

**Vital Sign: Sawfish**  
[shortened name: Sawfish]

**Parks Where Vital Sign will be Implemented:**

EVER – SFCN will summarize reports from existing program

**Justification/Issues being addressed:** Sawfish ranked 26<sup>th</sup> among the 44 SFCN vital signs.

Small-toothed sawfish (*Pristis pectinata*) is a federally listed endangered species found in EVER and BISC, typically near and in estuaries, bays, and inlets utilizing seagrass, mud/sand bottom, oyster bars, reefs, and mangroves. This long-lived and large species (record is 18 ft. long) was formerly a fishery before stocks dwindled. Its saw makes it susceptible to entanglement in nets and lines. Little is known about this species, but, like other rays and sharks, it has limited reproductive potential.

**General Monitoring Questions to be Addressed by the Vital Sign:**

- What are the status and trends in distribution, relative abundance, number of active nursery areas, and demographics (sex ratios, adult/juvenile ratios)

**Measures:**

Spatial distribution and relative abundance of adults, distribution of nurseries, recruitment, movement patterns

**Basic Approach:**

A sawfish monitoring program is already being conducted by MOTE Marine Laboratory and NPS that extends from Charlotte Harbor through Florida Bay. Currently the program consists of:

- Sawfish encounter reporting database with surveys and outreach at Flamingo landing to fishermen and recreational boaters.
- Spring nursery area surveys- purpose is to identify all active nursery areas and level of activity/reproduction. An intensive newborn sawfish tracking program is underway in Mud Bay using an array of receivers (two other ongoing sites in Ten Thousand Islands outside park).
- Tagging of adult sawfish and sharks. Satellite tagging in autumn of adult fish greater than 6 feet long to determine long-term movement patterns within and outside park.

As only 3 sawfish sightings have been reported in Biscayne National Park during the past 8 years, no monitoring is currently underway there.

The Recovery Plan for this endangered species is about to be finalized. The monitoring by MOTE is funded by NMFS and various grants and is expected to continue.

The strategy for SFCN will be to:

- Provide a brief annual summary of the results of monitoring of the sawfish on the NPS-SFCN public web page and link to MOTE sawfish web page

(www.mote.org/sawfish). Information that could cause collectors to locate sawfish will not be included. The summary will either be put together by SFCN staff based upon MOTE and NPS reports or summaries provided by the PI's.

- Provide copies of links to sawfish monitoring reports by MOTE and NPS on SFCN's NPS-intranet web page (NPS staff access only)
- Provide letters of support for the program as needed

**Principal Investigators/Key Contacts and NPS Lead:**

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- Andrea Atkinson, National Park Service, South Florida/Caribbean Inventory and Monitoring Network. Andrea\_Atkinson@nps.gov, 305-252-0347 [SFCN Lead]

**Development Schedule, Budget, and Expected Interim Products:**

By the end of 2008, SFCN will coordinate with MOTE to place summaries on the SFCN public web page and reports on the intranet page. Estimated time required: 0.5 weeks with a combination of Quantitative Ecologist and support staff.

Expected SFCN staff time requirements once program is fully implemented in 5 years:

SFCN Staff	Full Time Equivalent (FTE)
Coordinator	
Marine Ecologist	
Fisheries Biologist	
Marine Biologist Technician (So FL)	
Marine Biologist Technician (VI)	
Community Ecologist	
Wildlife Technician (Wildlife)	
Wildlife Technician (Vegetation)	
Quantitative Ecologist	0.01
Data Manager	0.01
GIS/Data Tech	0.01
Interns	
SFCN Total	0.03