

# FLOWER GARDEN BANKS NMS IMPACTED BY HURRICANE IKE



Fig. 1. Eric McHugh hovers over a large overturned boulder coral close to EFGB#2 mooring.

During the late afternoon of September 12, 2008, Hurricane Ike traversed the East Flower Garden Bank, located at approximately 27°54'33" N, 93°35'59" W, in the northwestern Gulf of Mexico. At the time of passage over the FGBNMS, the storm was a Category 2 on the Saffir-Simpson Hurricane Scale, with sustained winds of 105mph, and atmospheric pressure at 955mb. The highest winds recorded by TABS Buoy V, located close to the East Flower Garden Bank, were 71.7 knots (82.5 mph) at 7pm on September 12th. The storm was moving WNW at 12mph.

A "quick look" assessment cruise on board the M/V EAGLE RAY was conducted on October 10th by FGBNMS staff and volunteers to determine the impacts of Hurricane Ike at the East and West Flower Garden Banks.

Surveys were conducted at EFGB buoy #'s 2 and 5, and at WFGB buoy #2. Multiple large boulder colonies had been dislodged and moved across the reef, leaving large craters and paths of impact along the track of displacement. Barrel sponges (*Xestospongia muta*) were sheared off, either completely, or partially, although some were observed with no injuries. Scouring of approximately 3' of sand from the sand flats and around bases of coral outcroppings was evidenced. The *Madracis* fields on the eastern flank of the EFGB had experienced significant breakage. Blowout holes around boulder colonies in the *Madracis* field were numerous.

YSI and Seabird instruments were partially buried and need to be lifted and repositioned on the sand flats at EFGB#4/5 and WFGB#2. The acoustic receivers were both still intact and functioning.

The objective of this cruise was to take a quick look at the coral reef caps at the East and West Flower Garden Banks so that we can plan and prepare for more rigorous, quantitative assessment cruises in the near future. Not only is it imperative that a full assessment of the reef cap be undertaken by divers, but also that resources be made available to conduct deeper water assessments. These

assessments are needed both within the sanctuary using ROV and mapping technology, and at surrounding reefs and banks in the northwestern Gulf of Mexico of interest to the Flower Garden Banks NMS, as identified through the sanctuary Management Plan Review process.

Thanks to Marissa Nuttall (FGBNMS) and Eric McHugh (TAMUG) for participating in the cruise, and to Capt. Darryl Walker for coordinating the shiptime.

A full cruise report can be downloaded from <http://flowergarden.noaa.gov>

FMI contact Emma Hickerson or G.P. Schmahl 409-621-5151 ext. 111 or ext. 102



Fig. 2. Field of yellow pencil coral (*Madracis mirabilis*) are seen broken in place due apparently to downward forces produced by the storm.

Image credits:  
FGBNMS/Hickerson



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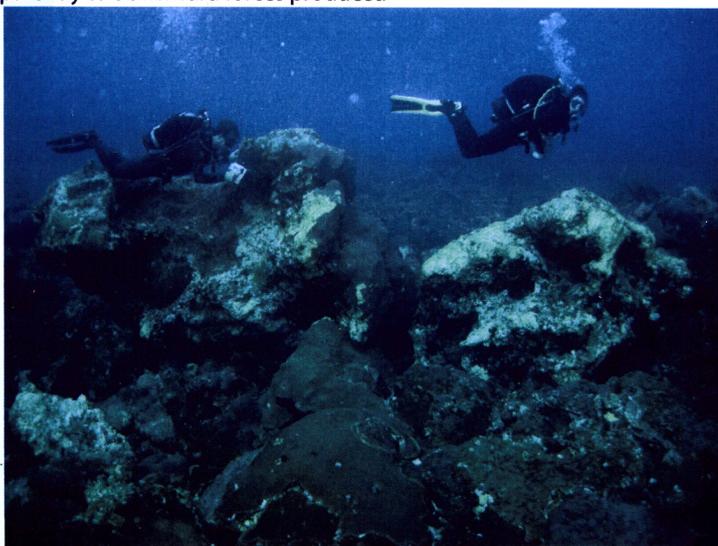


Fig. 3. Eric McHugh and Marissa Nuttall hover over large boulders of dislodged corals close to the WFGB#2 mooring.