

Nature Around Us

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The Box Turtle

Turtles, including box turtles, should never be moved out of their home ranges or kept as pets.

Since I was a child, eastern box turtles have been a favorite of mine. The more you learn about them, the more fascinating they are!

These reptiles come complete with their own housing—a shell made up of about 60 bones including a spinal structure and ribs. The bony plates interlock using spiny toothlike protrusions along their edge. Turtles live out their lives in an area not much bigger than four football fields. If you think you're seeing the same one in your yard over a period of years you are likely correct.

Each box turtle has its own unique pattern on its shell, so you could catalog and date photographs, and determine minimum ages of different individuals. Furthermore, if the turtle doesn't meet an untimely demise you may see it for many seasons. Turtles that reach adulthood can live as long as 50 years, and one Long Island, New York specimen reached the age of 130! For approximately its first 10 years, the box turtle can be aged by counting the ridges within a scute or plate on its shell, somewhat like a tree's growth rings. The center-most ring is known as the natal scute, or birth ring.

Box turtles have a very strong homing instinct. They are continually seeking out their "home territory," which makes it cruel to confine them to a different area. They retain what the Maryland Zoo describes as a "mental map of their territory" that enables them to know where their annual food sources can be found. This mapping serves to reinforce their homing instincts. Therefore, turtles should never be moved outside their home range or kept as pets. And translocation can also have lethal results. The colonists came to North American and introduced European smallpox to Native Americans; similarly, non-local turtles can introduce diseases to which turtles in their new region have no established immunity.

Not only can keeping wild turtles in captivity be dangerous to them, it is also illegal in many states—including New Jersey. They are especially susceptible to disease in captivity, and even if you were able to keep them clean and healthy, their lifespan could exceed that of their caretaker. I knew an animal lover who, in an effort to be helpful, would bring turtles he found on the road to his home and put them in a backyard pen. In his ignorance, he was robbing the turtles of most of their basic requirements as well as exposing them to other colonies' illnesses. Another good reason not to keep turtles: They can also put their caretaker's health at risk. Many carry salmonella without showing signs of illness.

Turtles use different habitat types. For example, some hibernate in mud and others bury themselves in leaf litter. They seek different types of soil for laying their eggs. They require a varied diet that includes earthworms, snails, beetles, caterpillars, berries, flowers, grasses, carrion, fruit, and even poison mushrooms. Thinking you could adequately provide for all their unique dietary needs in captivity is beyond optimistic. Turtles also play an important role in the wild. For instance, they are the main means by which mayapples are propagated. And some animals include turtles in their diet. Bald eagles can eat box turtles, as evidenced by shells found at the bottom of nesting sites.

Food, shelter, water and reproduction are key to each species' survival. Female turtles take five to 10 years to reach maturity. Once mature they are ready to meet up with a male turtle within their home range. Wildlife naturalists and enthusiasts often find turtles in some very compromising and unusual positions during mating season, which can cause a raised eyebrow and a few giggles.

Although turtles are capable of living a long life, their perils are many. Eggs are very prone to predation. Mammals like raccoons, foxes, opossums, and skunks all dig up clutches and eat the eggs. When you see turtle eggs on the surface, it is evidence that a predator has robbed the nest. I once read that over a female turtle's lifetime, if 25 of its hatchlings reach maturity that is a good result. Box turtle populations are further compromised by the illegal pet trade, which often involves export to foreign countries. There have been instances in which border agents have confiscated hundreds of box turtles. Most die because of the conditions under which they are retained once seized, and return to the wild is very complicated.

Road fatalities for adult reptiles and amphibians represent their greatest threat. When rescuing a turtle crossing a road, place it safely off the asphalt in the direction it was travelling. Most importantly, make your own safety a priority!

So the next time you see a box turtle, appreciate its amazing survival skills as it employs its best defense and retracts into its shell!