

# Monitor National Marine Sanctuary

## Key Species

### Management Issue

The Monitor National Marine Sanctuary (MNMS or Sanctuary) was designated in 1975 to protect the wreck of the famed vessel. Since designation, the Sanctuary has started to expand its research and monitoring beyond maritime heritage resources to include biological resources as well. Fundamental to this change is the basic requirement to inventory and characterize key species that live in and around the MNMS. With this information, MNMS will be better equipped to make more informed management decisions and take assertive action to assess and monitor the status and trends of key species within the Sanctuary.

### Description

The Monitor National Marine Sanctuary was established primarily due to its cultural resources, and the majority of the research that has been conducted has focused on those resources. There have been very few biological studies conducted and an inventory of key species living within the sanctuary has not been established. Increased understanding of key species and how populations are changing over time will increase the ability to better monitor environmental impacts and possibly predict environmental changes (Nicholls 2002).



*A sand tiger shark swims near a shipwreck off the coast of North Carolina.  
Photo Credit: East Carolina University*

### Questions and Information Needs

- 1) What are the key species located within the Sanctuary?
- 2) What is the status and trends of key species?
- 3) What is the health of the key species?
- 4) How can key species be effectively managed?
- 5) What is the abundance and distribution of species?
- 6) Sand Tiger Sharks can be found congregating around shipwrecks. Are these sharks a key species within the Sanctuary? What is the purpose of the population aggregations?

### Scientific Approach and Actions

- Accumulate scientific results from previous studies within the MNMS vicinity
- Analysis for organism classification
- Establishment of interagency relationships for research purposes

### Key Partners and Information Sources

NOAA's National Center for Coastal Ocean Science, North Carolina Aquarium, East Carolina University, Duke Marine Lab, University of North Carolina Coastal Studies Institute, NOAA Fisheries Lab (Beaufort, NC), National Marine Fisheries Service Northeast Fisheries Science Center

### Sanctuary Resources Available

- Research vessel for research projects
- Personnel and NOAA divers

### Resource Needs

- Partnerships for shared responsibility of data collection, analysis, and reporting (NOAA, academic institutions)

*Updated: 6/18/2014*

*For More Information -- <http://www.sanctuaries.noaa.gov/science/assessment>*

## Management Support Products

- Scientific papers and reports
- Extensive list of organisms found within the sanctuary
- Reports on distribution of species
- Maps and GIS distribution models

## Planned Use of Products and Actions

- Identification of key species will be used as a starting point with which to detect changes within the species and compare future results
- Appropriate management actions based on findings

## Program References

### MNMS Management Plan

Resource Monitoring Action Plan

### MNMS Condition Report

- What is the status of key species and how is it changing?
- What is the condition or health of key species and how is it changing?
- What are the abundance and distribution of major habitat types and how are they changing?
- What is the condition of biologically-structured habitats and how is it changing?
- What are the contaminant concentrations in sanctuary habitats and how are they changing?
- What is the status of biodiversity and how is it changing?

### ONMS Performance Measures

- 3.2: Habitat Protection Performance
- 3.3: Measuring Living Resources Protection Performance

### Other Documents

- Monitor National Marine Sanctuary State of the Sanctuary Report 2008

### Cited Sources

- Nicholls, Pip. (2002). Determining impacts on marine ecosystems: the concept of key species. *Water & Atmosphere*, 10(2), 22-23.

Updated: 6/18/2014

For More Information -- <http://www.sanctuaries.noaa.gov/science/assessment>