## Mississippi Gulf Fishing Banks, Inc.

## Activity Report for the Period July 14 thru August 7, 2016

## **Activity Summary**

During this period there were 2 Diving Trips made to changeout 5 USM Sensors. MGFB, working cooperatively on a USM/GCRL project headed up by Dr. Scott Milroy, a dozen data loggers were deployed in the Gulf to measure Dissolved Oxygen, Temperature, and Salinity, every 15 minutes. Hopefully the information will yield insight into hypoxia conditions and sources plaguing Mississippi's Artificial Reefs. On August 6, a trip was made to replace the unit at FH-10 (data since June 12). On August 7, a trip was made to replace units at FH-14 (My Wife, data since June 12), FH-3 (Chevron Boat, data since June 15), FH-2 (St Elmo data since June 22), and FH-13 (Barataria Bay data since June 11).

## **USM/GCRL Recording Sensors Replaced**

MGFB has been working cooperatively with a USM/GCRL project headed up by Dr. Scott Milroy. A dozen data loggers were deployed in the Gulf to measure Dissolved Oxygen, Temperature, and Salinity, every 15 minutes. Hopefully the data will give insight to mitigate and determine sources of hypoxic (low O2) events. Hypoxia was visually evident on the reefs to the west such as FH-3 and FH-14. The project called for a 6 week approximate deployment so 6 new recorders were configured to be exchanged. After the data was collected on those, the units would be cleaned up and made ready to exchange with the remaining 6 recorders. On August 6, a trip was made to FH-10 with intent of proceeding to FH-14 & FH-3. Winds picked up and only FH-10 was visited. The next day a trip was made to FH-14, FH-3, FH-2, and FH-13. All the trips were combined on a single video and can be found at <a href="https://youtu.be/UQIW5OUDvkQ">https://youtu.be/UQIW5OUDvkQ</a>. In addition, a dive was made on the Paddle Wheeler Josephine near FH-14. This is an 1881 shipwreck of historical importance. A additional second dive was made on the Barataria Bay in FH-13 to replace the missing Flag there. Both these 2 dives are on separate videos. The Paddle Wheeler video is at <a href="https://youtu.be/zPzv-lh0Okc">https://youtu.be/zPzv-lh0Okc</a> and the Flag Video is at <a href="https://youtu.be/zJ7LzmhntvE">https://youtu.be/zJ7LzmhntvE</a>.





Some general observations made throughout these dives: FH-10 showed mostly some spadefish but not much else. FH-14, My Wife II, showed signs of improved hypoxia compared to the deployment video. Visibility was actually better than expected on both dives. A nice population of year zero red snapper established on this reef. FH-3, the Chevron Boat, showed the worse hypoxia evidence. It too was better as this visit showed some fish instead of none like on the deployment video. Two stone crabs actually setup housing between the recorder and the hand rail. No sea urchins were seen (a sign of hypoxia) but quite a few sea anenomes littered the wheelhouse roof. Also one of the Fish Dice Juvenile Fish Habitats deployed ended up sideways on the rear deck. FH-2, the St. Elmo, showed many more fish and life compared to the west reefs. Fishing pressure was evident by all the fouled fishing lines, lost anchors, and lost marker buoys. FH-13, the Barataria Bay, is perhaps the most productive reef ever deployed off Mississippi. With her significant size and multitude of FADs, she is holding tons of baitfish like Cigar Minnows and Blue Runners. The Recording Instrument showed the least amount of fouling probably due to the deeper water. The sensor is at 75 feet with the deepest measurement under the bow washout hole at 96 feet. The surrounding depth is 88 feet denoting some subsidence into the bottom. A game size red snapper was laying claim to the wheelhouse and sightings were also made of a lionfish and a queen angel. The missing American Flag was replaced while out there and seems to add some nice character to the reef. At just over a year old, this reef is really taking hold. There seems to be much less pressure compared to the FH-2 St Elmo reef probably due to holding back the numbers publicly for a year.