

# SC Dolphin Tagging Study

August 2005

## 2005, a Year of Contrasts

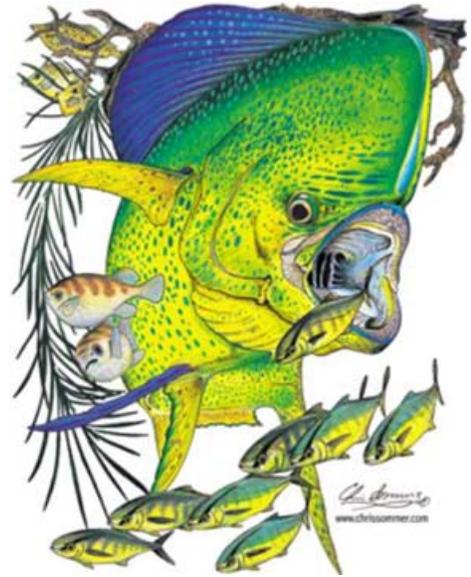
If there is one fact that I have learned in 35 years of studying fish is that as soon as you think that you are beginning to understand a species, they will behave completely different, leaving you wondering, “why did they do that?” Tagged fish recoveries for 2005 have done just that, presenting many markedly different behaviors not observed before.

Anglers have reported nine additional tag recoveries since the last newsletters bringing the number of tagged dolphinfish recovered this year to 34. This raises the number of reported tag recoveries for the study to an impressive 109 since its start in 2002.

One of the most pronounced differences in the 2005 recoveries compared to the previous three years is the high rate of travel (miles traveled per day) exhibited by many of the recovered fish. Six fish have had travel rates in excess of 60 miles per day. Only two fish in the previous three years have had similar rates of travel. The fastest rate of travel involved a dolphin tagged in late July by Mark Mitchell of Orlando, FL while fishing aboard his boat *Seawitch* off Islamorada, FL. The fish was recovered nine (9) days later by Daniel Alexander of Raleigh, NC on a fishing trip aboard the charter boat *Samanna* off Oregon Inlet, NC. This fish had traveled 835 miles from its release site averaging 92.8 miles per day.

The last two years produced numerous tag recoveries of dolphin that had been tagged and recaptured off South Carolina. These tag recoveries were for fish that had been at liberty from 1 to 70 days and were recaptured less than 50 miles from their release site. No such recoveries have been noted off South Carolina this year. However, a recovery of a similar nature was made off the Florida Keys. A dolphin tagged on July 15 by Bill Underwood aboard Gregg Daniel’s boat *Archelle* while fishing out of Key West, FL was later recovered by Al Hernandez off Islamorada, FL. The fish was at liberty for 20 days and was recovered only 83 miles from its release site. This is the first recovery in the Florida Straits to hint at a “lingering in the area” or “regular short-term return to the area” by a dolphin.

The length of time required for dolphin to travel from South Florida and the Keys to North Carolina was significantly reduced this year. Two dolphin tagged off Islamorada by Justin Brown of Pembroke Pines, FL in late May made good time with one reaching the waters off Southport, NC in 21 days (646 miles) and the other going to the waters south of Cape Hatteras in 18 days (785 miles). However, this travel time was cut in half by a dolphin tagged off Ft. Lauderdale, FL by Ryan Williams aboard his vessel *Barataria* during a trip in early July. The fish was recaptured just 10 days later and 674 miles to the north of its release site off Cape Hatteras, NC by Capt. Derek Taylor’s charter boat *Carolina Girl*. The dolphin tagged by Mark Mitchell off Islamorada that traveled an average of 92.8 miles per day on its 9 day journey to North Carolina confirmed that such fast travel was not just a one-time event for the species.



Recoveries this year indicate that dolphin have largely remained in the Gulf Stream current during their travel northward from the Florida Straits to Cape Hatteras. While dolphin usually appear to be traveling against the current flow, they are actually swimming at a speed that is less than that of the current into which they are swimming. This results in a negative ground speed for the fish with the water current continuously carrying them northward. This riding the Gulf Stream is why many charter boat captains characterize the 2005 dolphin fishery as a “here today gone tomorrow” fishery.

This theory is supported by Dr. Mitch Roffer, Roffer’s Ocean Fishing Forecast, through his study of sea surface temperatures generated by satellite imagery. Dr. Roffer has noted the virtual absence this year of the large, slow moving eddies, 10 to 15 mile wide, that typically form on the western side of the Gulf Stream as it moves from Florida to North Carolina. Instead, he said, that small eddies, 3 to 5 miles wide, have formed much further offshore that travel at a higher speed. It is these eddies that serve to concentrate baitfish which in turn concentrate and hold dolphin.

Another interesting note is that while tagging in the Florida Straits has accounted for 52 percent of the dolphin tagged in 2005, these fish have been involved in 68 percent of the tag recoveries this year.

**Dolphin Tagging To End in 2005**

South of Cape Hatteras – September 1  
North of Cape Hatteras & Gulf – October 1

# Dolphin Tagging Newsletter

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## Tagging Activity Kicks in Late

### 2005 Tagging Progress By Zone as of August 1

Zone	Area	Southern Limit	Northern Limit	Number Tagged
1	E. Bahamas	22N	28N	62
2	FL Straits	23N	25N	679
3	South Florida	25N	27N	261
4	Central Florida	27N	30N	38
5	North FL & GA	30N	32N	38
6	Central SC	32N	33N	191
7	N. SC - S. NC	33N	35N	9
8	Northern NC	35N	36.5N	5
9	Virginia	36.5N	38N	1
10	N. Mid-Atlantic	38N		2
11	Gulf of Mexico			10

The number of dolphin tagged in 2005 for the SC Dolphin Tagging Study received a big boost in July. With over 500 dolphin tagged during July alone, the study is back on track with last year's numbers. However over half of the 1,296 dolphin tagged this year, were tagged in Zone 2, the Florida Straits.

Through out the Dolphin Study, fishermen in Zones 2, Florida Keys, have been a major contributor of tagged dolphin marking more than 500 fish per year in 2003 and 2004. Now approaching the 700 fish mark for 2005, these fishermen have made up for most of the decline in tagging in other zones.



The goal of this project is to aid fishery managers to insure that fishermen will continue enjoy days like this in the future. Photo courtesy of Jim Goller.

Anglers in Zone 3, South Florida, have also made their largest contribution of any year. Having tagged over 38 percent more dolphin this year than any year prior, the South Florida fishermen have stepped forward to boost the number of dolphin being tagging. The large surge in tagging in Zones 2 and 3 helped to balance the decline in tagging in Zone 6, South Carolina. Anglers in South Carolina experienced a very unusual and poor dolphin year that resulted in a major decline in tagged fish. Zone 6 fishermen have averaged tagging 378 dolphin in previous years but this year they have only been able to tag half that number. Palmetto state anglers have explained that the reason they have not tagged more dolphin is that they have not been able to catch many dolphin.

## Thanks to the Fishermen

The South Carolina Department of Natural Resources and the principle investigator for the Dolphin Tagging Study wish to extend a heart felt thanks to all of the bluewater fishermen who have contributed to the success of this scientific study. Without the hundreds of fishermen who have given up not only their time but their fish as well and who have cared enough to take the time to report a recovered tagged fish, this study would have failed.

The success of this study is truly a testimonial to the conservation ethic that is present in our bluewater anglers. They have demonstrated a solid commitment to aid science in seeking better fishery management through a better understanding of dolphinfish found off the eastern United States.

Thank you for your support.

## Turn in Your Dolphin Tagging Reports

Participants wishing to compete for the year end awards for tagging the most dolphin need to get their cards in to be counted. All tagging report cards must be received at the Dolphin Tagging Study office by 5:00 p.m. October 14.

For more information on the project, visit <http://dolphintagging.homestead.com> or contact

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