

# Cooperative Science Services, LLC Dolphinfish Research Program

Made possible by a grant from Marine Ventures Foundation

February 2010



## Recoveries in Puerto Rico

Two recent tag recoveries off the north Atlantic coast of Puerto Rico are providing the first look at movements of dolphin off this Caribbean island. This makes three fish tagged off the north coast of the island that have been recaptured. All of these fish were tagged by Manuel Botello of San Juan and his crew aboard the *Missing Angel*. They tagged both fish northeast of San Juan.

The first recovery was a 33-inch cow dolphin tagged in 2009, the day after Christmas by crewman Irvin Baez of Rio Grande, Puerto Rico. Luis Marrero of Arecibo, Puerto Rico, recovered the fish on January 3, 2010 while fishing 14 miles north-northeast of Arecibo aboard the *Meloni*. The fish had traveled west-southwest 57 miles during its eight days of liberty.

The second recovery involved a 31-inch cow dolphin tagged by Manuel Botello on January 20, 2010 and remained at liberty for seven days. This fish was recovered by Rafael Caicedo of Guaynabo, Puerto Rico while fishing 23 miles off San Juan aboard the *Mimi Lou*. The fish had moved at a much slower pace than the first one, traveling only 16 miles to the northwest during its liberty.

Both of these recoveries exhibited a net westward movement from the northeastern tip of Puerto Rico along the trench between the Bahamas Bank and Caribbean islands. A third San Juan fish recovered in January 2009, also followed this route to the Dominican Republic. This raises the question as to whether these fish would have ultimately traveled to the waters off the Florida Keys.

The rate at which the fish traveled west did vary. The fish recovered off Arecibo had sped along at the rate of

7.1 miles per day, while the fish recovered off San Juan was easing along at 2.3 miles per day. The fish recovered off the Dominican Republic in 2009 averaged 4.3 miles per day. This difference in the rate of travel is apparently common for dolphin, having been shown for fish off Florida, South Carolina and the Bahamas. Some fish move at a fast pace along their migration route while others appear to linger in an area. The truth be known, individual behavior is likely a function of the availability of food and the movement of their prey.

Another tag recovery received this period was for a fish tagged in the Tongue-of-the-Ocean off Andros Island, Bahamas. The fish was recovered in June 2009, but the angler recovering it misplaced the tag until recently. Originally tagged by Dave Wilson of Andros, Bahamas, in March 2009, the fish was recovered by Rob McKenna of Marathon, Florida, 77 days after its release. The amazing part is that the fish was recovered within a few feet of where it had been released. This is the longest period recorded for a dolphin to be tagged in the Tongue and recovered there.

Capt. Bouncer Smith's December 2009 tagging flurry off Miami, Florida, has paid off once again. This is the fourth fish recovered from the ones he tagged in the last month of the year. Released on December 7, 2009, the fish was recovered by Capt. Brad Simonds of the charter boat *Southpaw*. Capt. Simonds recovered the dolphin on

Sponsored In Part By:

## Marine Ventures Foundation



DNR



GRADY-WHITE BOATS

Six Mile Creek, LLC



# Dolphinfish Research Newsletter

February 2010

Page 2.

January 24, 2010, in 140 feet of water off Key West, Florida.

The fish was at liberty for 48 days. Using the shortest route method, the fish had traveled 142 miles to the southwest following the continental shelf, averaging three miles per day. But this would require the fish to undergo a sustained swim against the Gulf Stream.

A possible alternate route would take the fish from Miami through the Providence Channels into the Atlantic. There it could travel southeasterly to San Salvador Island where it could cross the Bahamas Bank into the Bahamas/Caribbean trench. Once in the trench, it could travel west to the Florida Keys. This route is just over 1,000 miles and would have required the fish to travel 21.5 miles per day, which is not unrealistic for the species.

Is this recovery the first indication of a fall southerly migration off south Florida? Or as presented in the alternate route, another indication of a mini-migration route around the Bahamas? More tag recoveries will be needed to draw a conclusion either way.

Anglers interested in a complete listing of the 2009 tag recoveries along with a map depicting their movements should visit the program's Web site at <http://dolphintagging.homestead.com/Map.html>.

## Individual Taggers can make a Difference

Anglers do not realize the power they have to make major contributions in the study of the movements and migrations of dolphinfish in the North Atlantic Ocean, Caribbean Sea and Gulf of Mexico. More fish were tagged in December 2009 and January 2010 than during those same months for the previous seven years combined. The difference was that three boats made a concerted effort to tag during these months.

Two of the boats are charter boats based in Miami, Florida; Capt. Bouncer Smith's *Bouncer's Dusky* and Capt. Jimbo Thomas's *Thomas Flyer*. Capt. Thomas managed to tag six fish in December and 17 more in January. Capt. Smith worked hard in December, tagging 47 fish. Capt. Manuel Botello of San Juan, Puerto Rico, and his crew aboard his *Missing Angel* managed to tag 32 dolphin in December and 43 more in January off the north coast of Puerto Rico.

Thanks to the effort put forth by the crews of these boats, six winter tag recoveries have taken place. These recoveries have provided short-term recovery information that has largely been missing in the study. If this study is to achieve its goal of mapping the movements of dolphin in the North Atlantic, fish need to be tagged in every month of the year and throughout their entire range.

The Dolphinfish Research Program needs your financial support. No federal funds support this important research. This program exists because of private donations.

*Dolphin Tagging Progress by Zones, Jan. 31, 2010.*

Zone	Area	Southern Limit	Northern Limit	Number Tagged
1	Bahamas	22° N	28° N	0
2	FL Straits	23° N	25° N	0
3	South Florida	25° N	27° N	18
4	Central Florida	27° N	30° N	0
5	North FL & GA	30° N	32° N	2
6	Southern SC	32° N	33° N	0
7	N. SC - S. NC	33° N	35° N	0
8	Northern NC	35° N	36.5° N	0
9	Virginia	36.5° N	38° N	0
10	N. Mid-Atlantic	38° N		0
11	Gulf of Mexico			0
12	W Central Atlantic			43
13	Caribbean Sea			0
	Total			63

## How Important Are Dolphin?

Offshore recreational fishing opportunities are rapidly dwindling. The growing number of recreational fishing closures, such as for many snapper and grouper, coupled with the declines in many of the tuna and shark stocks are severely limiting offshore fishing opportunities. Many fishermen will soon be faced with the question of whether it is worth the expense to fish offshore.

Dolphinfish are the number-one harvested fish in the blue water troll fisheries of the Gulf of Mexico and South Atlantic Bight. More dolphin are harvested in these areas than are king mackerel, yellowfin tuna, blackfin tuna and wahoo combined. Dolphinfish also rank very high among the anglers of the Mid-Atlantic Bight. Fishermen report that dolphin are the only fish in their box at the end of the day on as many as 85 percent of their trips trolling the blue waters of the South Atlantic Bight.

What happens if dolphin disappear?



*More than 1.45 million dolphinfish were harvested from the Gulf, Atlantic and Caribbean by U.S. sports fishermen in 2008. (MRFSS Data)*

**Your donations to the Dolphin Study are Fully Tax-Deductible**

**Make checks out to:**

**HH Reef Foundation/Dolphin Study**

# Dolphinfish Research Newsletter

February 2010

Page 3.



*Graceful flight of the flying fish entertain fishermen with their amazing gliding skills during those periods when fishing is slow. They also serve as an important food item in the dolphin's diet throughout this magnificent game fish's range.*

## 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  
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  
SC 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 McMahan, N. Palm Beach, FL  
Grady-White Boats, Inc., Greenville, NC  
Bailey Smith, Great Exuma, BA  
Hallprint Fish Tags, Victor Harbor, S. Australia  
Capt. Bill Parker, Hilton Head Island, SC

## Dolphinfish Research is Independent

As important as dolphin are to the U.S. and world's recreational fisheries, they have been neglected in the basic research of their life histories needed for management. Data currently available on dolphin in U.S. waters cannot determine if the stock is healthy or in decline. Before the Dolphin Tagging Study, hard data did not even exist to confirm the south-to-north spring/summer migration along the East Coast. No information is available on movements in other areas of the Atlantic and Caribbean.

The Dolphin Tagging Study is part of the Dolphinfish Research Program conducted by Cooperative Science Services, LLC, a private research company based in Charleston, South Carolina. The purpose behind the Dolphinfish Research Program is to carry out needed research on dolphinfish to ensure the future health of the stock.

Every angler who fishes for dolphin, every offshore fishing organization, and every business involved in offshore fishing should be supporting this study either by tagging fish or providing financial support. Donations do not have to be at the \$500 or \$1,000 level. Contributions of \$20, \$50 or \$100 do help. Please consider donating.



## For More Information, Contact

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