Cooperative Science Services, LLC Dolphinfish Research Program

December 2010



Recoveries in the Mediterranean Sea

Anglers who have been following the Dolphin Tagging Study over the past two years probably recall that the program added a Mediterranean component in 2009. Based in Spain and spearheaded there by Esteban Graupera and Oriol Ribalta, president and vice president of the Spanish Confederation of Responsible Recreational Anglers (see

http://www.pescaresponsable.es/), the program has grown to include anglers in both Spain and Italy. This year the study is beginning to yield information on this game fish highly prized by European anglers.



Dolphin, known as llampuga by the Spanish, are just as popular with European anglers as they are with American anglers. Photo by R.Tamburini.

For those of you who might not be geographically savvy about the Mediterranean Sea, it basically separates southern European countries from northwestern African countries. Beginning at Gibraltar, Spain, in the west, the Med stretches southeast more than 2,400 miles to Beirut, Lebanon, at its eastern end. The entrance to the Med starts out near 36° North latitude (same latitude as the southeastern tip of Virginia) and ends in the eastern Med stretching from 31° to 36° North latitude (southeastern Georgia to Virginia). From Leuca, Italy, in the north to Surt, Libya, in the south, the Med is more than 600 miles wide. It is a much larger body of water than most westerners realize.

The first tag recovery took place off the Spanish Island of Mallorca and was recovered in a fish market. The fish was tagged on September 10, 2010, off the southern tip of the island by Salvador Soler fishing aboard the boat *Balearic Tuna*. The tagged fish was actually discovered in a seafood shop and reported to Oriol Ribalta. Oriol was able to back-track the origin of the fish, determining that it had been recovered by a commercial boat on October 26, 2010, off the northwest tip of Mallorca. The fish had traveled north roughly 57 miles during its 46 days of liberty.



The Dolphinfish Research Program's first tag recovery in the Med indicated a northerly movement during its fall travel around the island of Mallorca. Graphics provided by O. Ribalta.

Sponsored In Part By:

Marine Ventures



Six Mile Creek, LLC





Dolphinfish Research Newsletter December 2010 Page 2.

The second tag recovery in the Mediterranean Sea had a similar liberty period, 48 days, but a different behavior. Toni Solar tagged the dolphin off Cambrils, Tarragona, Spain, on October 2, 2010, during a fishing trip aboard his boat *Pecten*. The dolphin was recovered by a commercial fishing vessel out of Malta on November 19, 2010. Crew member Joseph Bugeja reported catching the dolphin off the southwestern tip of Sicily, about 68 miles northwest of Gozo Island, Malta. The fish traveled 723 miles to the southeast, averaging 15.1 miles per day. At release, the fish was reported to be 18.7 inches in fork length and was reported to be 20 inches at recapture, indicating a 1.3 inch growth.

Little is known about movements of dolphinfish in the Mediterranean or Eastern Atlantic Ocean. This fall movement would suggest that the fish may have been headed for the eastern section of the Mediterranean Sea with its lower latitudes for the winter. However, two tag recoveries do not make a migratory route. The restricted access to the Atlantic Ocean posed by the Straits of Gibraltar, only 10 miles wide, reduces the likelihood of an annual major or mass migration of dolphin in and out of the inland sea.



The eastward movement exhibited by this dolphin could suggest that the fish may have been planning to winter in the lower latitudes of the Eastern Mediterranean. Graphics provided by O. Ribalta

Florida Fish Takes the Short Route

Dolphin tagged off Florida's east coast are being recovered off Florida after relatively long liberty periods, 48 days or more, but having moved only a short distance, as little as 90 miles, from their release site. Virtually all of these recoveries involved fish in the waters off south Florida and the Florida Keys, an area known to have possibly the heaviest fishing pressure of any waters in the U.S. Such heavy fishing pressure almost precludes a fish with such a voracious appetite as dolphin surviving for an extended period. This suggests that the fish engage in a movement behavior that takes them out of Florida waters for a short period before it returns them to U.S. waters off Florida in less than a year.

A dolphin tagged off Key West, Florida, by Roger Bursey while fishing aboard Capt. Robert Frevert's boat *Keys Bound* exhibited just such a movement. Tagged on July 9, 2010, it was recovered by Sean Olejar of Malvern, Pennsylvania, while on a fishing trip aboard the *No Mulligan* off Juno Beach, Florida, on November 10, 2010. The fish was recovered only 240 miles from its release site after having been at liberty for 124 days. During this period the fish had grown from a 16-inch schoolie to a 33-inch gaffer.

If the fish had remained in this 240-mile stretch of coast for the entire period, it would mean that it traveled northward at a snail's-pace of 1.9 miles per day or 418 feet northward per hour. This is considerably slower than the 8.1 miles averaged per day for dolphin recovered instate off Florida or the 21.6 miles per day averaged for Florida fish recovered out of state. If the fish took a mini migratory route around the Bahamas Bank up through the trench between the Caribbean Islands and the Bahamas, a trip of 1,400 miles, the fish would only have to average covering 11.3 miles per day.

This is the third recovery in 2010 to suggest that at least some dolphin will cycle back through U.S. waters in periods of less than one year. Going back to 2006, 13 tag recoveries suggest that some dolphin off southeast Florida will return to the Florida coast in less than six months. This is important information that supports having a regulation requiring fish under 20 inches be returned to the water. This suggests that Florida fishermen could realize benefits from this conservation measure in as little as six months with more and larger fish to catch.

Dolphin Tagging Progress by Zones, November 30, 2010.

Zone Area Southern Northern Number Tagg 1 Bahamas 22 ° N 28 ° N 19	ed 1
	_
2 FL Straits 23 ° N 25 ° N 569	9
3 South Florida 25 ° N 27 ° N 445	5
4 Central Florida 27 ° N 30 ° N 87	,
5 North FL & GA 30 ° N 32 ° N 77	,
6 Southern SC 32 ° N 33 ° N 114	4
7 N. SC - S. NC 33 ° N 35 ° N 9	
8 Northern NC 35 ° N 36.5 ° N 75	5
9 Virginia 36.5 ° N 38 ° N 7	
10 N. Mid-Atlantic 38° N 7	
11 Gulf of Mexico 37	,
12 W Central Atlantic 62	2
13 Caribbean Sea 5	
Total 1,68	35

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

Dolphinfish Research Newsletter

December 2010

Page 3.





Year-End Awards

Four participating boats will each receive a new rod and reel valued at more than \$500 courtesy of the Dolphin Tagging Study. These awards are intended to recognize those individuals who have invested considerable time and effort in tagging dolphin for this important study. The possibility of winning one of these prizes also adds incentive for anglers to put forth a little extra effort that they would not otherwise have done. It also adds a competitive air to the program for those anglers who are serious about tagging fish for this study. The private boat, charter boat, boat tagging in areas other than the Florida east coast and the individual angler that tag the most dolphin in the 2010 will receive a TLD 30 on a Custom Crafted Star standup rod.

These awards are possible thanks to the generosity of **Haddrell's Point Tackle and Supply** of Mt. Pleasant and Charleston, South Carolina and **Star Rods of Sea Striker Tackle** of Morehead City, North Carolina. I deeply appreciate the support the program has received from Mike Able at Haddrell's Point and Dick and Philip Henry at Sea Striker. It is through their loyal support that these year-end awards are possible.

A Holiday Thank You

There is an amazing infrastructure of supporters behind the operation of the Dolphinfish Research Program that makes it the success that it is. I wish to take this opportunity to thank all of the people who have made 2010 a big success.

It is not just the fishermen who tag or recover dolphin that are important. The people who provide financial support, the fishing clubs that support the research, the volunteers who measure fish at tournaments, and the local newspaper reporters and national magazine writers who report on the program are all equally important in making this dolphinfish research a big success.

Thanks to all. Merry Christmas and Happy Hanukkah to everyone. Have a Happy New Year. $\mathcal{D}_{\circ n}$

New 2010 Financial Contributors

West Palm Beach Fishing Club, West Palm Beach, FL Beaufort Sportfishing and Diving Club, Beaufort, SC

For More Information, Contact

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

2010 Financial Supporters

Six Mile Creek, LLC, Charleston, SC
Antonio Gonzalez, Miami, FL
Haddrell's Point Tackle and Supply,
Mt. Pleasant and Charleston, SC
Chris Sommer Fine Art, Coral Springs, FL
Hilton Head Reef Foundation, Hilton Head, SC
Wood Brothers, Green Pond, SC
Dr. Al Fernandez, Miami, FL
Manuel Botello, San Juan, PR
Piedmont Offshore Fishing Club, Greensboro, NC
Ryan McMahon, N. Palm Beach, FL

Capt. Bill Parker, Hilton Head Island, SC Rex Thompson, Columbia, SC Tom Urban, Cudjoe Key, FL Rizer Chevrolet Company, Walterboro, SC

Greg Griffith, Holland, MI Belle Isle Marina Wahoo Tournament, Georgetown, SC Bill & Jeanette Baugh, Ramrod Key, FL

Tommy Lewis II, Raleigh, NC Larry & Kathleen Hufford, Palm Bay, FL Star Rods and Sea Striker Fishing Tackle, Morehead City, NC

Georgetown Landing Marina, Georgetown, SC Bailey Smith, George Town, Exuma, BA Rock Boat Fishing Team, Weston, FL James P. Shannon, Isle of Palms, SC Frank Gibson, Beaufort, SC

Gettin' Jiggy Fishing Team, Delray Beach, FL Central Florida Offshore Anglers, Orlando, FL Tim and Michelle Heiser, Plantation, FL Greenville Salt Water Sports Fishing Club, Greenville, SC

B. C. Chickadee, Key Colony Beach, FL Larry Deal, Winter Park, FL

Florida Coastal Conservation Association, Orlando, FL Blue Water Fishing Club, Florence, SC Ryan Earhart, Charleston, SC

Grady-White Boats, Inc., Greenville, NC Marine Ventures Foundation, Jackson Hole, WY Philip Brownell, Coconut Creek, FL Bohicket Marina, Seabrook Island, SC

> Dixon Pearce II, Mt. Pleasant, SC Robert S. Kerr, Davenport, FL Harry Johnson, Jr., Mt. Pleasant, SC

Fred Bergen, Savannah, GA Capt. Larry Harvey, Georgetown, SC Robert Frevert, Jupiter, FL

SC Saltwater Sportfishing Association, Charleston, SC SC Department of Natural Resources, Charleston, SC Ryals Offshore Productions, Jacksonville, FL

Charleston Big Game Fishing LLC, Isle of Palms, SC
Capt. Bill Parker, Hilton Head Island, SC
R. J. Ventura, Mt. Pleasant, SC

Leatherwood Manufacturing, Inc., N. Charleston, SC Sunrise Charters, Atlantic Beach, NC Capt. Rom Whitaker, Hatteras, NC

NC Coastal Conservation Association, Raleigh, NC Marsha Hass, Charleston, SC

Franklin O. Hendley, Cheraw, SC Blue Ridge Environmental Services, Inc, Shelby, NC Treasure Coast Construction, Inc, Delray Beach, FL Florida Sports Fishing Association, Cocoa Beach, FL

John Stalder, Merritt Island, FL Capt. Bouncer Smith, Miami, FL Sebastian Inlet Sportfishing Association, Inc.,

Melbourne, FL

William J. Pomenti, Islamorada, FL