U.S. MARINE RECREATIONAL FISHERIES

<u>DATA COLLECTION</u>. Data on commercial fisheries were collected for many years, yet before 1979 there was no continuous, systematic collection of marine recreational fishery data. In 1979, NMFS began the comprehensive Marine Recreational Fishery Statistical Survey (MRFSS). Data collected through the MRFSS show that recreational fisheries have tremendous impacts on fish stocks. For several important species recreational landings surpass commercial landings (see figure on preceding page). Detailed information on marine recreational fishing is required to support a variety of fishery management and development purposes and is mandated by the Sustainable Fisheries Act, Public Law 94-265.

The MRFSS consists of an intercept survey of anglers in the field and a telephone survey of coastal county households. The intercept survey collects data on species composition, catch rates, and fish lengths and weights. The telephone survey collects data on the number of marine fishing trips. These independent data are combined to produce estimates of catch, effort, and participation. Catch is divided into three categories - type A, type B1 and type B2. Type A catch is fish that were caught, landed whole and were available for identification, enumeration, weighing and measuring by trained MRFSS field personnel. Type B1 catch includes fish that were caught, filleted, released dead, given away, or disposed of in some other way so that the interviewer could not verify the species, sizes, or numbers reported. Fish that were caught and reported as released alive are in the Type B2 category. Estimates are generated by subregion, state, wave (bimonthly sampling period), species, mode, primary area fished and catch type. In addition, economic and demographic data are also obtained.

The MRFSS is being conducted in 1999 along the coast of the entire continental United States, except the state of Texas and Alaska. Sampling coverage varies across the time series (see coverage section). Detailed information and access to the data are available on the Fisheries Statistics and Economics web page (www.st.nmfs.gov/st1). Data from other NMFS and state surveys (SE head boats, Texas, California Passenger Fishing Vessels, Oregon/Washington ocean boats, Pacific salmon, Alaska) are not included in this report.

DATA TABLES. The estimated number of fish caught and weight of the harvest are presented for 128 commonly caught species. The estimated total harvest includes a) fish brought ashore in whole form that were identified, weighed, and measured (A1); and b) fish that were not available for identification (B1). The latter type includes fish used for bait, discarded, filleted or released alive. Harvest does not include fish that were released alive (B2). Estimated catch and harvest is presented by subregion and primary fishing area: inland [sounds, rivers, bays], state territorial seas [ocean to 3 miles from shore, except for Florida's Gulf coast, where state territorial seas extend to 10 miles from shore], and Exclusive Economic Zone (EEZ) [ocean from the edge of the state territorial seas to 200 miles from shore]. The total number of estimated trips and participants are presented by state.

1998 MRFSS DATA. In 1998, over 7.5 million people made 60 million marine recreational fishing trips to the Atlantic, Gulf and Pacific coasts. The estimated marine recreational finfish catch was 312 million fish. Over 55 percent of the number caught were released alive. The estimated total weight of the harvest was 195 million pounds.

The Atlantic and Gulf coasts accounted for 77 percent of the participants, 88 percent of the fishing trips, and 91 percent of the marine recreational finfish catch. Most (56 percent) of the catch came from inland waters, 34 percent from state territorial seas, and 10 percent from the EEZ. The distribution is different for the Atlantic and Gulf coasts versus the Pacific coast. On the Atlantic and Gulf the majority of the trips were from inland waters, while on the Pacific coast more trips were from the state territorial seas.

ATLANTIC AND GULF. In 1998, 5.8 million marine recreational fishing participants took 53 million trips and caught a total of 284 million fish. The estimated number of Atlantic and Gulf coast trips decreased from a five-year high of 61 million trips in 1997 to 53 million in 1998. The estimated number of people engaged in marine recreational fishing on the Atlantic and Gulf coast ranged from a low of 5.8 million in 1998 to a high of 7.6 million in 1994. By subregion, the Gulf of Mexico accounted for the highest numbers of fish caught (44 percent) followed by the Mid-Atlantic (29 percent). Thirty percent of the recreational fishing trips were made in the South Atlantic, 30 percent in the Gulf of Mexico, 27 percent in the Mid-Atlantic, and 13 percent in the North Atlantic.

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The most commonly caught non-bait species (numbers of fish) were Atlantic croaker, spotted sea trout, summer flounder, striped bass, bluefish, and black sea bass Top-ranked non-bait species (catch in numbers) by subregion were striped bass in the North Atlantic, summer flounder in the Mid-Atlantic, spot in the South Atlantic, and spotted sea trout in the Gulf of Mexico. By weight, the largest harvests were striped bass, summer flounder, bluefish, dolphin, red drum, spotted sea trout, and king mackerel. The average weight for all fish combined was 1.4 pounds while the average weights for the top species were 2.9 pounds for bluefish, 9.3 for striped bass, 4.5 for red drum, 6.4 for dolphin, 1.2 for spotted sea trout, 1.8 for summer flounder, and 9.0 for king mackerel.

The catch of striped bass increased steadily and dramatically since 1990 with a catch of nearly 16.5 million fish in 1998. Over 91 percent of striped bass were released alive in 1998. Spotted sea trout, bluefish and Atlantic croaker catches remained relatively steady from 1994-1998. Summer flounder catches increased from 16 million in 1995 to nearly 22 million in 1998.

Ten percent of the catch on the Atlantic and Gulf coasts came from the EEZ. The most commonly caught species in federally managed waters were black sea bass, red snapper, summer flounder, dolphin, striped bass, bluefish and Atlantic cod.

PACIFIC. In 1998, 1.7 million marine recreational fishing participants took 7.0 million trips and caught a total of 28 million fish. Seventy percent of the trips were made in California, followed by 21 percent in Washington, and 9 percent in Oregon.

The most commonly caught non-bait species (numbers of fish) were Pacific (chub) mackerel, surf smelt, kelp bass, Pacific barracuda, black rockfish and barred sand bass. By weight, the largest harvests were yellowtail, black rockfish, Pacific barracuda, lingcod, California halibut and blue rockfish. The average weight for all fish combined was 1.7 pounds. Average weights for some of the top species were: 8.9 pounds for California halibut, 2.1 pounds for black rockfish, 8.5 pounds for yellowtail, 4.6 for Pacific barracuda and 8.0 pounds for lingcod.

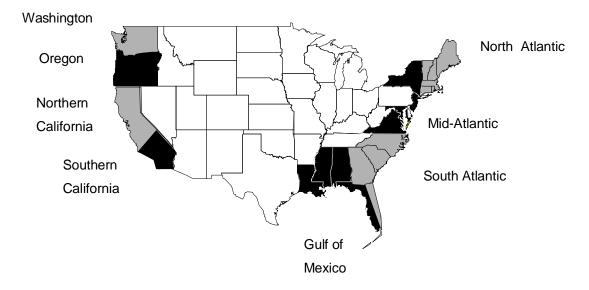
Surf smelt jumped from the 1993-1995 average of a little over a million fish to almost 5 million fish in 1998. Pacific barracuda catch has shown no real trend since 1994, ranging from a low of 584,000 fish in 1996 to a high of 1.8 million fish in 1994. Pacific mackerel reached a 4-year high in 1996 with 6.0 million fish caught.

Fifteen percent of the total marine recreational catch on the Pacific coast came from the EEZ. The most commonly caught Pacific coast species in federally managed waters were Pacific mackerel, yellowtail, Pacific barracuda, barred sand bass, blue rockfish, kelp bass, and yellowtail rockfish. The percent of the catch from the state territorial sea was about 43 percent in 1998, while the inland catch increased from 13-17 percent in the early 1990's to 42 percent for 1998.

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Coverage of MRFSS Survey 1979-1998

The Marine Recreational Fisheries Statistics Survey provides coverage of saltwater sport fishing (including estuarine and brackish water) from private/rental boats, charter and head boats, and the shore on the Atlantic Coast (Maine-East Florida), Gulf Coast (Louisiana-West Florida), and Pacific coast (Washington through California).



Special care is advised when comparing catch estimates for the MRFSS time series because of differences in sampling coverage.

- In the South Atlantic and Gulf sub-regions (NC-LA) the MRFSS has not collected catch data from head boats since 1985, so estimates for these sub-regions now only include charter boats in the for-hire sector.
- Marine recreational fishing in Texas is monitored by the Texas Department of Parks and Wildlife and has not been surveyed by the MRFSS since 1985.
- On the Pacific coast, ocean boat trips during certain waves (bimonthly sampling periods) and salmon trips are not sampled because they are surveyed by the state natural resource agencies.
- Alaska conducts an annual mail survey and has never been surveyed by the MRFSS.
- The U.S. Caribbean and West Pacific territories have not been surveyed by the MRFSS since 1981 and their data are not
 included in currently available data.

There are other exceptions where the following areas were not sampled during the period specified:

Exceptions to MRFSS Coverage:

Jan/Feb - All regions - 1981 Jan/Feb - ME-GA - 1982-present
Nov/Dec - ME & NH - 1987-present
CA-WA - 1990-1992 WA - 1993-1994
Jan/Feb - No.CA-OR - 1994 Jan/Feb - So.CA-OR - 1995

Nov/Dec - OR - 1994