

SMALLTOOTH SAWFISH RESEARCH IN THE CHARLOTTE HARBOR ESTUARY

Sawfish are modified rays with a shark-like body. The earliest sawfish arose about 100 million years ago. These sawfish were distant cousins of the ones we see today, which appeared about 56 million years ago. Sawfish get their name from their “saws”, which are used to locate, stun, and kill prey. They feed mostly on fish but they also eat crustaceans.

At one time sawfish were abundant, but unfortunately were never studied. With few remaining, it is important to learn about their life history, biology, and ecology so that conservation efforts will be successful. This has been the premise behind the Fish & Wildlife Conservation Commission’s (FWC) sawfish research in Charlotte Harbor which began in November 2004. According to Gregg Poulakis of FWC, sawfish research efforts are focused primarily in the Caloosahatchee River (from the Mid-Point Bridge to the Miserable Mile) and in the upper Harbor (from I-75 on the Peace River to the mouth around Hog Island). The majority of FWC’s captures and the majority of angler reports have been from the Caloosahatchee region.

FWC’s research includes both random and directed sampling for sawfish using a variety of gear. For instance, a 600’ seine is used to sam-

ple in the shallower waters, whereas a mini longline is used in the deeper waters. All captured sawfish are tagged and released. In 2005, 23 sawfish were captured, with one recapture, and in 2006, 29 sawfish have been captured, with 10 recaptures. Recaptures were made anywhere from two weeks to 14 months following the original capture. Captured sawfish have been between about two feet (newborn) and seven feet long

Three types of tags are placed on each captured sawfish. The first is a PIT tag. This is similar to the tags put in dogs and cats. It’s injected under the skin and is about the size of a grain of rice. The tag is picked up by researchers during recapture using a scanning device. These tags are the most permanent of the three. The second tag is a roto tag. This tag is brightly colored with identification numbers and contact information on it. These tags, located on the 1st dorsal fin, are used for angler reports. Reporting information is at the end of article.

The last tag is an acoustic tag. It is about the size of a AAA battery and is located on the 2nd dorsal fin. These tags transmit at a specific frequency to a series of moored hydrophones that

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photo courtesy of www.wikipedia.org

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record activity 24 hours a day. Mote and FWC have hydrophones in the Caloosahatchee from the Miserable Mile up to the Franklin locks. These hydrophones are collecting information for a variety of tagged species including snook and sharks. The information obtained using this method provides a general picture of where sawfish are and where they are moving within the hydrophone array. Gregg also uses a manual tracking method where a hydrophone is deployed off the side of a boat and feeds information to an onboard speaker to fine tune movements and behavior information inside and outside of the array. Roto tags and acoustic tags last a few months to one year. For more information on sawfish and the research described above, visit <http://research.MyFWC.com/sawfish>.

Smalltooth sawfish are listed as endangered under the Endangered Species Act, which makes it illegal to harm, harass, or handle them. Accidental captures do occur while fishing for other species. If a sawfish is hooked or netted it should be released immediately.

Sawfish Safe Release Guidelines

(From Museum of Natural History)

Warning: Sawfish are large powerful animals that can cause serious injury. For your safety and the safety of the sawfish, use caution if you do hook or net one of these animals.

If hooked: Keep sawfish in the water at all times. If it can be done safely, untangle the line if it is wrapped around the saw and remove as much of the line as possible. Cut the line as close to the hook as possible. Do not handle the animal or attempt to remove any hooks on

the saw unless you have a long-handled de-hooker.

If you do encounter a sawfish, you can greatly help conservation efforts by providing the following information:

1. Your name, phone number, and email address;
2. Date, time, and location of the encounter;
3. Number, size, and behavior of the sawfish;
4. Your activity at the time of encounter; and
5. Information on any tags (look for number on tag), scars, or distinguishing marks.

Please report this information to any of the below contacts:

- ➔ **Gregg Poulakis, FWC**
Email: sawfish@myfwc.com
Phone: (941) 255-7403
- ➔ **Colin Simpfendorfer, Mote Marine Lab**
Email: sawfish@mote.org
Phone: (941) 388-4441; or
- ➔ **George Burgess, FL Museum of Natural History**
Email: sawfish@flmnh.ufl.edu
Phone: (352) 392-2360.

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