

U.S. MARINE RECREATIONAL FISHERIES

DATA COLLECTION. Data on commercial fisheries were collected for many years, yet before 1979 there was no continuous, systematic collection of marine recreational fishery data. 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. 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.

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. Estimates are generated by subregion, state, wave (bimonthly sampling period), species, mode and primary area fished. In addition, economic and demographic data are also obtained.

The MRFSS is being conducted in 1998 along the coast of the entire continental United States except the state of Texas. Sampling coverage varies across the time series (see figures). Detailed information and the ability to access 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 64 commonly caught species. The estimated number caught includes a) fish brought ashore in

whole form that were identified, weighed, and measured; and b) fish that were not available for identification. The latter type includes fish used for bait, discarded, filleted or released alive. Harvest does not include fish that were released alive. 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 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.

All estimates are shown with proportional standard errors (PSE). The PSE's express the standard error of an estimate as a percentage of the estimate and are a measure of precision. A 95% confidence interval indicates a 95% certainty that the true value lies between the lower and upper limits. The 95% confidence intervals are calculated as: 1) the lower limit is the estimate minus 1.96 times the standard error, and 2) the upper limit is the estimate plus 1.96 times the standard error. For example, if the estimated trips equal 64 million with a PSE of 1%, then the upper confidence interval would be 65,254,400 (64 million + (1.96 X 640,000)).

1997 MRFSS DATA. In 1997, almost 9 million people made 68 million marine recreational fishing trips to the Atlantic, Gulf and Pacific coasts. The estimated marine recreational finfish catch was 366 million fish. Over 50% percent of the catch was released alive. The estimated total weight of the harvest was 234 million pounds.

The Atlantic and Gulf coasts accounted for 79% of the participants, 90% of the fishing trips, and 92% of the marine recreational finfish catch. Most (57%) of the catch came from inland waters, 32% from state territorial seas, and 11% 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 catch

U.S. MARINE RECREATIONAL FISHERIES

was from inland waters, while on the Pacific coast the majority was from the state territorial seas.

ATLANTIC AND GULF. The estimated number of Atlantic and Gulf coast trips made between 1993 and 1997 remained at about 58 million. The estimated number of people engaged in marine recreational fishing on the Atlantic and Gulf coast ranged from a low of 6.6 million in 1996 to a high of 7.6 million in 1994. In 1997, 7 million marine recreational fishing participants took 61 million trips and caught a total of 337 million fish. By subregion, the Gulf of Mexico accounted for the highest numbers of fish caught (45%) followed by the Mid-Atlantic (31%). Thirty percent of the recreational fishing trips were made in the South Atlantic, 30% in the Gulf of Mexico, 28% in the Mid-Atlantic, and 12% in the North Atlantic.

The most commonly caught non-bait species (numbers of fish) were spotted seatrout, Atlantic croaker, summer flounder, striped bass, black sea bass, and bluefish. Top-ranked non-bait species (catch in numbers) by subregion were striped bass in the North Atlantic, summer flounder in the Mid-Atlantic, bluefish in the South Atlantic, and spotted seatrout in the Gulf of Mexico. By weight, the largest harvests were dolphin, striped bass, bluefish, red drum, king mackerel, summer flounder, and spotted seatrout. The average weight for all fish combined was 1.6 pounds while the average weights for the top species were 2.6 pounds for bluefish, 10.1 for striped bass, 5.1 for red drum, 10.1 for dolphin, 1.1 for spotted seatrout, 1.8 for summer flounder, and 10.1 for king mackerel.

The catch of striped bass increased steadily and dramatically since 1990 with a record catch of over 17 million fish in 1997. Over 91% of striped bass were released alive in 1997. Spotted seatrout, summer flounder, Atlantic croaker and black sea bass catches remained relatively steady from 1993-1997. Bluefish catches increased from 10 million in 1995 and 1996 to 13 million in 1997.

Eleven 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, Atlantic mackerel, dolphin, red snapper, Atlantic croaker, summer flounder and bluefish.

PACIFIC. In 1997, 1.8 million marine recreational fishing participants took 7.2 million trips and caught a total of 29 million fish. Seventy-two percent of the trips were made in California, followed by 20% in Washington, and 8% in Oregon.

The most commonly caught non-bait species (numbers of fish) were Pacific (chub) mackerel, surf smelt, white croaker, kelp bass and barred sand bass. The largest harvests were California halibut, Pacific mackerel, Pacific barracuda, black rockfish, barred sandbass, and lingcod. The average weight for all fish combined was 0.9 pounds. Average weights for some of the top species were: 9.0 pounds for California halibut, 0.9 pounds for Pacific (chub) mackerel, 2.0 pounds for black rockfish, 1.5 pounds for barred sandbass, and 7.1 pounds for lingcod.

Surf smelt jumped from the 1993-1995 average of a little over a million fish to almost 5 million fish in 1996. California halibut catch has shown no real trend since 1993, ranging from a low of 347,000 fish in 1993 to a high of 924,000 fish in 1997. Pacific mackerel reached a 4-year high in 1996 with 6.0 million fish caught.

Seven 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, barred sand bass, yellowtail rockfish, blue rockfish, Pacific barracuda, kelp bass, and white croaker. The percent of the catch from the state territorial sea was about 60% in 1997, while the inland catch increased from 13-17% in the early 1990's to 33% for 1997.