



The Office of National Marine Sanctuaries is part of NOAA's National Ocean Service

#### **Our Vision**

People value marine sanctuaries as treasured places protected for future generations.

#### Our Mission

To serve as the trustee for the nation's system of marine protected areas to conserve, protect and enhance their biodiversity, ecological integrity and cultural legacy.

Cover Photos (Clockwise from upper right):
Whale shark (Erich Borneman),
AUV launch from R/V Nancy
Foster (Greg McFall), SE US
from space (NASA), multi-beam
bathymetry image made from
R/V Nancy Foster (NOAA), coral
with disease (Erich Mueller).

# Southeast Atlantic, Gulf of Mexico and Caribbean Region 2007 Accomplishments Report

#### Introduction

The Southeast Atlantic, Gulf of Mexico and Caribbean Region of the Office of National Marine Sanctuaries includes Gray's Reef, Florida Keys and Flower Garden Banks National Marine Sanctuaries. The role of the Regional Team is to assist, benefit and enhance the activities of the three sites within the region. The Regional Team also serves as a liaison with other regions and the national program, and as a point of contact for other regional counterparts both within NOAA and with other agencies. With a regional focus, the team takes a broader perspective and applies sanctuary program successes on a broader geographical scale.

This report highlights accomplishments of the Southeast Atlantic, Gulf of Mexico and Caribbean Regional Team during 2007. These efforts emphasized science and connectivity, and the importance of using science to direct management actions. Also evident in 2007 accomplishments is the region's commitment to site interests, to the idea of providing added value to site issues, and efforts to integrate programs where possible.

# Regional support for sites & among-site coordination

The foremost goal of the regional structure is to provide support and add value to the three sites. Regional staff do this in many ways including support of field operations, management activities and site operations.

#### **Field Operations Support**

Regional staff provided significant contributions to the Gray's Reef and Florida Keys R/V Nancy Foster cruises, providing a Dive Master and Chief Scientist for the Florida Keys cruise, and a scientist and diver for the Gray's Reef cruise. In May, Gray's Reef and regional staff partnered with the South Atlantic Fishery Management Council and the National Undersea Research center to conduct mapping operations of deep coral Habitat Areas of Particular Concern in Florida. This work, conducted outside the boundaries of any of the existing sanctuaries, was important for regional management interests. Acting in this capacity also helps to build partnerships with external agencies and foster regional collaboration with a focus on ecosystem approaches to management, which provides for the needs of many by sharing limited regional resources.

Regional staff also served on research teams for the Flower Garden Banks "Secrets of the Gulf" expedition and the Florida Keys National Marine Sanctuary "If Reefs Could Talk" Aquarius Mission. Both missions were high profile education and scientific missions which brought exciting research efforts out to the public and into classrooms. Regional staff participated in other important field operations in the three sites including the Florida Keys coral spawning



and numerous Gray's Reef operations.



Bosun Group Leader Brad Delinski launching AUV from R/V Nancy Foster during expedition to Gray's Reef National Marine Sanctuary. Photo: Greg McFall

## **Support for Management Activities**

Numerous management actions are underway in the three sanctuaries of the Southeast Atlantic, Gulf of Mexico and Caribbean Region, and regional staff offered their assistance to each. These include the establishment of a Research Area in Gray's Reef, a proposal to ban spearfishing in Gray's Reef, management plan review for the Flower Garden Banks and the approval of Dry Tortugas National Park's Research Natural Area. Regional staff also participated in site Sanctuary Advisory Council meetings and on several occasions presented on issues of common concern to offer lessons learned from other sites around the region and program.

To support management activities, the Office of National Marine Sanctuaries is working to complete condition reports which will provide information on resource status and trends in all sanctuaries and the monument. Regional staff participated in the writing teams for the Flower Garden Banks and Gray's Reef Condition Reports and will do so for the Florida Keys Condition Report in 2008.

Regional staff also assisted in developing a Mass Coral Bleaching Response Plan for the Florida Keys National Marine Sanctuary. The plan is organized around four major themes: early warning system, impact assessment, communications, and long-term management considerations. A key to the early warning system is a volunteer program, BleachWatch (http://isurus.mote.org/Keys/bleachwatch.phtml), managed by Mote Marine Lab's Tropical Research Laboratory. During the bleaching season, Mote staff prepare

The Office of National Marine Sanctuaries is trustee for a system of 14 marine protected areas, encompassing more than 150,000 square miles of ocean and Great Lakes waters. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. The sanctuary system is part of the National Oceanic and Atmospheric Administration (NOAA), which manages sanctuaries by working cooperatively with the public to protect sanctuaries while maintaining compatible recreational and commercial activities. The Office of National Marine Sanctuaries works to enhance public awareness of our nation's marine resources and maritime heritage through scientific research, monitoring, exploration, educational programs and outreach.









Anemone, Gray's Reef National Marine Sanctuary. Photo: Greg McFall

Current Conditions Reports, which summarize data from the NOAA Coral Reef Watch program (satellite sensors for sea surface temperature and thermal stress), SEAKEYS/C-MAN stations (sea surface temperature and wind speed), and volunteer observations. Collectively, these sources of information are integrated into an overall level of risk for bleaching in the Keys.

#### **Support for Site Operations**

The Region team provided support to the Flower Garden Banks National Marine Sanctuary's efforts to establish an agreement with Texas A&M for berthing the R/V Manta, which was under construction in 2007. Regional staff also visited the Flower Garden Banks National Marine Sanctuary offices to review facility and new vessel needs.

## Regional Contributions to Science & Management

Regional staff spent a significant amount of time in 2007 contributing to regional science efforts. This included report writing, presentation of research and management activities, and attendance at conferences and meetings. These activities served as opportunities to collaborate with other marine resource managers and to inform the public and our partners of science and management activities underway within the Southeast Region of the National Marine Sanctuary System.

## Reporting on Science & Management

Regional program staff wrote scientific reports and published scientific literature during 2007. Projects included a poster for the Coastal Zone 2007 meeting on public involvement in GRNMS Management, a Marine Protected Areas chapter for the U.S. Climate Change Science Program's Synthesis and Assessment Product 4.4 (Adaptation Options for Climate-Sensitive Ecosystems and Resources), and a paper on the practical approach to ecosystem-based management.



Coral reef, Flower Garden Banks National Marine Sanctuary. Photo: GP Schmahl.



During 2007, regional staff gave numerous presentations at academic institutions, including Florida Keys Community College, Harte Research Institute for the Gulf of Mexico Studies, University of Florida and the University of South Florida. These presentations provided students and academic partners information on a variety of issues.

# NATIONAL MARINE SANCERLIABILES

### Scientific and Management Related Meetings

Regional team members participated in and presented at numerous conferences and meetings in 2007, all in an effort to network with other scientists and ocean managers. These related to topics of interest for all three sites, including climate change, coral bleaching, regional ocean governance, reauthorization of the Coral Reef Conservation Act,

Regional staff also served as regional representatives for Southeast Coastal Ocean Observations Regional Association (SECOORA), the Gulf of Mexico Coastal Ocean Observing System and Regional Association (GCOOS), the Florida Coastal Ocean Observing Systems (FL COOS) Consortium and the Integrated Ocean Observing System (IOOS). Both of these organizations serve to provide critical data of interest to all three sites in the Southeast Region

## Regional Collaboration with State & Federal Entities

#### Collaboration with Federal Partners

Members of the Southeast Region team represented the National Marine Sanctuary and the three sites of the region at numerous Fishery Management Council meetings in 2007. These included meetings of the South Atlantic and the Gulf of Mexico councils and the Gulf of Mexico Alliance. Regional staff also serve on NOAA's South Atlantic, Southeast and Caribbean, and Gulf of Mexico Regional Teams. The Regional Science Coordinator represents the Flower Garden Banks, Florida Keys and Gray's Reef on the National Marine Sanctuary Program's Science Council. Staff also participated in numerous meetings with other federal (NERRs, NMFS) partners on issues of interest to the sites and region.

#### Collaboration with State & Other Partners

Regional team members participate in a variety of non-federal organizations which are critical to a comprehensive understanding of what is happening in the region as a whole. Additionally, this type of involvement is a valuable asset to the sites who cannot always send a representative to each opportunity. Some of these organizations include the High Seas MPA Advisory Working Group, the Florida Keys National Marine Sanctuary Water Quality Protection Program Steering Committee, the Florida Ocean and Coastal Resources Council and the US Coral Reef Task Force. The Regional Director also represented DOC/NOAA for two South Florida Ecosystem Restoration Task Force meetings. Participation in these organizations keeps the sanctuary program engaged in the activities and research conducted by regional partners, and helps to inform the sites of new initiatives and collaborative opportunities.







Black Seabass, Gray's Reef National Marine Sanctuary. Photo: Greg McFall

# International Collaboration/Partnerships

The Southeast Region has been active in developing international collaborations and partnerships to promote ocean resource stewardship throughout the Caribbean and beyond. Some examples of these efforts are described below.

#### International Year of the Reef

Regional staff took a leading role in planning the Sanctuary Program's contribution to the 2008 International Year of the Reef. In addition to the on-going education programs by the Florida Keys and Flower Garden Banks sanctuaries that are helping to promote reef stewardship, the Southeast Region anticipates having a high profile at the International Coral Reef Symposium, a key reef science summit and IYOR event in July 2008.

# Mooring buoy installations & other partnership opportunities in Colombia

The Region provided Colombia assistance with mooring buoy technology for the Colombian National Park at the islands of Rosario and San Bernardo. Regional staff also participated in the International Advisory Board for Coralina, dedicated to marine conservation in Colombia. Coralina has made excellent progress in the implementation of their marine zoning plans for the Seaflower Biosphere Reserve and the San Andreas-Old Providence Marine Protected Area. The coral reef resources of Colombia are both vast and healthy and lie upstream of the Florida Keys and the sanctuaries of the Southeast Region. The Program plans continued science, technology and management collaboration to strengthen the links to Colombia's marine



#### **Nicaragua**

Regional staff have been asked to provide technical assistance for MPA planning to the Communal Council of Corn Island on the southern Caribbean coast of Nicaragua. This is a promising partnership opportunity, which will complement the collaboration with Colombia.

#### Puerto Rico

Regional staff met with representatives of the Department of Natural and Environmental Resources for Puerto Rico, who are interested in the Sanctuary System and its potential role in enhancing local marine conservation efforts. Several high-level discussions have identified the positive assets that the Sanctuary Program can bring to marine stewardship and understanding in Puerto Rico.

#### International MPA Course

In collaboration with Universidad Nacional Autónoma de México, Florida International University, and Nova Southeastern University, regional staff helped teach a course on marine protected area science and management for 30 students from Latin America in Akumal Mexico. This was the third year of the Sanctuary Program's participation in this important international education and outreach effort.



Participants at International MPA Course, Akumal Mexico. Photo: Jennifer Rehage



Sponges, Gray's Reef National Marine Sanctuary. Photo: Greg McFall







# New Sites & Expanded Protection at the Flower Garden Banks

# <u>Islands in the Stream – A Network of Marine Reserves for the Gulf of Mexico</u>

Regional staff have had an important role in the development of the proposal to establish a network of marine reserves in the Gulf of Mexico. Named Islands in the Stream, the initiative emphasizes the diverse biological communities occupying important reef and bank sites that ring the Gulf of Mexico and the ocean currents that interconnect them. In support of the concept, background information on ecological connectivity and site characterizations is being assembled. These data are being used in on-going efforts to promote the value of the concept to government agencies, administrators and public stakeholder groups.

#### FGBNMS Management Plan Review

SE Region staff actively participated in the management plan review process for the Flower Garden Banks National Marine Sanctuary. This review, coordinated by the sanctuary's staff and the sanctuary's advisory council, has proposed expanded boundaries to include significant seafloor features and biological communities that are adjacent to the existing sanctuary. It has also proposed an in-depth study of the effects of fishing on the sanctuary's ecosystem and what management actions may be necessary to mitigate any negative impacts.

# Climate Change

The Southeast Region has taken a leading role in helping to guide local, regional and international responses to climate change and its impacts. Staff have been invited to several conferences, and participated in panel and roundtable discussions with state governments, academic institutions and conservation groups to help direct science and policies toward curbing human-induced climate change and its impact on coastal and marine environments. The wealth of knowledge conveyed to these groups by sanctuary staff regarding coral reef ecosystem responses to ocean warming and other climatic impacts has helped to promote the value of the sanctuary system in understanding and monitoring for global change in marine ecosystems.



# Looking forward to 2008

2008 promises to be another busy and productive year for regional staff. Management actions in the region will be a priority, including the Gray's Reef Research Area and spearfishing issues, the Flower Garden Banks Management plan review, and the Florida Keys Condition Report and 10-Year Ecosystem Report Card. The Islands in the Stream initiative will also continue to be a priority effort in the Southeast Region. As in 2007, the focus of regional efforts will be on science and connectivity, and toward providing value added to the three sites in the Southeast Atlantic, Gulf of Mexico and Caribbean Region.

#### Who we are:

- Dr. Billy Causey, Regional Director, Key West, FL
- Dr. Brian Keller, Regional Science Coordinator, St. Petersburg, FL
- Sarah Fangman, Associate Science Coordinator, Savannah, GA
- Dr. William Kiene, Associate Science Coordinator, Galveston, TX
- Steve Baumgartner,
  Operations
  Coordinator
  (shared position with
  FKNMS), Key West, FL



