

2011 “YEAR OF THE TURTLE”

Softshell Turtles



Florida Softshell Turtle (Apalone ferox)
Blackwater River, Florida
Photo: Molly O'Connor

Because of their unusual shell this is one of the more easily recognized turtles in Florida; however, distinguishing the three different species is a bit harder. The Florida Softshell (*Apalone ferox*) can be distinguished from the others by its' size, carapace design, and its' habitat preference. It is the largest softshell turtle in Florida, reaching carapace lengths of 73-cm. Molly and I saw one in the upper reaches of the Escambia River near Troy, Alabama that was huge! This turtle, unlike the other two, prefers to be in quieter waters such as ponds, ditches, lakes, and areas of rivers where the current is not as strong. The “nape” of the carapace (just behind the head) of the Florida Softshell has small “tubercles” or “knobs” (see photo above). These would be hard to see unless you could get really close to a basking one and get a zoomed photo (as in the above photo ☺). This species is found throughout the state of Florida and in the lower portions of the Southeastern United States. The Spiny Softshell (*Apalone spinifera aspera*) is smaller than the Florida having a carapace length of about 53-cm. This species prefers rivers and creeks with some flow to them and, like the Florida Softshell, spends much of its time in the deeper parts of the water ways they inhabit. The “nape” of this carapace has “spine-like” projections and possibly a few “knobs”. This species is quite common throughout the eastern United States but is only found in the rivers and creeks of the panhandle in our state. The Smooth Softshell (*Apalone mutica calvata*) is the smallest of Florida's softshells with a carapace length of only 29-cm. This turtle prefers strong flowing rivers with sandbars and tends to spend most of its time buried in river sand close to these sand bars. Found throughout the Mississippi Valley area it has only been recorded in the Escambia River in our state, and only as far south as the town of McDavid, north of Cantonment on Highway 29 in Escambia Co. Some believe the reason the Smooth Softshell does not inhabit the Escambia River further south than McDavid is because of the lack of sand bars along the river south of this point. As the name suggest the “nape” of this turtle's carapace is smooth.

Softshells spend most of their time in the deeper parts of the water ways in which they inhabit, though they have been seen basking. They are carnivorous, feeding on a variety of prey such as snails, fish, and insects. Scientists who study the Smooth Softshell have found that females tend to feed on aquatic prey while males seem to feed more on prey found along the banks and sand bars. The Spiny Softshell has been seen feeding on dead fish at the surface and along the banks of rivers. They apparently use the “ambush” method of hunting and, while buried in the sand, extend a long neck to grab prey within range. Because of their nasty temper, razor-like beaks, and long necks, softshells should be handled with care; they have been known to leave a serious wound to those who are careless with them.

As with most aquatic turtles, softshells prefer to nest on high/dry areas with well drained soils; sand bars are popular nesting areas for them. Unlike most aquatic turtles, raided nests by predators, such as raccoons, is not as common; only about 10% of their nests are ever found by these predators. Another difference is that the sex of the developing offspring is controlled by genetics, not nest temperature as with so many other aquatic turtles. Like so many other species of turtles, the eggs and young are most vulnerable to predation; and the list of potential predators is long. There are reports of alligators preying on adult Florida Softshells. This makes sense when you think about the primary defense other species have against these apex predators is their hard shell; softshells obviously lack this luxury.

This turtle is considered common throughout their range as well as in Florida; softshells do have their problems... primarily their harvest by humans as a food source. Though there are fewer Floridians who feed on them today there is a lucrative market for them in Asia. This was the species, along with the Suwannee Cooter, that originally started the movement for what would become **FWC Ruling 68A-25.002**. Hundreds and thousands of these turtles were captured on trot lines and shipped to Asian markets in the northeast and overseas. Thankfully we may have put a stop to this.

This is a turtle that is not often seen by the public and stimulates “turtle-watchers” to the rivers of Northwest Florida to try and photograph one. Molly and I will conduct some local field trips in the next few years to see if we can find them and to see if the Smooth Softshell inhabits other local rivers or creeks.



*Harvested Florida Softshells (Apalone ferox) seized at Tampa International Airport heading for Asian markets
Tampa, FL*

Photos: George Heinrich; Bill Turner



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