



## NOAA FISHERIES

The **Marine Recreational Information Program**, or **MRIP**, is the state-regional-federal partnership responsible for developing, improving, and implementing surveys that measure how many trips saltwater anglers take, and how many fish they catch. This vital information – combined with other data, such as commercial catch and biological research – enables scientists and managers to assess and maintain sustainable U.S. fish stocks.

### FOR MORE INFORMATION

**Program: Gordon Colvin**  
gordon.colvin@noaa.gov  
(240) 357-4524

**Outreach: Leah Sharpe**  
leah.sharpe@noaa.gov  
(301) 427-8205



[www.CountMyFish.noaa.gov](http://www.CountMyFish.noaa.gov)

# Estimating For-Hire Trips

## FHS and VTRs on the Atlantic Coast

Sustainably managing recreational fisheries is an ongoing and dynamic process. Managers have the dual mission of ensuring that stocks are not overfished, and that recreational anglers have optimal access to quality fishing opportunities. To achieve this balance, managers must be constantly evaluating data from many sources to set fishing regulations, then working with scientists and stakeholders to monitor the impacts of those regulations to ensure they are fair and effective. This fact sheet looks at one piece of the data picture: **Estimating for-hire trips taken on the Atlantic Coast.**

### The management process: Preliminary and final estimates.

Every two months, NOAA Fisheries produces and releases preliminary estimates of total saltwater recreational catch from different fishing modes – shore, private boat, and for-hire, which includes charter and head/party boats. Estimates of total catch are the product of two different estimates from each mode: the number of trips fishermen take, and the average number of fish of each species caught on those trips.

Fisheries managers use these preliminary estimates as needed to set annual catch limits and initial fishing regulations, including season lengths, size, and daily catch limits. Final estimates are scheduled to be produced the following April. Managers may use final estimates to revise certain actions. Stock assessors and scientists use final estimates to determine the status of stocks.

### Measuring for-hire trips on the Atlantic Coast.

NOAA Fisheries uses the voluntary **For-Hire Survey (FHS)** as one source of data to produce trip estimates for charter boats along the Atlantic Coast, and for head boats fishing from Maine through Virginia. For-hire vessels are selected at random each week from a list of all vessels. Representatives of those vessels are contacted by phone and asked about their fishing activity. As with any phone survey, not everyone we try to contact is able to respond. Data from the FHS is incorporated into the preliminary estimates of the **number of angler fishing trips on for-hire boats.**

The other source of data is **Vessel Trip Reports (VTRs)**. VTRs are mandatory for all federally permitted for-hire boats fishing from Maine through North Carolina. This reporting program is intended to be a **census** of the boats required to participate. The reported number of angler trips from VTRs are not available for use in preliminary estimates, but they are incorporated into final estimates. It is possible that a boat required to report VTRs will also be contacted for the FHS.

### Putting the data together: Producing final estimates.

To make the best use of available data, we incorporate the number of trips recorded from the VTRs into the FHS. Doing so allows us to reduce potential bias due to non-response in the FHS estimates as well as potential bias due to undercoverage of for-hire vessels. The process works like this:

- We first look for boats that report VTRs and were also surveyed by the FHS. In these cases, we replace FHS data with the numbers from the VTR census. This effectively **increases the overall response rate** we're measuring, thereby **reducing the potential for nonresponse bias** in the FHS estimates.
- We then look for VTR boats that were not covered by the FHS and add their reported trips to the revised FHS estimates of total trips. Adding in trips by the VTR boats **reduces the potential for an undercoverage bias** in the total estimates.
- Once we have created a final estimate of total trips, that number is multiplied by the catch rate estimates we produce separately, using a dockside survey, to develop the final estimates of total catch.
- If the final trip estimates are higher or lower than the preliminary estimates, overall catch will be correspondingly higher or lower as well.