

Marine Recreational Information Program Initiative Pilot Project

Question

Does a having a state saltwater fishing license improve the efficiency of angler effort surveys?

Background

In order to understand saltwater recreational fishing's relationship to fisheries sustainability, it is important to know who's fishing, where and how often. This *angler effort* is determined by a telephone survey of randomly selected coastal households. Although well accepted among survey scientists, this method known as *random digit dialing* is inefficient as a relatively small percentage of contacted households report fishing during any 2-month survey period.

Recent amendments to the Magnuson-Stevens Act aim to improve efficiency by requiring future surveys of fishing effort target anglers registered or licensed at the State or Federal level. At issue is the fact that current saltwater licensing programs exempt large sections of the population from licensing requirements (e.g. age, military and disability exemptions). In other words, the phonebook of saltwater anglers that serves as the basis for the telephone survey is incomplete. To compensate for gaps in survey coverage created by these exemptions, a methodology has been developed to integrate licensed-based sampling with random digit dialing. The resulting *dual-frame* survey provides a way to collect fishing effort data from the entire population of recreational saltwater anglers.

Early Indications

As part on the ongoing initiative to improve recreational data collection, NOAA Fisheries is partnering with the Gulf States Marine Fisheries Commission on a pilot project in the Gulf of Mexico to test the feasibility of this dual-frame approach. Preliminary results suggest that sampling anglers from license frames is much more efficient than sampling from the entire population of coastal residents. Under the existing random digit dialing survey method, approximately 10 percent of household contacts result in an interview with a recently active angler. Using the phonebook of licensed anglers, the contact rate jumped dramatically. With the new methodology, between 33-67 percent of contacted households report recent fishing activity (depending on the state and time period). The Gulf pilot project demonstrates how contacting licensed anglers directly can result in more information with fewer calls. It also stresses the importance of getting a complete accounting of anglers in order to ensure all segments of the fishing community get surveyed (i.e. minimize potential biases).

Next Steps

In 2008, plans are to expand the Gulf pilot project into North Carolina. Using the state's recently instituted saltwater fishing license, the project can help refine this dual-frame approach and ultimately increase the efficiency of angler effort surveys. Results of these pilot projects will help finalize a methodology that can be expanded to other regions as state licensing programs or Federal registries are implemented.