

Vital Sign: Protected Marine Mammals

[shortened name: Marine_Mammals]

Parks Where Vital Sign will be Implemented:

BICY, BISC, EVER

BUIS, DRTO, SARI, VIIS - deferred

Justification/Issues being addressed: Protected Marine Mammals ranked 28th among the 44 SFCN vital signs. These critically imperiled or rare marine mammals are typically large species, sensitive to the effects of calving/rearing habitat loss, habitat degradation, contaminant bioaccumulation, and food-web alterations. Recovery from historic hunting/collection pressure and low reproductive fecundity are also issues. Marine mammals experience a wide range of stressors and habitat quality issues both inside and outside park boundaries. The most threatened marine mammal regularly in SFCN parks is the manatee. Because of their relatively low numbers they are affected by stochastic impacts on populations such as boat collisions, entanglement in fishing gear, and entrapment in flood control structures. Disturbance by visitors can also be an issue. Dolphins have also become a concern due to possible contaminant impacts on health. Monitoring population status, trends and distribution informs park managers about the status of these legally protected and publicly charismatic species, which enables potential impact assessments of visitor use and management activities.

General Monitoring Questions to be Addressed by the Vital Sign:

- What are the status and trends in the distribution, abundance and condition of rare, threatened, and endangered marine mammals (e.g. manatees, dolphins) regionally and within parks?

Measures:

Distribution, abundance, size, condition/disease of manatees and dolphins

Basic Approach:

SFCN will coordinate with park staff, USGS, FWRI, FKNMS, and USFWS.

FWRI is currently the key monitoring and research agency for manatees in the state of Florida

FKNMS is currently conducting research in habitat use of bottle nose dolphins in Florida Bay.

The strategy for SFCN will be to

Provide a brief annual summary of the results of monitoring dolphins and manatee on the NPS-SFCN public web page and link to FWRI and FKNMS web pages.

The summary will either be put together by SFCN staff based upon reports and sent to the PI's for approval, or summaries provided by the PI's.

Provide copies or links to manatee and dolphin monitoring reports by FWRI, FKNMS and NPS on SFCN's NPS-intranet web page (NPS staff access only)

While dolphins and whales occur in BUIS, DRTO, SARI, and VIIS, monitoring is deferred due to insufficient funds.

Principal Investigators/Key Contacts and NPS Lead:

- Ben Ruttenberg, National Park Service, South Florida/Caribbean Inventory and Monitoring Network, Ben_Ruttenberg@nps.gov, 305-252-0347.
- USGS-SIRENIA(manatee), FWRI(manatee, dolphins, turtles), FWS, NMFS(dolphins and whales). FKNMS (dolphins).
- Brian Keller (Dolphin research), Science Coordinator, FKNMS 305-743-2437, Brian.Keller@noaa.gov

Development Schedule, Budget, and Expected Interim Products:

By the end of 2008, SFCN will coordinate with FWRI and FKNMS to place summaries on the SFCN public web page and reports on the intranet page. Estimated time required: 1 week 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