



NOAA FISHERIES

MRIP Effort Pilot Studies At-a-Glance:

WHERE:

FL, MA, NC, NY

GOALS:

- Identify a better method than random-digit dialing to reach saltwater recreational anglers for effort surveys.
- Determine the best way to use license and registration information to contact anglers, and how to fill in gaps that exist in registration databases.
- Establish the most effective methods for maximizing the number of anglers who respond to surveys.

METHODOLOGY:

- Survey is mailed to randomly selected households (based on license and registration information, as well as USPS household address databases) at the conclusion of each two-month sampling period.
- Recipients are asked to report the fishing activity for each member of the household during the previous wave, as well as provide additional household information.
- A total of up to three contacts is made with each sampled address. These include an initial survey and two follow-ups, as necessary.

MRIP Fishing Effort Survey Pilot Studies: Testing Registry Data, Moving Away From Random-Digit Dialing

Why do we need to look at new ways to estimate fishing effort?

“Effort” surveys are what NOAA Fisheries uses to estimate how many fishing trips are taken by recreational anglers. This information is coupled with our complementary surveys of angler “catch rates” to come up with an overall picture of recreational fishing catch and activity.

NOAA has traditionally used a survey method called “random-digit dialing” (RDD) to contact households in coastal counties and collect recreational fishing effort data. RDD is a widely accepted survey approach, and focusing on the coastline was the best way to find saltwater anglers. At the same time, there are also several well-known shortcomings with this method:

- **RDD is inefficient at identifying anglers.** Many calls go to households where no anglers live, which increases the cost of contacting anglers.
- With more people abandoning “land lines” for **cell phones**, which cannot be included in our telephone survey, a growing number of potential anglers become unreachable.
- **Response rates**, or the number of people who actually pick up the phone and answer the questions, are declining for all telephone surveys. This is true whether for fishing effort, public opinion polls, or attitudes about a commercial product or service. As with undercoverage, “nonresponse” is a potential source of bias.

What improvements are being tested?

In September of 2012, we launched the final phase of our effort survey pilot studies. Building on previous findings, we’re honing in on definitive answers to two fundamental questions:

- What is the best way to identify saltwater recreational fishermen to include in a survey? (This is what statisticians call the “sample frame.”)
- Given the limitations of RDD, what is the best way to contact them?

Using License and Registration Data as a Sample Frame

From the perspective of estimating recreational fishing activity, the main purpose of state and federal saltwater fishing license and permit programs is to provide an effective way to survey anglers. However, current license and registration databases are incomplete. Coverage gaps include people who have not registered; people who are not required to register in some states, like youth under age 16; or registrants who make mistakes on their application. To ensure we can reach all people who may be fishing, we supplement the license and registration “sample frames” with lists of all households now available from the U.S. Postal Service.

Reaching Anglers by Mail

One surprising finding from our previous work is that – even in our “digital age” – the most effective way to reach recreational anglers has been through the U.S. Mail. This study will verify whether this holds true, and also help identify the best way to design our surveys so that we get the most responses.

What’s next?

We will complete this pilot study by the end of 2013. We anticipate that beginning in 2014, the MRIP fishing effort survey will incorporate a combination of license/registration and USPS frames, and will be conducted by mail.





NOAA FISHERIES

NOAA Fisheries is an agency within the Commerce Department's National Oceanic and Atmospheric Administration (NOAA). NOAA's mission is to understand and predict changes in the earth's environment and conserve and manage coastal and marine resources to meet our nation's economic, social and environmental needs. The NOAA Fisheries Service provides world class science and stewardship.

The Marine Recreational Information Program, or MRIP, is the new way NOAA Fisheries is collecting, analyzing and reporting recreational fishing data. MRIP gathers catch information through in-person surveys of anglers taken at the completion of a fishing trip.

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Key Takeaways for the MRIP Fishing Effort Survey Pilot Studies

- We're **MOVING AWAY** from the Coastal Household Telephone Survey, which uses random-digit dialing of coastal households to contact anglers.
- We are **CURRENTLY USING** angler data submitted through licensing and registration programs in our fishing effort survey pilot studies. We're testing how this improves our overall efficiency, as well as our ability to reach non-coastal saltwater anglers.
- Because not all saltwater anglers are licensed, and some license information we receive is inaccurate or incomplete, we're **SUPPLEMENTING** our survey sample frames with information supplied by the U.S. Postal Service.
- Our work to date has shown that mail surveys are **MORE EFFICIENT** than telephone surveys for collecting trip information from anglers. This is consistent with other research showing that telephone surveys are seeing an overall decline in effectiveness, regardless of what they're used for.
- We are in the **FINAL PHASE** of testing improvements to our effort surveys. We anticipate our new survey methods will be implemented in early 2014.
- Other MRIP studies are testing new methods to conduct angler intercept "catch" surveys. We use these surveys to estimate the number of fish being caught, along with their size and species, and whether they were kept or discarded.

