# **CATCH SHARES & MONITORING SYSTEMS**



# Gulf of Mexico Reef Fish Fishery

The Gulf of Mexico reef fish fishery consists of over 42 species, including highly valuable snapper, grouper, and tilefish species. Due to overcapacity and extreme overfishing, an Individual Fishing Quota (IFQ) system was implemented for commercial red snapper in 2007, and 18 grouper and tilefish species were added to the IFQ program in 2010.

Multiple objectives were developed for the Gulf reef fish fishery monitoring program, including:

- > Account for all fishery-related mortality including landings, at-sea discards, and unreported catch;
- ➤ Collect biological and fishery-related data to inform stock assessments, including vessel characteristics, gear type, gear details, total catch, species composition, fishing effort, biological samples, and sea conditions;
- > Collect information on vessel location, activity, and permits; and
- Provide accurate data in a timely way to support in-season management and annual planning needs.<sup>1</sup>

The following highlights the fishery's monitoring strategies and briefly discusses program funding and effectiveness.

## Monitoring Strategy: Logbooks

Fishery: Commercial reef fish vessels

Method: Fishermen are required to complete a logbook documenting catch and effort for each fishing trip. The logbook must be submitted to the Southeast Fisheries Science Center within seven days of a fishing trip. The National Marine Fisheries Service audits logbooks and returns about 10% of the vessel reports for completion or correction. When requested, fishermen must also complete a logbook that details their discards. These discard logbooks are based on a 20%

random sample of the fleet.

Monitoring Strategy: At-sea observers

Fishery: Commercial reef fish vessels

Method: The long-term goal of the observer program is to provide more accurate data of finfish and protected species interactions. Vessels are randomly selected by NOAA Fisheries and are stratified by season, gear type, and geographic location. The observer program data are available about four weeks after a trip and are used in stock assessments and the National Bycatch Report. While the program targets 5% of trips, it achieves only around 1% 1

Monitoring Strategy: Dockside

Fishery: Commercial reef fish vessels



Photo courtesy of Ryan Ono





*Method:* Dockside monitors collect landings information in addition to economic and biological data as part of a trip interview program. Interviews are conducted on a sample basis and information gathered includes species age, length, size frequency data, catch per unit effort, and composition of species caught and landed.<sup>1</sup> These data generally lag by months or even years, and information is not independently verified. It is also not used to ground-truth other sources of data such as dealer reports or fishing logbooks though it could be possibly used in this way.

Monitoring Strategy: Hail in/Hail out and vessel monitoring system

Fishery: Commercial reef fish vessels

*Method:* Fishermen are required to notify NOAA Fisheries three hours before landing. This, combined with a VMS requirement, allows the NOAA Fisheries Office of Law Enforcement to select a landing to monitor in-person. VMS is also used to monitor compliance with fishing regulations such as restricting fishing in closed areas. All vessels are required to carry an operating VMS on board that transmits hourly signals. Each vessel must notify NOAA Fisheries prior to departure which fishery the vessel will participate in and which gear will be carried and used.

Monitoring Strategy: Electronic reporting

Fishery: IFQ vessels

*Method:* The system tracks IFQ shares and allocations in addition to the pounds and value of landed red snapper and other IFQ species. Both dealers and fishermen enter data jointly during landing using personal identification codes. To make a transaction complete, both parties have to submit the required data, including number of pounds sold and average price of landings. This allows managers and law enforcement to monitor IFQ accounts in real time, ensure sales and purchases balance, and have a complete picture of what was purchased in the past 24 hours. While this information was available through the paper fish ticket process that was used previously, it was not available in real time.

Monitoring Strategy: Designated/approved landings ports

Fishery: IFO vessels

*Method:* The strategy was designed to facilitate enforcement and dockside monitoring efforts. An approval code is needed to move IFQ species from a designated landing site; the code shows that the landing has been reported by the fisherman and dealer.<sup>2</sup> Fishermen can land their vessels anytime during the day and night, given that they have provided their hail-in or landing notification; however, offloading is restricted to the hours of 6 a.m. to 6 p.m.<sup>3</sup>

### **Funding and Program Effectiveness**

Funding for the monitoring program is primarily gathered through a cost recovery fee. IFQ fishermen are charged the maximum amount allowed by the Magnuson-Stevens Act; 3% of the ex-vessel value of landed fish for the first year. The percentage is then re-evaluated each consecutive year. Given the low percentage, however, the recovery fee does not fully cover the costs of the program. The fee is collected by dealers at the time of sales, which are then submitted to NOAA online on a quarterly basis.<sup>3</sup> To date, the monitoring program has been achieving most of its goals since reporting is mandatory and penalties are strict for non-compliance. A formal five year review of the program is currently underway.





### Sources

- 1 MRAG-EDF. 2011. Guiding Principles for Developing Effective Monitoring Programs.
- 2 Gulf of Mexico Fishery Management Council (GMFMC). 2010. Gulf of Mexico Commercial Grouper and Tilefish Individual Fishing Quota (IFQ) Program Frequently Asked Questions, January 2010. 8 pp. <a href="http://sero.nmfs.noaa.gov/sf/pdfs/Gulf\_Reef\_Fish\_IFQ\_FAQs010310.pdf">http://sero.nmfs.noaa.gov/sf/pdfs/Gulf\_Reef\_Fish\_IFQ\_FAQs010310.pdf</a>

3 Gulf of Mexico Fishery Management Council (GMFMC). 2010. *Gulf of Mexico Commercial Grouper and Tilefish Individual Fishing Quota (IFQ) Program Frequently Asked Questions*, January 2010. 8 pp. <a href="http://sero.nmfs.noaa.gov/sf/pdfs/Gulf">http://sero.nmfs.noaa.gov/sf/pdfs/Gulf</a> Reef Fish IFQ FAQs010310.pdf

