

Marine Recreational Information Program The New Recreational Fisheries Data Collection Program



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Florida Fish and Wildlife Conservation Commission
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This presentation is designed to give a brief overview of the new national saltwater recreational fisheries data collection program, the Marine Recreational Information Program (MRIP). MRIP is a system of surveys operating with consistent standards and sufficient flexibility to meet national, regional, and state needs and provide reliable information about recreational fishing in a timely manner to support effective and fair management.

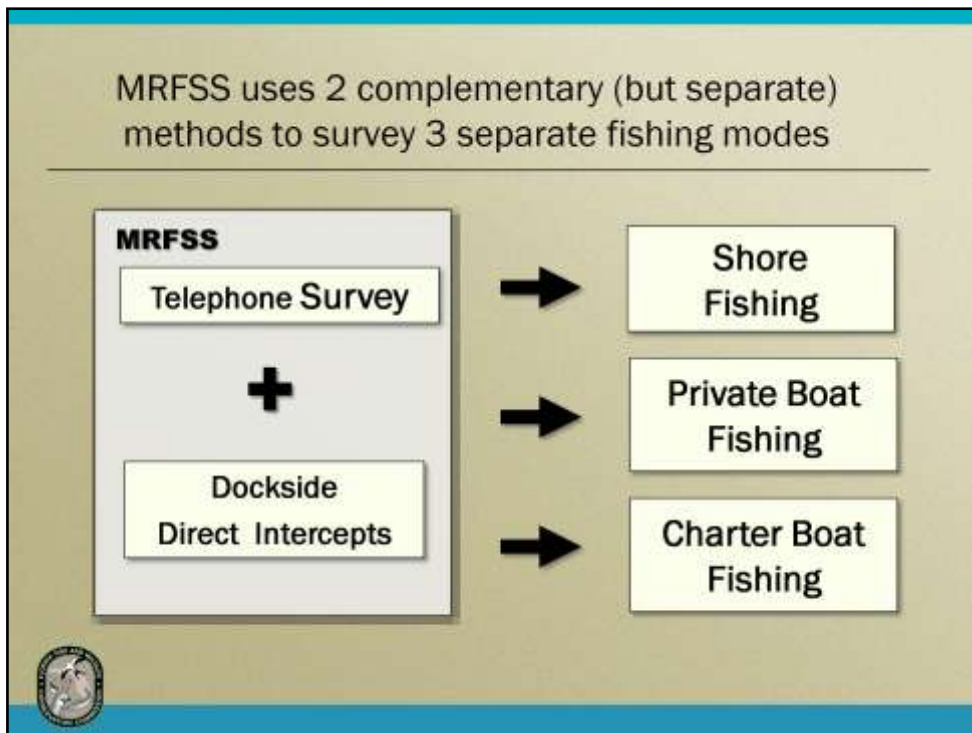
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Background on MRFSS – the “old survey”

- Marine Recreational Fisheries Statistics Survey (MRFSS) started in 1979
- MRFSS conducted by FWC since 1998 with NOAA-NMFS funding and coordination
- Still in use (~ 50,000 angler interviews conducted annually in FL) but...
- ...to be progressively phased out as new survey methodologies are tested and implemented



Data on the recreational harvest, number of fish caught and released and fishing effort (number of recreational fishing trips) has been traditionally collected through the Marine Recreational Fishery Statistics Survey (MRFSS). MRFSS is conducted by FWC scientists and field biologists with funding provided by a NOAA-NMFS grant. MRFSS was designed to collect recreational fisheries information on a regional scale to meet the management needs of the time. Since then, fisheries management programs have become more complex and demand data at a much finer scale than current programs can provide. Therefore, new survey methodologies developed through MRIP began being implemented in January 2009 and will continue into the future as alternative approaches are designed and tested.



The MRFSS survey collects information on catch from onsite surveys and both catch and effort from phone surveys which contact residents in coastal counties using random dialing. The Telephone Survey randomly samples the human population to estimate the proportion of the total population that fishes. The phone survey approach collects effort data from all types of anglers not always accessible in the field, such as private access fishing and night fishing. The Dockside Direct Intercept survey allows samplers to get catch data immediately following a fishing trip, which provides: (1) short recall period for released catch, (2) direct inspection of harvest, (3) access to lengths, weights, and biological samples.

MRFSS Review and Improvement

- 2006 National Academy of Sciences review made extensive recommendations for improving data collection and statistical analysis
- Biggest issue was the lack of a list of anglers – who do we survey?
- Both the onsite interview and phone survey components need to be completely redesigned
- MRFSS redesign team is tackling these issues, and FWC is well represented on several of the subgroups



It is much more difficult to collect data on recreational anglers than on commercial fishing operations. There are far more saltwater anglers than commercial harvesters and they do not land their catches at specific points where there are dealers. Also, all surveys depend to some degree on the anglers' recall and willingness to volunteer valid information. As a result, designing a survey that will provide accurate and timely information, with good coverage and at acceptable cost, is a major challenge. Because of concerns with the estimates produced by MRFSS the National Marine Fisheries Service commissioned a review of the survey by the National Academy of Sciences. This survey, completed in 2006, identified the lack of a "universal sampling frame" (which simply means that recreational anglers are identifiable as a distinct segment of the general population) as the biggest shortcoming of MRFSS. Florida has recently addressed this issue by licensing shore-based anglers. As a result, we are in a better position to take advantage of improved effort estimation methods using angler license databases. Other survey problems identified in the NRC report are being tackled by a team of managers, stock assessment scientists, and constituents to ensure that the needs of those who collect, use, and are impacted by the data, are understood, documented, and considered as the program advances. FWC is well-represented in several working groups and plays a leadership role in the MRFSS survey redesign process.

Marine Recreational Information Program (MRIP)

- Currently being phased in across the nation
- Not expected to have an official date when it is complete:
 - Need flexibility to improve in the future as necessary
 - New and old methods need to overlap for some time for comparisons to be meaningful
- Expected to provide a better picture of marine recreational fisheries data:
 - Number of trips taken
 - Amount and species of fish caught
 - Where and when those fish are caught



When fully implemented MRIP will be a system of coordinated regional data collection programs designed to address specific needs for recreational fishing information and replace MRFSS. The design of regional programs is being guided by ongoing and future pilot projects that will test new methodologies and provide recommendations for modifying current survey methods. These improvements began to be implemented in January 2009 as alternative approaches are designed and tested and will continue until the new program is fully implemented. Initial improvements will address fundamental issues identified by the NRC review, including assessing the potential for bias in current surveys, and developing data collection standards. As these fundamental survey design and management issues are resolved, focus will shift towards meeting data users' needs for precision and resolution.

Florida Initiatives

- **Goal:** enhance Florida data collection programs while staying consistent with the broader national initiative (MRIP)
- **Pilot #1:** Highly Migratory Species (HMS):
 - Characterization of the For-Hire and Private angler components of Florida HMS Fishery
 - Telephone surveys of For-Hire captains and private anglers
 - Dockside intercepts of HMS trips
 - Produce better effort and catch estimates for HMS species



The Highly Migratory Species pilot study (funded by NOAA-NMFS) which included a telephone survey of permitted private boat anglers, conducted by FWC in South Florida in 2008-2009, helped to characterize the fishery for South Florida. Important findings included: the Automated Landings Reporting System (ALRS) is ineffective in obtaining catch information on swordfish and an enforced catch tag may be better. For most species, the Pilot study showed the precision of MRFSS catch estimates for HMS to be poor relative to the Private Angler Telephone Survey (PATS). Recommendations for data collection improvement are currently being made to the MRIP Executive Steering Committee.

Florida Initiatives

- **Pilot #2:** FWC investing \$960,000 over 3 years in SFR funds for improved regionalization of Florida (better spatial resolution)
- Survey of private anglers going from 2 to 8 regions by 2011



Another important pilot study being developed by FWC is looking at improvements in the spatial and temporal coverage of the surveys. This study, currently funded by the Sport fish Restoration program outlines several scenarios for improvements to the spatial resolution of dockside sampling that will allow regional private angler catch estimates to be generated for Florida that are of higher resolution than those currently generated by MRFSS. The study will also provide an estimate of cost for long-term implementation. The implementation of catch and effort surveys designed to produce regionalized estimates, angler license directory based sampling, and improved estimation procedures are critical components to the success of MRIP in Florida.

Florida Initiatives

▪ Pilot #3: Gulf of Mexico Reef Fisheries

- Observers on charter vessels
- Angler 'catch cards' for collection of catch and discard information
- Monthly mail out to FL saltwater anglers
- Focused on red snapper but getting data on multiple snappers and groupers
- Produce better effort and catch estimates for reef fish species



In tightly regulated fisheries the number of released fish can far outnumber the harvested portion of the catch and mortality of released fish has the potential to exceed harvest. Therefore, an important component of total fisheries removals is the latent mortality of released fish (discards). Recognizing the need for this type of information this study (funded by a Federal Congressional appropriation) provides direct measures of both harvested and discarded red snapper and associated reef fish species in the For-Hire and private boat sectors of the recreational fishery on the West Florida Shelf. Although it only started in August 2009, the study already has 157 For-Hire vessels participating in At-Sea work (30 headboats), and 44 vessels participating in web-based logbook reporting. Of the 103 observer-based trips made since August, about 3,000 biological samples have been collected and 3,500 fish have been tagged (145 recaptures with red grouper and red snapper being the best represented so far). A total of 8,000 catch cards have been distributed to anglers, with 110 data-filled cards returned (from 63 respondents). Data indicate that 94% of the red snapper caught and released were larger than 16 inches and the vast majority had been lip-hooked.

Florida-Specific Surveys

- Snook Recreational Fisheries Survey
 - Done above-and-beyond MRFSS survey to increase snook catch, effort data, and biological samples
 - Funded by Florida's Snook Stamp \$\$
- Lobster Recreational Fisheries Survey
 - Provides the lobster data not captured by other surveys
 - Funded by Florida's Lobster Stamp \$\$



FWC conducts two directed saltwater recreational surveys to enhance the quantity and quality of recreational fisheries data collected: the Snook Recreational Fisheries Survey and the Lobster Recreational Fisheries Survey. These dedicated surveys are funded with revenues generated by the Snook Stamp and Lobster Stamp, respectively.

In Summary

- Florida is an active participant and plays a leadership role in the development and implementation of MRIP
- FWC is focused on implementing improvements to its saltwater recreational fisheries surveys while remaining consistent with the broader national initiative (MRIP)
- Advantages of being part of the national initiative include:
 - Consistency and standardization in data used for assessment and management between state and federal waters—as partners we have more clout and more opportunity for input
 - FWC receives more federal funding for recreational fisheries surveys than any other state

