Striped mud turtle

*Kinosternon baurii*

(Photo courtesy of Richard D. Bartlett)

**Taxonomic Classification**

**Kingdom:** Animalia  
**Phylum:** Chordata  
**Class:** Chelonia  
**Order:** Testudines  
**Family:** Kinosternidae  
**Genus/Species:** *Kinosternon baurii*  
**Common Name:** Striped mud turtle

**Listing Status**

**Federal Status:** Not Listed  
**FL Status:** State-designated Threatened (Lower Keys population only)  
**FNAI Ranks:** G5T2Q/S2 (Globally: Demonstrably Secure, Sub sp. Imperiled [subspecies classification questioned]/State: Imperiled)  
**IUCN Status:** LC (Least Concern)

**Physical Description**

The striped mud turtle is a small aquatic turtle with an oval shaped shell that can reach four inches in length (10 centimeters). This species has a brown upper shell (carapace) with three stripes that may not be visible, and a rust colored lower shell (plastron). Striped mud turtles have large heads that usually have two small yellow stripes on each side (Florida Natural Areas Inventory 2001).
**Life History**

The diet of the striped mud turtles primarily consists of insects, worms, snails, algae, seeds, and the remains of invertebrates (Wilson et al. 2006, Ernst and Lovich 2009).

Nesting occurs throughout the year, but activity peaks between September and November, although there is another peak in June (Wilson et al. 1999). Female striped mud turtles can travel 250 meters (820 feet) from wetlands to nest (Mushinsky and Wilson 1992, Wilson 1996, Wilson et al. 1999). In Florida, striped mud turtles can lay up to six clutches of one to six eggs per clutch, per year, but the average number of clutches is four (Iverson 1977, Wilson et al. 1999, Meshaka and Blind 2001, Wilson et al. 2006). Incubation temperature determines the sex of the embryo; the majority of the embryos are females when incubation temperatures are greater than 82°F (28°C) or between 71 and 72.5°F (21.5°C and 22.5°C). Males are predominant when temperatures are 70.7-72.5°F (21.5-22.5°C). At temperatures below 75°F (24°C) some embryos will pause their development. (Ewert et al. 1990 in Wilson et al 2006). It can take the young over a year to merge from the nest cavity (Wilson et al 1999).

**Habitat & Distribution**

Striped mud turtles inhabit ponds and ditches in Florida (brackish and freshwater) that have a salinity under 15 parts per thousand. Striped mud turtles can be found throughout Florida; however, the protected population is found in the Florida Keys from the western portion of the Seven Mile Bridge to Key West. (Florida Natural Areas Inventory 2001). This population was protected because it was proposed as a separate taxa, but subsequent research has concluded that this is not the case (Karl and Wilson 2001).

**Threats**

The dependence of striped mud turtles on waters of low salinity makes it vulnerable to decline and/or extirpation in the Lower Keys. Natural freshwater habitats in the Keys tend to be small (up to 50 acres) and vulnerable to degradation. Their natural habitats depend on a natural subsurface freshwater lens (ground water supply for islands) although striped mud turtles are also found in manmade ditches and ponds. Freshwater lenses can be affected by over withdrawal by humans, and saltwater intrusion. Although the species has survived untold hurricanes, severe
saltwater overwash from very large storms could increase salt content of fresh and brackish water ponds making them unsuitable habitat for the striped mud turtle (Dunson 1992). If sea level rises high enough, as has been predicted by some climate change models, striped mud turtle habitats in the Keys will be inundated with sea water and become uninhabitable. Other threats to the species include increases in egg predation because predator population subsidized by humans and pollution, especially oil spills.

**Conservation & Management**

The Lower Keys population of the striped mud turtle is currently protected as a State-designated Threatened species by Florida’s Endangered and Threatened Species Rule, but has been recommended for delisting as the Keys population is not taxonomically different from mainland populations.

- Biological Status Review (BSR)
- Supplemental Information for the BSR

**Other Informative Links**

Florida Natural Areas Inventory  
University of North Carolina - Captive Husbandry  
University of Georgia Savannah River Ecology Laboratory

**References**


