



**NEWTON  
CONSERVATORS**

FALL ISSUE

# NEWSLETTER

*Newton's land trust working to preserve open space since 1961*

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## Turtle Watching in Newton

Everyone seems focused on bird watching, but I like to watch turtles. And now is a great time to watch them in Newton. My “top turtle in Newton” is probably the eastern painted turtle because it is the champion basker and, like a wood frog, can freeze without dying in the cold New England winters. And it is also the most common turtle in Massachusetts, making it the easiest to watch.



PHOTO: BARBARA BATES

*Champions at basking, Eastern painted turtles are the only known turtles to have scutes arranged in straight lines across their carapaces.*

snapping turtles often bask in the water, slightly below the surface, making them look like shadows in ponds.

In addition to painted turtles, the snapping turtle is common in Newton. You can observe both of these turtles around ponds and streams from spring until the fall weather turns cold. Late July and August can be an especially engaging time to watch since both turtles' eggs usually hatch then.

### How can you identify the turtle you are watching?

I look at the color of the turtle's skin and shell, plus the shape of the shell and size of the turtle. I'll describe only the two most common Newton turtles, but you can find excellent turtle “fact sheets” at:

<https://www.mass.gov/guides/turtles-of-massachusetts> for all our native turtles.

Painted turtles are reptiles and cold blooded. To keep their temperature warm enough, they climb onto logs and rocks to lie in the sun with their legs, neck, and head extended as far out of their shells as possible to maximize the sun's warmth on their skin. This can mean balancing on their bottom shell (called the plastron) while they bask. Painted turtles will bask for at least several hours a day and have been known to bask on the backs of loons and, more startlingly, on the backs of snapping turtles! I find this last claim to be somewhat odd since



PHOTO: W. LUTZ

*Male eastern painted turtle's middle claws on front feet are 2-3 times longer, distinguishing them from females.*

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PHOTO: BARBARA BATES

Female eastern painted turtles are thicker top to bottom than males to allow space for eggs to develop – notice the domed look on both carapace & plastron.



PHOTO: W. LUTZ

Turtles cannot leave their shells because their spines are fused to their carapaces. Notice the serrated trailing edge of this common snapping turtle shell.

You can differentiate males from females by the claws on their front feet: claws are of equal length for females while the males' two middle claws are two to three times longer than the side toes (they are thought to be used in courting/mating.)

If you see a clear red slash on the side of a turtle's head, you are probably watching a red-eared slider (*Trachemys scripta elegans*), a non-native turtle once sold as a pet but now banned from the pet trade. When an owner tired of the pet turtle and released it, the red-eared slider took up residence in the wilds of Newton. Thankfully red-eared sliders do not breed this far north and so their numbers are not increasing. According to Matt Kamm of Zoo New England's turtle conservation program, it is not warm enough here for the red-eared slider's eggs to incubate and hatch. They do grow to 8 to 11 inches, though, as they live out their lives in our neighborhood.



PHOTO: GREG HUME, WIKIPEDIA.ORG

Red-eared Slider, a non-native turtle

There are several subspecies of painted turtle, but we encounter mostly the eastern painted turtle (*Chrysemys picta picta*). Eastern painted turtles have a creamy pale yellow or sometimes orangish plastron (bottom shell) and a dull black to brown or olive carapace (top shell). It is the only known turtle with its carapace's scutes (the sections or plates of the shell) arranged in straight lines across its back. Eastern painted turtles have yellow streaks and blotches on their heads and necks and sometimes red streaks on their legs or the marginals of their shells (the sections between the carapace and the plastron). Eastern painted turtles are mid-size turtles, growing to about six inches in length over the course of their 30-odd-



PHOTO: G. RUSSELL

Common snapping turtles have keeled scutes on their carapace, but the keels fade with age.

ranges in color from blackish brown to olive and has three pronounced ridges that fade with age. The yellowish plastron is tiny, and the turtle cannot withdraw its limbs into its shell for protection. This large heavily muscled turtle looks positively prehistoric, especially if you can see the stegosaurus-like plates sticking up from its tail. The species name "serpentina" refers to this turtle's very long neck. Never touch this turtle unless you are touching the rear half of its carapace since its snapping jaws can reach the front half easily!

Why are these turtles on the move now?

Females nest from late May to early July. This means you will see adult females crossing roads to dig nests in sunny patches of soil, sometimes several hundred yards from the water where they live. When the eggs hatch, usually late August through early October, you may see the tiny hatchlings heading straight to the water. It is thought they can smell the water. However, eastern painted turtles may over-winter in the nest and emerge as early as April!

If you see an adult turtle on the road, do not try to change its direction. If you can safely assist the turtle, help it move in the direction it was originally traveling to the side of the road. If you see a baby / hatchling painted or snapping turtle, help it to find cover (a pile of leaves or bush) or help it into the nearest water.

You can catch glimpses of the common snapping turtle (*Chelydra serpentina*) in Cold Spring Park and the Newton Cemetery & Arboretum. The common snapper can grow to 20 inches in length and weigh over 35 pounds. Its carapace



PHOTO: G. RUSSELL

Snapping turtles often cross roads in search of good nesting sites. Notice the spikes on this one's tail.



PHOTO: BARBARA BATES

Snapping turtles walk the pond bottom in search of places to ambush their prey.



## Reproduction

Both eastern painted and common snapping turtles mate in April. I've watched the ponderous underwater ballet that the snappers perform in the second pond at the Newton Cemetery & Arboretum several times.

Eastern painted turtles dig their flask-shaped nests using only their rear feet. If the soil is too dry and hard, the turtle will urinate on it to make it easier to dig. She will reach back through the narrow nest opening with one foot to scoop out earth and deposit it to the side. Then she angles her body so that she can use her other leg to scoop soil out from the other side while maintaining a narrow entrance to the nest. You can watch a video of an eastern painted turtle digging her nest here: <https://youtu.be/IW7zidg0yQc>

Once she has finished the digging, the eastern painted



PHOTO: W. LUTZ

*Painted turtles lay 4-10 eggs per nest.*

turtle will deposit between four to ten roughly 3/4 inch white eggs into the nest, tucking each egg to the side to make room for the next before returning the soil to cover them and

packing it down. You can watch the egg laying process here: [https://youtu.be/O8ucrSwK1\\_8](https://youtu.be/O8ucrSwK1_8). Nesting can take more than an hour to complete.

Snapping turtles also dig using their rear feet but they dig a wider nest. A snapper may not nest every year since she can store viable sperm for up to three years. Mary Holland of the [Naturally Curious Blog](#) describes watching a snapping turtle complete her nest:

“Hole made, she proceeds to slowly lift her body and release ping pong ball-sized, -colored and -shaped eggs, usually one at a time, but occasionally two, into the hole beneath her. Down she comes for a minute or two of rest, and then up she rises again to release another egg. She does this anywhere from 20 to 40 times, a process that can take up to several hours, depending on the number of eggs she lays. Then her large, clawed hind feet slowly begin to scrape the two piles of soil she removed back into the hole, one foot at a time, until the eggs are covered, at which point she tamps the soil down with her plastron, or bottom shell. She then returns to the water, leaving the eggs and hatchlings to fend for themselves.”

(<https://bit.ly/2QFwAb8>)



PHOTO: BARBARA BATES

*A predator, perhaps a racoon, dug up this snapping turtle nest and feasted on the 20-50 eggs a snapper can lay.*



PHOTO: BARBARA BATES

*Had a predator not eaten these snapping turtle eggs, they would have hatched 80-90 days after being laid.*

After all, that shell is not of much concern for a nut-eating mammal like a chipmunk!

Once a turtle reaches maturity it has fewer natural enemies. Raccoons, otters, mink, and foxes will prey on small painted turtles, but can find them tough nuts to crack since they can withdraw into their shells. The mature common snapping turtle has *no natural predators* other than us and our cars.

In this time of COVID-19, watching turtles can be a nice way to relax — as another Newton Conservator once told me, “Turtles are about going slow and paying attention to your life.” ♦

🌿 Barbara Bates

Sadly, nest-predators like raccoons, skunks, fox, and coyotes destroy up to 90% of turtle nests before they ever have a chance to hatch. Crows, squirrels, and snakes finish off any left-over eggs that have been exposed.

Once the nest hatches, the hatchlings are still not safe as they dash to the nearest water. I once watched a bull frog at the water's edge rapidly gulp four baby snappers in a row as the rest slid into the pond. In addition to the usual suspects, Great Blue Herons and chipmunks eat the baby turtles.



PHOTO: W. LUTZ

*Baby snapping turtles can bite – handle with care. Snapping turtles have very small plastrons compared to painted turtles because they are bottom dwellers and as adults can easily defend themselves.*