

Playing the Numbers: Gauging the Impact of Recreational Fishing in Rhode Island

Tony Corey

If it wasn't important, people wouldn't be arguing about it.

The impact of recreational fishing-on the stocks, on the economy, on management-is significant because the sport is so widespread. It is the second most popular form of outdoor recreation in the country, drawing millions of enthusiasts annually to coastal waters. How many recreational fishermen there are and how many fish they catch have far-reaching biological and economic implications. In Rhode Island, such numbers are matters of informed, but variable, speculation.

The state's largest recreational fishing organization, the R.I. Saltwater Anglers Association (RISAA), uses the figure 107,000, from a 1980s fisheries economics survey, to number local marine anglers. The R.I. Department of Environmental Management's Division of Fish and Wildlife (DEM F&W) more than doubles that, estimating in the quarter-million range, based on random-dial telephone surveys. 41šN's own use of the figure 700,000 in the last issue stirred controversy when the number was picked up in a Providence Journal op-ed piece and then challenged by RISAA president Stephen Medeiros.

Why this disparity in the numbers? And why do the numbers matter anyway?

From an economic point of view, more is better: Recreational fishermen buy, rent, or charter boats; purchase fuel and bait and tackle; and contribute a significant multiplier effect in expenditures for lodging, meals, camping, etc. The larger the number of recreational anglers, the greater the economic boon.

From the perspective of pressure on the resource, though, more anglers mean fewer fish to go around and, consequently, catch restrictions.

Information about angler populations and fishing frequency factors into stock assessments and catch allocations. Bag limits "are highly dependent upon the estimate of the numbers of marine anglers and the time they fish," writes Michael Rice, University of Rhode Island fisheries, animal and veterinary science department chair, in a January 3, 2001, Providence Journal op-ed commentary. "If the estimates are too high, the bag limits have to be small. Conversely, if the estimates...are too low, the conservation benefit of the bag limit is nullified."

Rice contends that effective management of fish stocks requires reliable assessment of the impacts of recreational as well as commercial fisheries. He further insists that an accurate count of recreational anglers is absolute "rock-bottom baseline" information in this equation. And he mentions licensing and

registration as mechanisms that would produce this data-mechanisms that recreational fishermen have traditionally resisted.

Mark Gibson, DEM F&W deputy chief, thinks anglers might resist because "they think the numbers are going to be used against them." But he and Najih Lazar, DEM F&W supervising marine biologist, point out that accurate assessments benefit the stocks and therefore benefit the anglers.

Lazar runs the Rhode Island segment of a National Marine Fisheries Service (NMFS) data collection effort for estimating the impact of recreational fishing on marine resources. The Marine Recreational Fishing Statistics Survey (MRFSS), in operation since 1979, provides continuous, standardized data for stock assessments, allocation decisions, facility requirements (piers, marinas), and economic and social impact appraisals related to new regulations.

The two-part survey consists of random-dial telephone contacts and field access-site interviews. The phone survey deals strictly with effort, Lazar explains-number of recreational anglers in a household, number of fishing trips in a given period, and location and mode (e.g., charter boat or shore fishing) of each trip. The site interview covers actual catch data, along with demographic information-number of fish caught by species and length and weight of each, fishing trips per year, primary area of fishing, and angler's state and county of residence. Effort and catch rates plug into models for an estimate of total catch.

What the database reveals may surprise anglers, who may think their effect on the resource is minor because they take only a few fish. But a few fish become a lot of fish when multiplied by the 17 million marine recreational anglers identified nationally. These anglers harvest about 200 million pounds of fish in more than 60 million recreational fishing trips a year, according to MRFSS on-line fact sheets (www.st.nmfs.gov/st1/recreational/survey/index.html). In Rhode Island, anglers rack up more than one million saltwater fishing trips a year, according to the fact sheets. Locally as well as nationally, the recreational harvest for a number of species exceeds the commercial harvest.

All this effort can lead to overfishing, which triggers regulatory interventions such as minimum-size increases and reduced bag limits. Reductions are percentages of total catch estimates determined through the MRFSS survey, says Lazar, adding that better survey numbers mean better management decisions.

If there's a down side to a large recreational fishing constituency, says RISAA president Medeiros, this is it. "The more people out there fishing, the more impact there is on the fishery. Once the stats come in, there can be cutbacks in the number of fish per angler." He mentions as example the bag limit, season, and size restrictions currently imposed on fluke.

But there's more to the numbers than fish counts. Lazar points out that the database not only supports regulatory decisions but also clarifies "the larger picture of this sector on the whole economic machine of the state. The recreational fishery makes a very significant contribution to the economy." For example, average travel expenses per fishing trip range from \$8 to \$102- substantial revenues when multiplied by the million-plus trips per year. Moreover, typically two-thirds of the recreational anglers participating in the Rhode Island MRFSS survey are out-of-state residents, a statistic that speaks of a high tourism factor and its attendant economic benefits.

Medeiros underscores the weight of such numbers by pointing to statistics reported for Florida's recreational fishing industry by that state's Fish and Wildlife Conservation Commission assistant director, Roy Williams. Far surpassing commercial fisheries valued at about \$215 million, Florida recreational fisheries generate \$3.3 billion.

Believing that Rhode Island's recreational fishing dollars are probably likewise higher than its commercial fishing revenues, Medeiros suggests that solid numbers can give this state's recreational fishing constituency a clout similar to that of Florida's. "Down there," he says, "the legislature really listens to recreational fishermen."

DEM F&W <http://www.state.ri.us/dem/programs/bnatres/fishwild/index.htm>

RISAA <http://www.risaa.org/>