

PROJECT UPDATES

Winter 2009



OVERVIEW

The Marine Recreational Information Program, or MRIP, is a powerful new tool being used to achieve NOAA's mission of safeguarding the long-term health and productivity of our shared marine resources. The focus of the program is on saltwater recreational fishing, which generates an estimated \$82 billion in sales and supports over 500,000 jobs annually. MRIP is changing the way recreational fishing data is collected and reported to help ensure that managers, anglers, and other stakeholders have the complete and reliable information necessary to fairly and sustainably manage fish stocks and their surrounding ecosystems for generations to come.

MRIP will maximize the accuracy and utility of fishing data by employing flexible, targeted, and regionally based information-gathering programs that adhere to a set of consistent national standards. Implementation is occurring nationwide in a process that involves three overlapping phases.

- **Evaluation Phase** – Independent experts are being used as part of an exhaustive evaluation of existing tools to determine which are effective at meeting management and science needs. This phase began in 2006 and current results are driving the innovations being tested in phase 2.
- **Innovation Phase** – New methods of collecting and analyzing data are being developed and tested. Numerous such projects, described below, are underway and will begin yielding results by the end of 2009.
- ◆ **Activation Phase** - As new and more reliable data collection methods are implemented, we will continue to improve survey coverage so that timely and accurate information is available when and where it's needed.

2009 PROGRAM HIGHLIGHTS

MRIP is built on a dual foundation of sound science and public engagement. On the science front, MRIP is informed by the input of dozens of NOAA and independent scientists and other professionals working to address the 200 observations and recommendations made by the NRC in the areas of:

- Effort and Catch Estimation.
- Removal Estimation.
- Data Requirements for Population Assessment.
- Human Dimensions.
- Program Management and Support.
- Communication and Outreach.

In terms of public engagement, NOAA continually meets with data partners, managers, state and local officials, fishermen, members of coastal communities and other interested stakeholders to identify and refine their expectations and data, analysis and outreach needs.

As indicated in the following updates, the MRIP team has made considerable progress on all fronts. For instance, work on implementing the National Saltwater Angler Registry – a vital component in providing more accurate effort estimates – is almost complete, with a launch scheduled for January 1,



2010. In addition, the For-Hire Workgroup is well underway in evaluating the use of logbook reporting and testing the most efficient ways to implement the procedure.

In other areas, progress is equally steady but not as self-evident to those outside the workgroups. The painstaking work of evaluating past surveys, challenging assumptions, testing new methods and ensuring that updated designs deliver on their promise of improvement has consumed thousands of staff and volunteer labor hours and yielded an abundance of valuable insights that are now being tested in the field.

Making this upfront investment in time and intellectual capital is the only way to ensure that MRIP can meet managers' and other stakeholders' needs for data to inform decision and policymaking on issues such as Annual Catch Limits and Accountability Measures. In the interim, NOAA will continue to work with managers, our state partners and other stakeholders to provide the best data currently available to meet statutory requirements.

IMPROVED DATA COLLECTION AND ANALYSIS

*Management decisions are based on data that must be comprehensive, detailed, and accurate. Ensuring surveys and subsequent analysis meet these needs is the principal task of the **Design and Analysis Work Group**. It is working to ensure we have as clear a picture as possible of what species we're catching, how many we're catching, where we're catching them, and when we're catching them.*

Design and Analysis Work Group – New Projects:

● = Evaluation Phase ■ = Innovation Phase ◆ = Activation Phase

■ Testing a Mail Survey Alternative

Project will test mail surveys as alternatives to telephone surveys in the dual-frame approach. The pilot project will assess 1) coverage of the independent sample frames (license and address frames), 2) response rates that can be achieved by using a mail survey from both the general population and the license frame, 3) timeliness of mail surveys for estimating recreational fishing effort, and 4) the overlap between sample frames and if this overlap can be determined by matching addresses, rather than relying on survey responses.

Projected Completion: February 2010

■ Quantifying Differences in Catch Rates, Characteristics and Behavior between Accessible and Non-Accessible Saltwater Fishing Trips

Develop a methodology to test for differences in catch rate, angler characteristics, and behavior between trips sampled by field interviewers and trips that are not because of factors such as private property restrictions or the remoteness of the location.

Projected Completion: March 2010

■ Expanding the Dual-Frame Telephone Survey

Expansion of ongoing dual frame sampling methodology testing (whereby fishing licenses holders are used as a sampling frame rather than coastal households) to the Washington recreational fishery.

Projected Completion: August 2010



IMPROVED DATA MANAGEMENT

Proper analysis requires a clear understanding of the characteristics of data, both its strengths and limitations. The **Data Management and Standards Work Group** is making sure that managers and scientists understand how data are generated so that the data are used properly.

Data Management and Standards Work Group – New Projects:

● = Evaluation Phase ■ = Innovation Phase ◆ = Activation Phase

● Improving Data Collection Quality Control

Document existing data quality control programs to evaluate their effectiveness in limiting error introduced during data collection, processing, and estimation.

Projected Completion: Winter 2010

■ Improving Intercept Survey Design

This pilot project will assess various sources of potential bias in the design of the current intercept survey being conducted in North Carolina.

Projected Completion: June 2010

HIGHLY MIGRATORY SPECIES

Highly migratory species provide a special challenge to fisheries managers. The total number of trips specifically targeting these fish is relatively small and difficult to accurately characterize in a broad survey, so a more targeted approach is required.

Highly Migratory Species (HMS) Work Group – New projects:

● = Evaluation Phase ■ = Innovation Phase ◆ = Activation Phase

● Evaluating Survey Design for West Coast Highly Migratory Shark Fisheries

Assess three levels of sampling uncertainty in the California HMS shark fishery: 1) sampling for thresher sharks in what is considered a pulse fishery, 2) testing the assumption that that catch composition and rates are the same for private and public access sites and trips made at night, and 3) catches from tournaments.

Projected Completion: March 2010

◆ Continuation of Highly Migratory Species For-Hire Survey in Florida

Extension of ongoing project to characterize the fishery and estimate HMS landings for a complete tourist season.

Projected Completion: Winter 2009



FOR-HIRE VESSELS

The for-hire sector – charter boats, 6-packs, guide boats, party boats, and head boats are a mix between commercial and recreational fisheries as far as data is concerned because each state has its own licensing and reporting requirements. Since a significant number of fish are taken by for-hire boats, getting an accurate accounting of this sector is a critical management need.

For Hire-Work Group – New Projects:

● = Evaluation Phase ■ = Innovation Phase ◆ = Activation Phase

■ Developing Probability-Based Sampling Methods

Hire a consultant with expertise in survey sampling design to develop probability based sampling protocols for the southeast head boat intercept survey to reduce individual sampler discretion and ensure a truly random sample. Develop guidance on applying the probability-based sampling protocols to use as a tool to aid in validation of self-reported logbook data (using the intercept data to validate the self reported logbooks).

Projected Completion: Winter 2010

■ Validating Trip and Catch Data in the Hawaii Commercial Marine License Reporting Program

Develop a dock-side charter vessel activity study to independently document trip and catch at 1-3 major charter harbors in the state to assess non-compliance and inaccurate reporting. At the same time, the dealer “trip ticket” data and Maui voluntary data for charter fleets will be used to identify issues in the current Commercial Marine License reporting system.

Projected Completion: July 2010

■ Pilot Testing of Electronic Logbooks

Develop and test a web-based logbook in cooperation with a subset of eight headboats in the southeastern U. S. Results from the paper and electronic reporting systems will be compared for a one-year reporting period to determine reliability, accuracy, compliance, timeliness and cost of both methods. Intercept sampling will be used to validate logbook submissions.

Projected Completion: October 2010

■ Accounting for Missing Data in a Logbook Program

Hire an expert in survey design and statistics to design a method to account for missing data (due to reporting non-compliance or other issues), including data propagation or gathering, estimation of summary catch and effort statistics and annual adjusted statistics of the Head Boat fishery of the Atlantic and Gulf Coast.

Projected Completion: May 2010

■ Designing of a Logbook Reporting Program for the Gulf of Mexico

Working with expert consultants and industry, design a regional logbook reporting program with validation of self-reported data, compliance tracking, non-response follow-up, and methods to adjust raw logbook data for misreporting and non-response for future implementation in the Gulf of Mexico.

Projected Completion: Workshop held August 2009, final design early Winter 2010



FOR MORE INFORMATION

To learn more about what the MRIP team is doing to improve data for managing saltwater fishing, or for questions or comments, please visit www.countryfish.noaa.gov. Your feedback is indispensable to the success of the program.