2011 "YEAR OF THE TURTLE" Mud and Musk Turtles



Loggerhead Musk Turtle (<u>Sternotherus minor minor</u>)

Marianna, FL

Photo: Molly O'Connor

The last turtle fact sheet for the "YEAR OF THE TURTLE" will be a group that is actually pretty common in the panhandle but probably rarely seen by residents here; the mud and musk turtles. These are tiny turtles (carapace lengths between 8 – 14 cm) but have been known to take a nasty nip from many a turtle handler's finger... heck they have a meaner disposition than a snapper! They are easily distinguished from other turtles in the panhandle by their small size and "helmet – shaped" carapace. They can be found in variety of aquatic habitats.

To distinguish mud from musk turtles you can use the plastron or location the turtle was found. The plastron of mud turtles is double hinged and they can almost completely close like box turtles. Also the second set of scutes on the plastron are "triangle" in shape (see fig below). They are typically found on the bottom of most aquatic systems and rarely bask at the surface. Musk turtles will have smaller plastrons with a single hinge and the second plastron scute is more "square". They spend a lot of time under the water as well walking across the substrate but they are known to bask on logs and can even climb smaller trees. Molly and I have seen this in the East River of Santa Rosa County. You will be paddling along and then hear the "plop" of something falling into the water; then another and another. At this point you will see them – about four feet in the air dropping from trees into the water. We have read reports of them dropping into canoes, but this did not happen to us; it was still pretty cool to see.



Loggerhead Musk (left); Common Mud (right) Roy Hyatt Environmental Center, Cantonment, FL Photo: Molly O'Connor

There are two species of mud turtles in the state of Florida. One of them, the Striped Mud Turtle (*Kinosternon baurii*) is found from the Apalachicola River area south, but is apparently declining in the Florida Keys. The carapace is 10-12cm long and has three longitudinal stripes. It can be found in either quiet waters or those with strong flows. It is often found in very low water or moving around on dry ground. Females seem to nest in the same areas each season and, unlike most turtles in our state, prefer nesting in shaded areas. These turtles are omnivorous and, because of their size, are preyed upon by a variety of aquatic and land predators.

There are two subspecies of the common mud turtle (*Kinosternon subrubrum*). The Eastern Mud Turtle (*Kinosternon subrubrum subrubrum*) is found throughout most of the eastern United States. *Kinosternon subrubrum hippocrepis* is found throughout the Mississippi Valley area. Their carapace lengths are about 8cm and the shells of both are very dark. The difference between the two is that *K.s. subrubrum* has stripes on its head. Common mud turtles prefer water with little flow.



Loggerhead Musk Turtle Marianna, FL Photo: Molly O'Connor

We have two species and two subspecies of musk turtles in the state. One is the Loggerhead Musk (*Sternotherus minor minor*). It can be distinguished from other musk turtles by the light color of their heads with dark spots or flecks; the carapace tends to have a similar coloration. It is found throughout the southeastern United States but only in the northern parts of Florida. It is one of the larger musk turtles with a carapace of 14cm, which has overlapping scales. It is found in systems with and without strong currents and, like many others in this family of turtles, can remain on the bottom for an amazing amount of time. Molly has a Loggerhead Musk at RHEC and she has never seen it above the water line other than at feeding time. They apparently can absorb dissolved oxygen from the water through folds in their necks – prolonging their dive time. The Striped Neck Musk Turtle (*Sternotherus minor peltifer*) differs in that their heads are darker with light colored stripes. The Common Musk Turtle (*Sternotherus odoratus*) – "stinkpot" – differs from the *S. minor* in that the head is darker with yellow stripes and the scales of the 14cm carapace do not overlap.

Musk turtles are carnivorous and have been known to actually bite the baited hooks of fishermen. They can have a nasty disposition and should be handled with care. They do have the habit of nesting away from water and may take several days searching for good nesting habitat. They have been found slightly buried in leaf litter within a wooded area near their "home pond". Like the mud turtles, their smaller size makes them easy prey for both aquatic and terrestrial predators.

Other than the decline of mud turtles in the Florida Keys most of the family seems to be doing well in Florida. Their largest problem is the loss of habitat but road kills are now beginning to increase.



Juvenile Loggerhead Musk Turtle Marianna, FL Photo: Molly O'Connor





Rick O'Connor Sea Grant Agent Escambia County Extension University of Florida / IFAS 3740 Stefani Road Cantonment, FL 32533



Molly O'Connor Escambia County School District Roy Hyatt Environmental Center 1300 Tobias Road Cantonment, FL 32533 (850) 937-2117