 years! Something else unique about the box turtle is that as it ages, rings are formed on the shell, much like the rings of a tree trunk. Approximately one ring is formed for every year of the turtles life.

The shell is made of bone and is permanently attached to the turtle's body by connecting at the rib cage. Therefore, the shell is not removable. Though the shell is made of bone, it is also covered in a thin layer of living, vascularized tissue. On top of that, is a protective layer of keratin - the same material our fingernails and toenails are made of. This tissue can help repair and regenerate portions of the shell if it does become damaged. The process takes a long time, but the new tissue will grow underneath the old damaged tissue. Eventually, the damaged tissue will just fall off, leaving behind the newly repaired tissue.



Plastron with hinged plate

Behavior & Diet

The eating habits of eastern box turtles vary greatly due to individual taste, temperature, lighting, and their surrounding environment.

Unlike warm-blooded animals, their metabolism doesn't drive their appetite, instead, they can just lessen their activity level, retreat into their shells and halt their food intake until better conditions arise. This is especially true during cold winter months, where they will bury themselves in up to two feet of mud, hibernating until spring.

In the wild, eastern box turtles are **opportunistic omnivores**. Omnivore means an animal that consumes a variety of foods from the plant, animal, fungi, or algae families. People are examples of omnivores. Opportunistic means the box turtles look for foods that are readily available within the environment.

There are a variety of foods which are readily consumed by eastern box turtles, which include earthworms, snails, slugs, grubs, beetles, caterpillars, grasses, fallen fruit, berries, mushrooms, flowers, small fish, and carrion (carcasses of dead animals).



Wading in shallow water



Strong beak for feeding



Peeking out from behind protective plate

Conservation Status

Conservation status is a system in which it is determined how likely a species will become extinct in the near future. To be extinct means that no more of a certain animal species exists on this Earth.

Not surprisingly, the biggest threat to box turtles are humans. Because they are low to the ground and slow moving, they have a tendency to get hit by cars or agricultural equipment such as lawn mowers and tractors. Also because they are opportunistic in their eating habits, turtles that live in areas with high populations of humans can suffer from what are called **dietary indiscretions**, or eating foods that may not necessarily be nutritious or could be even toxic, but eating them because they are available.

The conservation status of the Eastern Box Turtle is Vulnerable - meaning high risk of endangerment in the wild.

So what are some ways we can protect the eastern box turtle? Rutledge Park, for example, makes a great habitat for them. The land is relatively low and somewhat flat. It is covered with a variety of tall trees (like the tulip poplar) to make shade and low bushes to hide under. It is moist and protected. There is even a stream where the turtles can get water, fish, or bathe. But it is not only Rutledge Park that may contain box turtles, our entire neighborhood of Druid Hills contains perfect living environments for box turtles. You may have them living in your own backyard!

The best way to protect the box turtle is to start in your own backyard. While running lawn equipment, keep a careful eye out for box turtles. If you happen to find one that is in the path of the mower, gently pick it up and move it to a safe, nearby location in your yard. When the mower is finished, return it to where you found it. Don't leave foods or chemicals out that could be potentially harmful or poisonous to the turtles if swallowed. And when visiting Rutledge Park, or any other park, carry these rules with you: Respect the environment. Throw away all of your trash or garbage. A good saying to remember is, "Leave nothing behind but your footprints."

