

Made possible by a grant from Marine Ventures Foundation October 2009



Tags Recovered Off New York

Two reports of tagged dolphinfish being recovered off New York were received since the last newsletter. This brings the number of dolphin reported recaptured this year off New York to three and the total for the year to 48 fish. With a little over 1,000 fish tagged in 2009, the record-setting recovery rate of 4.6 percent is being maintained. A total of 19 dolphin tagged in either the Bahamas, south Florida, or South Carolina have been reported recovered in offshore waters from Virginia to Massachusetts since the inception of this study.

The first tag recovery of this period had its start in Bahamian waters off Bimini during June. The crew of Richard DeLizza's boat, *Rock Boat*, took breaks each day from competing in a tournament in which they were entered to tag dolphin for science. They wound up tagging 80 fish during the tournament which is a strong statement of their dedication to conservation.

The Bimini fish was recovered on September 6, 108 miles offshore of Montauk, New York, in the western waters of the Atlantis Canyon. It was reported recaptured by Ron Taurick, a crew member on the sports fishing vessel *Maluca*.

At liberty for 87 days, the fish had traveled to a point 1,119 miles north northeast of its release site off Bimini. It had moved northward at an average speed of 12.8 miles per day. The fish was estimated to be 24 inches in fork length at time of the initial tagging and was estimated at 34 inches at recovery, indicating an estimated growth of 10 inches.

This recapture is the second-most northerly recovery of a tagged dolphin in the Western North Atlantic Ocean. It

is also the most northerly recovery of a fish tagged in Bahamian waters and only the second fish from the Bahamas to be recovered in the waters off New England.

It was master Dylan Robins, an eight-year-old boy from Alpine, New Jersey, who recovered the fish that had been tagged off Florida. Dylan recaptured the fish September 6, during a fishing trip off South Hampton, New York, aboard the boat *Lucky Four Us*. It was 29 inches at the time of recovery.

This traveling dolphin probably journeyed 1,000 miles or more but that is about all that can be said. The tag carried by this dolphin was distributed to Don and Justin Brown, two seasoned taggers from Pembroke Pines, Florida. Unfortunately, the initial tagging information fell victim to the chaos from the struggling south Florida economy. The tagging information was most probably set aside temporarily because of work demands but during the ensuing period it became misplaced. So the tagging and release of this fish remains a mystery.

This is an example of why it is so important to send in the tagging data promptly. Even experienced taggers can misplace tagging reports. It is tragic to lose the information on any dolphin that is tagged, but it is especially painful to lack the original information on such an important recovery.

For more information on fish movements visit <u>http://dolphintagging.homestead.com/Map.html</u>.



Dolphinfish Research Newsletter October 2009 Page 2.

Best Available Data (BAD)

Best available data is what the regional fishery management councils are required by law to use when making regulatory decisions regarding harvest of a stock of fish. The South Atlantic Fisheries Management Council (SAFMC) is currently considering new regulations for the harvest of dolphin along the U.S. Atlantic coast. Some of the changes council is considering are extending a minimum size limit to the entire U.S. Atlantic coast, setting a total limit on the annual harvest, and ending charter boats being allowed to sell dolphin caught under the recreational creel limit.

This means that the council will have to rely upon data collected by the National Marine Fisheries Service's (NMFS) Marine Recreational Fisheries Statistical Survey (MRFSS), which is the only catch and effort database available for U.S. recreational angling in the Atlantic and Gulf. This statistical survey is composed of two segments: a direct angler intercept to provide ground truth in the harvest of fish (number per boat trip, size, species, etc) and a phone survey that is used to quantify fishing effort and provide expansion of the harvest data.

Fishery managers have said for years that the MRFSS's data set is unreliable. So I decided to take a firsthand look at the harvest database. Thanks to the help of Dave Harter from Hilton Head, South Carolina, who serves on a review panel for the MRFSS program, I was able to review a copy of the 2008 Atlantic and Gulf raw intercept data provided by the NMFS statistical staff.

Examination of the catch data for dolphin confirmed the weaknesses of the program. The data showed that the normal level of MRFSS's sampling in a state was only adequate to identify and possibly quantify the largest fisheries of the state. Offshore fishing in most states is one of the smallest fisheries in terms of participants. In South Carolina only nine anglers were interviewed that had caught dolphin during 2008 with only six of their fish measured. Based on this information and expanded by the telephone survey, MRFSS projected 10,400 dolphin with a mean size of 30.3 inches fork length were caught by Palmetto State anglers in 2008. The dolphin harvest for the entire Mid-Atlantic Bight, which runs from New Jersey through Virginia, was based on only 60 angler interviews with anglers who caught dolphin but represented the harvest of 47,600 fish. In Louisiana, nine anglers catching dolphin were interviewed in 2008 with 22 of their fish measured which resulted in the projected harvest of 51,300 dolphin. Several coastal states known to have anglers who catch dolphin, namely New York, Massachusetts, Rhode Island and Mississippi, were not listed as having any anglers catching dolphin in 2008.

Only in the two states that are the largest consumers of the dolphin stock was the dolphin fishery reasonably represented. In North Carolina more than 1,800 anglers Dolphin Tagging Progress by Zones, October 1, 2009.

Dolphin Tugging Trogress by Zones, October 1, 2009.				
		Southern	Northern	Number
Zone	Area	Limit	Limit	Tagged
1	Bahamas	22 ^o N	28 ^o N	255
2	FL Straits	23 ^o N	25 ^o N	420
3	South Florida	25 ^o N	27 ^o N	208
4	Central Florida	27 ^o N	30 ^o N	13
5	North FL & GA	30 ^o N	32 ^o N	14
6	Southern SC	32 ^o N	33 ^o N	64
7	N. SC - S. NC	33 ^o N	35 ^o N	25
8	Northern NC	35 ^o N	36.5 ^o N	4
9	Virginia	36.5 ^o N	38 ^o N	3
10	N. Mid-Atlantic	38 ^o N		10
11	Gulf of Mexico			5
12	W Central Atlantic			15
13	Caribbean Sea			5
	Total			1041

who caught dolphin were intercepted by the MRFSS creel clerks who measured a total of 1,773 specimens. On Florida's east coast the creel clerks interviewed 846 anglers successful in catching dolphin and measured 769 fish, while on the west coast, 663 anglers who caught dolphin were intercepted with 492 dolphin measured. Using the data collected from these intercepted anglers MRFSS projected that 381,787 dolphin were harvested off North Carolina, while 665,530 dolphin were harvested off the Florida east coast and another 196,270 fish off the Florida west coast.

Creel clerks did not measure the lengths of all dolphin caught by intercepted boats. They would typically subsample a maximum 15 fish from boats with large catches. Such sub-sampling could bias the size distribution if the clerk did not select a proper sample that represented all sizes. Regional length data indicated considerable variation in the harvest of potentially immature dolphin, those under 22 inches fork length. MRFSS data indicates that 51 percent of the dolphin harvested in the Mid-Atlantic Bight are less than 22 inches. Dolphin less than 22 inches make up 26 percent of the harvest in the South Atlantic Bight. In the Gulf of Mexico these potentially immature fish represent 38 percent of the harvest. Such harvest data is important when setting minimum harvest size for a species.

While the National Marine Fisheries Service wants to do a good job of collecting data needed for management, it currently is not delivering quality management data for dolphinfish. And while the South Atlantic Fisheries Management Council wants quality data on which to base its decisions, it does not have it and is not likely to see it in the near future.

Your donations to the Dolphin Study are Fully Tax-Deductible Make checks out to: HH Reef Foundation/Dolphin Study

Dolphinfish Research Newsletter

October 2009

Page 3.



Fishermen have for years recognized the strong attraction that dolphinfish have for sargassum. Tagging reports indicate that more dolphin are caught in proximity to sargassum lines or patches than in open water. Fishery science recognizes the sargassum community as an important nursery area and yet little research has been done on this mobile ecosystem.

Public Interest in Dolphin Study Grows

The Dolphinfish Research Program (DRP) continues to draw interest and support among offshore fishermen. This year 69 boat owners have been provided starter kits and added to the field of angler tagging their dolphin for science. A total 26 new boats have joined the fleet of offshore vessels that have tagged dolphin for the study. Boats participating in the 2009 study have brought in more than 100 new anglers who provided one or more of their fish for tagging. This brings the total number of boats tagging dolphin since the start of the study to 458 and the number of anglers providing fish for tagging to more than 1,250.



Richard DeLizza and Jim Darrah display one of 98 dolphin that the crew aboard the Rock Boat have tagged off Bimini, Bahamas, south Florida and the Florida Keys in 2009. Photo by D. Barone.

2009 Financial Supporters Marine Ventures Foundation, Jackson Hole, WY Six Mile Creek, LLC, Charleston, SC Antonio Gonzalez, Miami, FL Homewaters Clothing, LLC, Columbia, SC Chris Sommer Fine Art, Coral Springs, FL Hilton Head Reef Foundation, Hilton Head, SC Shimano Fishing Tackle, Wilmington, NC Sea Striker Fishing Tackle, Morehead City, NC Georgetown Landing Marina, Georgetown, SC Wood Brothers, Green Pond, SC Robert Waite, Delray Beach, FL Dr. Al Fernandez, Miami, FL Tommy G. Lewis, II, Raleigh, NC North Carolina Waterman's Triad Chapter, Kernersville, NC Harry Hampton Memorial Wildlife Fund, Columbia, SC North Carolina Coastal Conservation Association, Raleigh, NC Larry Hufford, Palm Bay, FL Capt. Jimmy Price, Matthews, NC Tim and Michelle Heiser, Plantation, FL Capt. Charley DeBow, Cape May, NJ The Rock Boat Fishing Team, Weston, FL Manuel Botello, San Juan, PR Outta Range Sportfishing, Raleigh, NC Beaufort Sportfishing and Diving Club, Beaufort, SC Piedmont Offshore Fishing Club, Greensboro, NC Blue Water Fishing Club, Florence, SC Greenville Salt Water Sport Fishing Club, Greenville, SC Kenneth Caraway, Scranton, SC Michael Smith, Florence, SC South Carolina Saltwater Sportsfishing Assoc., Charleston, SC Belle Isle Marina Wahoo Tournament, Georgetown, SC South Carolina Department of Natural Resources, **Charleston**, SC Tom Urban, Cudjoe Key, FL B. C. Chickadee, Inc., Key Colony Beach, FL Sebastian Inlet Sportsfishing Association, Inc., Melbourne, FL Florida Sports Fishing Association, Cocoa Beach, FL Central Florida Offshore Anglers, Orlando, FL Capt. Rom Whitaker, Hatteras, NC Tailwalker Marine, Georgetown, SC Leatherwood Manufacturing, Inc., N. Charleston, SC Ryan McMahon, N. Palm Beach, FL Grady-White Boats, Inc., Greenville, NC Bailey Smith, Great Exuma, BA Hallprint Fish Tags, Victor Harbor, S. Australia

For More Information, Contact

Don Hammond Cooperative Science Services, LLC 961 Anchor Rd., Charleston, SC 29412-4902 Telephone – FAX (843) 795-7524 Email <u>CSSLLC@bellsouth.net</u> Web site <u>www.dolphintagging.com</u>