

A Look Ahead

In 2012, Flower Garden Banks National Marine Sanctuary celebrates its 20th anniversary! Since its designation in 1992, there have been many notable expeditions, achievements and discoveries within the sanctuary. This year will be especially important for the sanctuary. Early in 2012, a new management plan will be published - the result of more than five years of effort that included significant involvement from the public. This plan identifies the priority issues that NOAA will address over the next five to ten years, and provides strategic guidance for research, education and resource protection programs in the sanctuary.



John Embesi



CIOERT/Winfield



G.P. Schmahl

Flower Garden Banks National Marine Sanctuary Advisory Council Members

Officers

Chair: Dr. Larry McKinney
Vice Chair: Frank Burek

Non-Governmental Members

Conservation: Ellis Pickett and Page Williams
Diving – Recreational: Frank Burek and Jesse Cancelmo
Diving – Operations: Cher Walker and Frank Wasson
Education: Dale Loughmiller and Jacqui Stanley
Fishing – Commercial: Joe Hendrix and Mike Jennings
Fishing – Recreational: Irby Basco and Matt Bunn

Oil & Gas Production: Clint Moore and John Hoffman
Research: Dr. Will Heyman and Dr. Larry McKinney

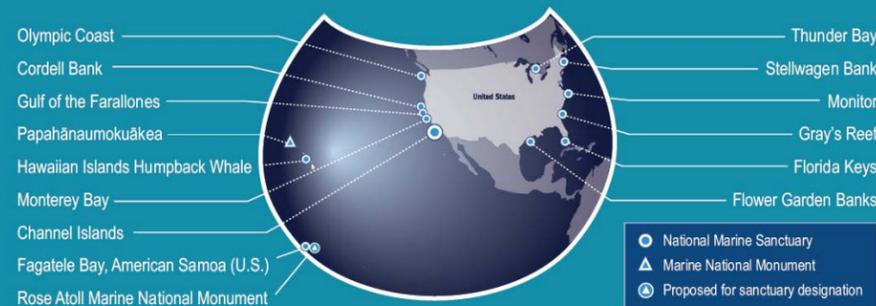
Governmental Members

Federal Government

Environmental Protection Agency: to be determined
Bureau of Ocean Energy Management, U.S. Department of the Interior: James Sinclair
NOAA Fisheries Service, U.S. Department of Commerce: Rusty Swafford
NOAA Office of Law Enforcement: Charles Tyer
United States Coast Guard: LCDR Carmen DeGeorge

<http://flowergarden.noaa.gov>

NATIONAL MARINE SANCTUARY SYSTEM



Scale varies in this perspective. Adapted from National Geographic Maps.

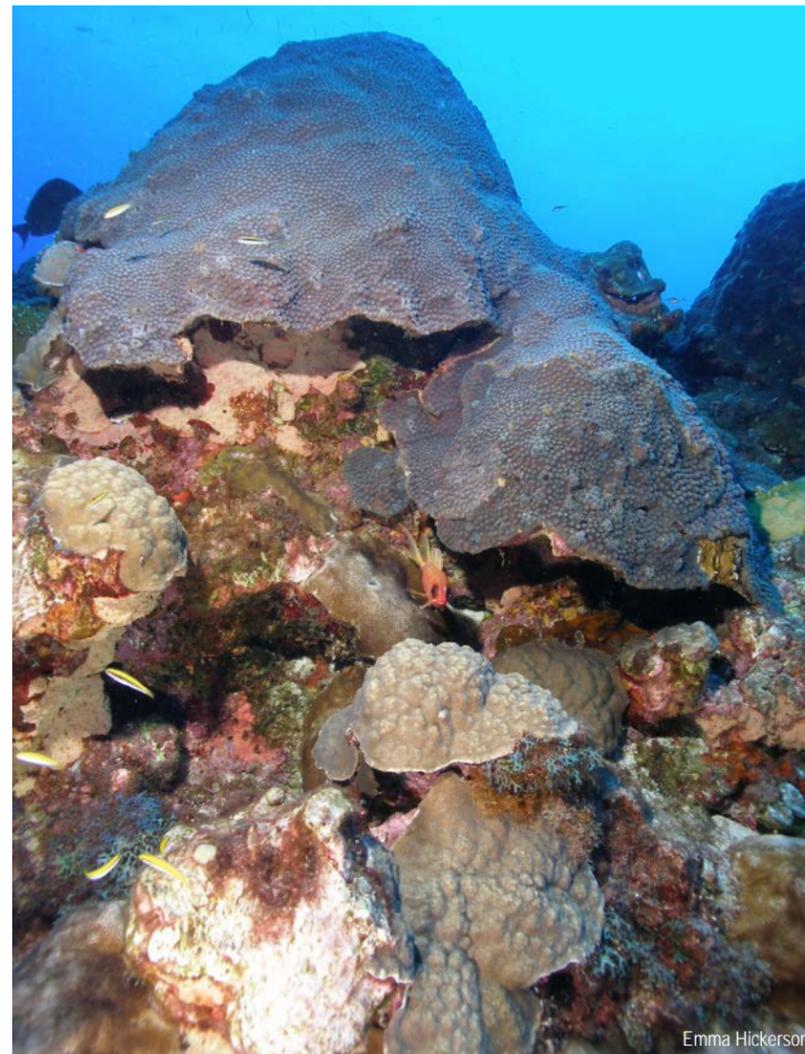
NOAA's Office of National Marine Sanctuaries is committed to supporting lives and livelihoods across the nation and in sanctuary communities through socioeconomic research and monitoring to understand the economic and social drivers of sanctuary resources and improve management practices.

Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration

FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY



2011 ACCOMPLISHMENTS



Emma Hickerson



FGBNMS/NURC-UNCW

Flower Garden Banks National Marine Sanctuary lies 70 to 115 miles off the Texas-Louisiana coast, where 'gardens' of coral flourish in the Gulf of Mexico. The sanctuary encompasses three underwater 'mountains' formed by salt domes and capped by coral reefs that harbor numerous Caribbean reef fish and invertebrate species. Majestic whale sharks and graceful manta rays also frequent the reefs. Deeper reefs make up the balance of the sanctuary (98%), providing habitat for numerous commercially and recreationally important fish species, black corals and gorgonians. Established January 17, 1992.



G.P. Schmahl



John Embesi

Expedition connects classrooms to corals

Science and education came together during a 14-day expedition dubbed *Coral Connections in the Gulf* onboard NOAA Ship *Nancy Foster*. Six partners from government and academia joined forces to collect baseline data in Flower Garden Banks NMS. Participants brought real-time science to the public by showcasing the expedition online as an interactive experience. Viewers were invited to submit questions, which were answered by team members when posting their daily blogs and photos during the expedition. The team responded to over 500 questions, submitted primarily by local students who followed the expedition as part of their coursework. <http://flowergarden.noaa.gov/science/nancyfoster2011.html>



Kelly Drinnen

Staff supports National Ocean Sciences Bowl competition

Flower Garden Banks and regional NMS staff actively supported the 2011 National Ocean Sciences Bowl finals competition held in Galveston. An introduction to the sanctuary and current science activities were highlighted during one of the feature presentations and in the creative event artwork provided by an advisory council member. Twenty contestants and chaperones also enjoyed a field trip on board R/V *Manta* where students experienced hands-on science. A "Speed-Career" event offered sanctuary researchers an additional opportunity to speak with students about marine science careers. Other contributions included reviewing competition questions, officiating the competition and providing sanctuary materials to each participant.



Kelly Drinnen

Soldiers to science

Flower Garden Banks NMS joined National Marine Fisheries Service in hosting an event *From Soldiers to Science: 100 Years of Ft. Crockett History*, during which staff unveiled an exhibit chronicling the fort's evolution. While ten of the buildings are now home to the sanctuary and other NOAA offices, Ft. Crockett was originally established to protect the waterways of Galveston and Houston during both world wars. Following WWII, the property was declared surplus and ultimately transferred to civilian agencies charged with researching ways to protect and manage the economically important natural resources in the Gulf of Mexico.

Aquariums connect public to sanctuary

Flower Garden Banks NMS continued to build upon partnerships with aquariums as an avenue of communication with the public. A major milestone was reached when renovation of the sanctuary exhibit at Texas State Aquarium was completed. Updates to the exhibit included new kiosks, fresh interpretive signage and graphics, and underwater communications gear that will allow divers to communicate with visitors about the sanctuary. All information is now presented in both English and Spanish with closed captioning for audio components. In addition to the exhibit update, sanctuary educators provided training for approximately 200 interpretive staff and volunteers at three aquariums with sanctuary exhibits.



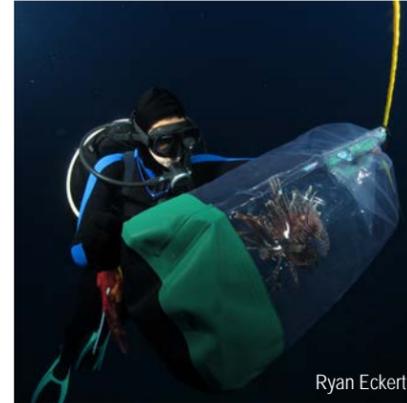
Kelly Drinnen



Ryan Eckert

Researchers investigate whale sharks

Flower Garden Banks NMS researchers partnered with three other organizations to investigate whale shark movements among reefs and banks in the Northwestern Gulf of Mexico and the Caribbean. During a five day expedition, six whale sharks were located using a spotter plane. A satellite tag was deployed on one of the sharks, allowing scientists to observe its daily movements. A second whale shark was tagged by FGBNMS within sanctuary boundaries. Knowledge gained during these investigations will help resource managers take an ecosystem approach to managing valuable Gulf resources.



Ryan Eckert

Sanctuary responds to invasive lionfish

Natives of the Indo-Pacific, lionfish were introduced into the Caribbean in the 1990s and rapidly expanded their range into both the Atlantic and Gulf of Mexico. Due to the lionfish's feeding habits and ability to reproduce rapidly, resource managers are concerned about their potential impacts on economically important species such as snapper and grouper, as well as other fish communities throughout the different habitats. When the first lionfish were sighted in Flower Garden Banks NMS during the summer, staff initiated counter measures by issuing take permits to dive charter operators. Sanctuary staff continue to work toward understanding and finding solutions to the potential economic and ecological impacts of the invasion.



Ryan Eckert

Research vessel a regional asset

The R/V *Manta* realized its potential as a regional asset this year, completing 24 missions for the sanctuary and 11 missions for six other research groups and one education group, including academia and government agencies. The vessel traveled more than 10,000 nautical miles and made 100% of the scheduled cruise dates with no delays due to mechanical failures. Science and management projects included long-term monitoring, fine-scale current topography and current patters, acoustic fish surveys, whale shark migrations, and mooring buoy installations.



Mark Trent

Socioeconomic study near completion

As part of the management plan review process, sanctuary staff embarked on an effort to evaluate socioeconomic implications of potential management proposals. In partnership with Texas A&M University, interviews of 'for hire' operators, for both diving and fishing, were completed. Information regarding use of the sanctuary by private boaters/fishers was collected in anticipation of a constituent survey. An analysis of the oil and gas industry activities was also conducted in the areas surrounding the sanctuary.