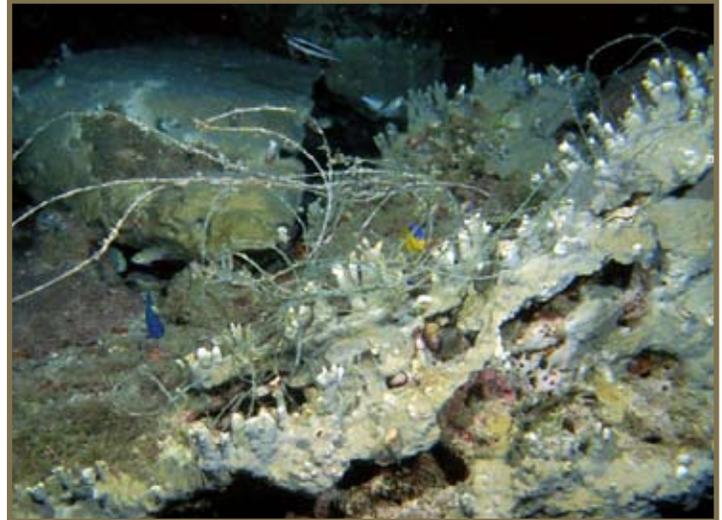




GULF COAST

Mapping, Assessment, and Removal of Derelict Fishing Gear (DFG) from Stetson Bank, Flower Garden Banks National Marine Sanctuary

Shrimp trawl nets, boat anchors, twisted metal and fishing line scatter the surface of Stetson Bank, a mid-shelf bank in the northwestern Gulf of Mexico. Comprised of a main feature and a deep ‘outer ring’ of claystone outcroppings atop a salt dome formation, Stetson Bank provides an ‘island’ of productive, shallow habitat for the growth of coral and sponge communities which, in turn, are home to an array of invertebrates, bony fishes, sharks and turtles. The main feature of Stetson Bank is protected within the Flower Garden Banks National Marine Sanctuary, while the deep ‘outer ring’ lies within a Habitat Area of Particular Concern (a Gulf of Mexico Fishery Management Council designation).



Monofilament line is reported regularly by scuba divers visiting Stetson Bank. Photos courtesy FGBNMS.

Recreational and commercial fishing, diving, boating, and other activities occur at and around Stetson Bank. Marine debris from these activities has been reported by divers and opportunistically documented through ROV habitat characterization surveys. Throughout the summer of 2008, marine debris surveys and mapping will be conducted and debris will be assessed for its impact on the biological community of Stetson Bank. If feasible, priority debris items will be removed by divers, under the guidance of sanctuary staff.

As a whole, this project contributes to ongoing research on the impacts and occurrence of marine debris within the Flower Garden Banks National Marine Sanctuary and other hard-bottom habitats in the northwestern Gulf of Mexico. More specifically, the removal of marine debris and derelict fishing gear will enhance the protection and restoration of the siltstone reef habitat of Stetson Bank.

WHAT IS MARINE DEBRIS?

Marine debris is any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes.

MARINE DEBRIS SOURCES

Sources of marine debris include land-based sources, such as littering, dumping, and industrial losses. Ocean-based debris can come from fishing vessels, cargo ships, stationary platforms, and other vessels.



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MANDATES

Mandates supporting NOAA's marine debris efforts include the following:

- Marine Debris Research, Prevention, and Reduction Act of 2006, 33 U.S.C. §§ 1951 et seq.
- U.S. Ocean Action Plan
- Coral Reef Conservation Act
- Marine Plastic Pollution Research and Control Act, 33 U.S.C. §§ 1901 et seq.
- Marine Protection, Research, and Sanctuaries Act, (Title II) 33 U.S.C. §§ 1401 et seq.
- Clean Water Act, 33 U.S.C. §§ 1251 et seq.

CURRENT PARTNERS

- NOAA Diving Program
- National Undersea Research Center/University of North Carolina at Wilmington
- Spree Expeditions, Inc.

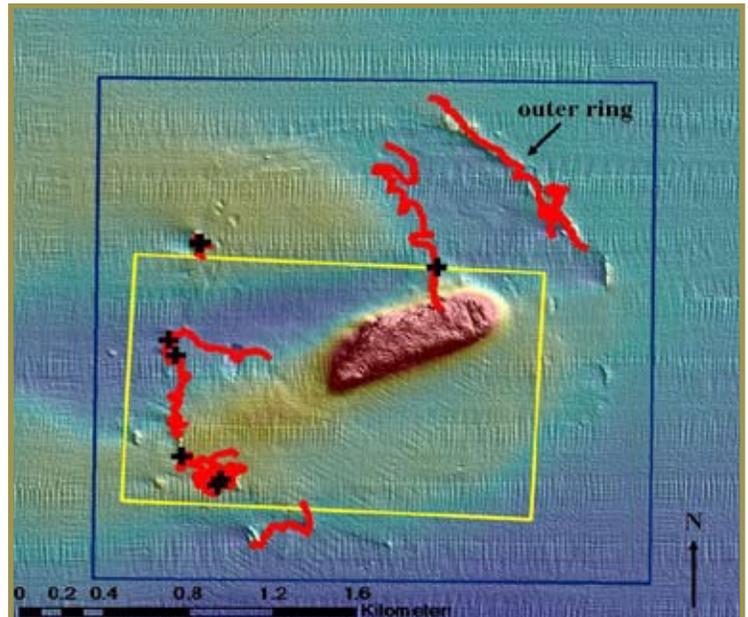
BENEFITS OF THE PROJECT

- Assessment of the impacts and sources of marine debris in the Flower Garden Banks National Marine Sanctuary.
- Decreased vulnerability and increased protection of sanctuary resources, including the substrate and fauna of Stetson Bank.
- Increased safety of divers, fishermen and sanctuary personnel.
- Increased public awareness of the cause and effects of marine debris in deepwater habitats.
- Development of a marine debris prevention, monitoring, and response plan.

CONTACTS

Jennifer DeBose, Ph.D.
Research Specialist
Flower Garden Banks National Marine Sanctuary
Jennifer.DeBose@noaa.gov
(409) 621-5151 x 114

Emma Hickerson
Research Coordinator
Flower Garden Banks National Marine Sanctuary
Emma.Hickerson@noaa.gov
(409) 621-5151 x 111



Completed ROV tracks (red lines) and known locations of significant marine debris (+) on and around Stetson Bank. Significant amounts of derelict fishing gear and other marine debris are scattered along the claystone outcroppings of Stetson. Current FGBNMS (yellow box) and HAPC boundaries (blue box) are shown. Bathymetry provided by Jim Gardner/USGS; map created by DeBose/FGBNMS.

This project is funded through NOAA's National Ocean Service, Office of Response & Restoration, Marine Debris Program. The NOAA Marine Debris Program works with other NOAA offices, as well as other federal, state, and local agencies and private sector partners to support national, state, local and international efforts to protect and conserve our nation's natural resources, oceans, and coastal waterways from the impacts of marine debris.