

Get to know your neighborhood turtles!

We all love turtles. Some of us have pet turtles and some of us are big fans of Ninja turtles. But we can do a little bit more to secure the future of these fascinating creatures. This article introduces the turtles in Woodlake and what can we do to protect them.

I was driving on the Woodlake Village Parkway with my daughter, when we spotted a box turtle crossing the road. We changed the lane to avoid hitting the turtle, and turned around hoping to help the turtle cross the road. After 10 seconds, we were so sad to find the crushed turtle on the middle of the road. That was a very upsetting moment for both me and my four year old. Maybe the driver of the big truck did not see it...or maybe the driver was too distracted to avoid it. Vehicle collisions are one of the major causes of turtle mortality. But if we were willing to stop or change the lane, we could have saved many of those turtles!

Turtles are fascinating creatures for many reasons!

Some ancient civilizations considered turtles as sacred animals and they believed that our world is supported by a giant "cosmic turtle". Turtles are one of the oldest vertebrate groups on the planet earth, roaming around for about 220 million years, since before the time of dinosaurs. At the same time, turtles have a really long lifespan and scientists believe that many of them can easily surpass 100 years. Some of them live in or near water, but some live in woods and even in our backyards and city ponds. One of the unique characteristics of a turtle is their shell. The turtle shell is actually an extension of their rib cage. There are about 45 species of turtles in the southeastern United States including 19 freshwater and 5 marine turtle species in Virginia.



Eastern painted turtles basking in Woodlake Tom Sawyer Bay © Sujana Henkanaththegedara

Woodlake turtles

It is quite remarkable that I have seen at least 6 species of freshwater turtles (5 native and one non-native) in our neighborhood. Some of them live in the Swift Creek Reservoir and surrounding aquatic habitats, and the others live in terrestrial habitats such as wooded patches and our backyards. Let me introduce our turtles starting from our backyard species.

1. Eastern box turtles (*Terrapene carolina carolina*)

Many of you may have seen box turtles in your backyards or crossing roads. Box turtles are one of a few widely distributed, medium-sized (up to 6 ¼ inches) turtles in Virginia and inhabit wide array of habitats including forests, swamps, open fields and suburban landscapes. They can be readily identified by their high, domed-shaped shell (carapace) with yellow and orange mottled pattern. Habitat loss, road mortality, and illegal collection for pet trade are some major threats to box turtles and it is a species of greatest conservation need in Virginia. (Photo © Sujan Henkanaththedegara)



2. Eastern mud turtle (*Kinosternon subrubrum subrubrum*)

The mud turtle is a small (up to 4 ¾ inches) aquatic turtle typically found in shallow areas of the reservoir with muddy bottoms. Overall it is a dark turtle without any obvious pattern. However, the lower shell (plastron) may be reddish brown. Males have a relatively larger tail compared to females and other turtle species. It is remarkable that this species is found in the barrier islands of the Eastern Shore suggesting that it can tolerate brackish water. (Photo © Wikimedia Commons)



3. Eastern river cooter (*Pseudemys concinna concinna*)

If you see a large group of turtles basking on a log around the reservoir, most probably they are river cooters. They are truly aquatic turtles with flattened shells and strongly-webbed feet. They have a brownish carapace and yellow to orange plastron. The head is marked with thick yellow lines which is helpful in identification. They can grow up to 13 inches. The baby river cooters are quite colorful with greenish mottle pattern on a dark carapace. River cooters are very common in large rivers and unfortunately they are frequent victims of the shooting of basking turtles for sport. (Photo © Sujan Henkanaththedegara)



4. Eastern painted turtle (*Chrysemys picta picta*)

The other basking turtle that you may see at the reservoir is eastern painted turtle. It is a very colorful, medium sized (up to 7 inches) aquatic turtle and may be the most abundant at the reservoir. A unique identification feature is two yellow spots behind the eyes with some yellow and red stripes on head and neck. The plastron is yellowish and the carapace edge is ornate with red and black markings. This turtle is a very adaptable turtle, living in almost all types of aquatic habitats including city ponds. (Photo © Sujan Henkanaththegedara)



5. Common snapping turtle (*Chelydra serpentina*)

This is the largest freshwater turtle in Virginia reaching up to 20 inches and 50 pounds. They have large and sharp jaws, relatively flat shell, a long-spiny tail and the defensive behavior. These turtles are unmistakable for any other turtle species in Virginia due to its unique appearance and behavior. Snapping turtles are secretive and rarely seen in water, but frequently encountered when crossing roads between water bodies. Unfortunately, they are harvested heavily for food. Snapping turtles are important players in aquatic ecosystems due to scavenging dead or sick fish. (Photo © Larry Tipton)



6. Red-eared slider (*Trachemys scripta elegans*)

The red-eared slider is a non-native turtle in this area (native to Mississippi drainage) which has been introduced as a result of either pet or food trade. They have established in the reservoir and usually found with painted turtles and river cooters. They are somewhat similar to painted turtles and river cooters, but they have characteristic red "ears". Red-eared sliders have the widest global distribution of any freshwater turtle due to its non-native occurrences, and in some countries, it acts as an invasive species harming native aquatic species. (Photo © Larry Tipton)



7. Eastern musk turtle (*Sternotherus odoratus*)

This is a small (up to 5 ½ inches), aquatic turtle known for its musky odor. It has a relatively pointed snout and a dome shaped shell. It is widely distributed in Virginia in a range of aquatic habitats including small ponds, roadside ditches and swamps (Photo © Sujan Henkanaththegedara)



Other possible species in Woodlake

Spotted turtle (*Clemmys guttata*)

We may also need to keep an eye on another possible species of turtles in our neighborhood. Although relatively rare and rapidly declining, Spotted turtle (*Clemmys guttata*) is likely in this area within suitable habitats. This is a small (up to 4 ¾ inches), semi-aquatic turtle with a dark plastron and yellow spots. Illegal collection for pet trade is a major threat for this species, and it is a species of greatest conservation need in Virginia. (Photo © Wikimedia Commons)
(Photo © Wikimedia Commons)



Threats and Conservation

Turtles are one of the most endangered groups of wildlife in the world with nearly 50% of them threatened with extinction. Although we live in a highly fragmented, suburban landscape, we are very fortunate to still see many turtle species in our neighborhood. Habitat loss and fragmentation are the number one threat to turtles (and most other wildlife). Roads play a major role in habitat fragmentation and roadkills are one of the major causes of turtle mortality in Virginia. Additionally, loss of swamps and wetlands, water pollution, and damming are detrimental for the survival of many aquatic turtles.

Some turtles are illegally collected for pet trade and some others are harvested for meat. However, all turtle species in Virginia, except snapping turtles, are legally protected from

commercial sale or harvest. Non-native turtles such as Red-eared sliders may compete with native turtles and may spread diseases. Therefore, it is very important to prevent the release of non-native pet turtles into our environment.

What can YOU do to save turtles?

1. Safely stop, pullover or change lanes for road-crossing turtles. If possible, safely remove the turtle from the road and release it to a safe location in ***the direction it was heading***.
2. Do not release your unwanted pet turtles. Also, releasing any turtle that has been captive for more than a month is illegal in Virginia.
3. If you find an injured turtle, consider calling a wildlife rehabilitator.
4. Do not take wild turtles as pets or hunt them. If you are suspicious of any cases, consider calling VADGIF at 1-800-237-5712 or e-mailing at WildCrime@dgif.virginia.gov.
5. Learn more about turtles and teach others about them.
6. Join a conservation organization and actively participate in wildlife conservation (consider joining Swift Creek Nature Club)

Resources to learn more about turtles

Books

1. Buhlmann, K, T. Tuberville and W. Gibbons (2008) **Turtles of the Southeast**. The University of Georgia Press, Athens, GE. 252 pp.
2. Kleopfer, J.D., T.S.B.Akre, S.H. Watson and R. Boettcher (2014) **A Guide to the Turtles of Virginia**. Bureau of Wildlife Resources Special Publication No. 4, Virginia Department of Game & Inland Fisheries, Richmond, VA. 44 pp.
3. Mitchell, J.C. (1994) **The Reptiles of Virginia**. Virginia Department of Game & Inland Fisheries, Richmond, VA. 352 pp.

Websites

Turtles of Virginia

http://www.virginiaherpetologicalsociety.com/reptiles/turtles/turtles_of_virginia.htm

By Sujan Henkanathgedara

Swift Creek Nature Club

Sujan is a Woodlake resident, a member of the Woodlake Environmental Committee and the founding president of the Swift Creek Nature Club (SCNC). He teaches at Longwood University and does research on ecology and conservation of crayfish.



Swift Creek Nature Club (SCNC) is a local organization dedicated to nature study and conservation. SCNC offers field trips, monthly programs and other nature-related activities to our members and their families. If you are interested to know more about SCNC, check our website at <https://blogs.longwood.edu/swiftcreeknatureclub/> or join our closed FaceBook group, "Swift Creek Nature Club".