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The 2008 U.S. Dolphin Season

Many anglers have been asking how the 2008 dolphin season turned out. Fishermen have been particularly interested in the amount of offshore fishing effort expended and how it changed from 2007. For this information, we look at the data generated by the Marine Recreational Fishing Statistical Survey (MRFSS), the national survey conducted by the National Marine Fisheries Service for this purpose.

The total number of dolphin harvested by U.S. recreational fishermen in the Atlantic and Gulf of Mexico combined in 2008 fell 10.4 percent from the 2007 harvest. The total fishing effort expended during 2008 in the Exclusive Economic Zone (EEZ) for the combined areas of the Gulf of Mexico (GOM) and Atlantic decreased 18.9 percent from its 2007 level. Comparison of fishing effort was limited to examining that which occurred in the more distant offshore waters of the EEZ, where the vast majority of dolphin are caught.

Region	2007	2008
North Atlantic	1,285	0
Mid-Atlantic Bight	25,575	47,645
South Atlantic Bight	1,217,259	1,057,801
Gulf of Mexico	267,182	248,204

Changes in the harvest of dolphin were not uniform among the major regions of the U.S. coast. The most extreme change occurred in the species' northern range, the North Atlantic region, where MRFSS said no dolphin were caught in 2008. No dolphin had been reported harvested in this area in two other years out of the last ten. This area accounts for less than one percent of the annual U.S. dolphin harvest. The change in the 2008 dolphin harvest for the Mid-Atlantic area was a real surprise showing an 86 percent increase in the number of fish harvested over the 2007 harvest.

But the 2007 harvest was the lowest during the last ten years representing only 40 percent of the average annual harvest during the past decade, and even with the increase, the 2008 harvest was still below the decade average. Harvest in the South Atlantic Bight, which typically accounts for more than 70 percent of the U.S. Atlantic, Gulf and Caribbean harvest, declined 13 percent in 2008 from 2007. Similarly, the 2008 dolphin harvest in the Gulf dropped 7 percent from its 2007 level.

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Region	2007	2008
North Atlantic	537,144	504,042
Mid-Atlantic Bight	1,184,691	801,461
South Atlantic Bight	2,897,252	2,311,581
Gulf of Mexico	1,669,714	1,480,652

Table 2. Number of angler-trips made by region.

So what does this all mean? The drop in fishing effort was expected by members of the offshore fishing industry if for no other reason than fuel prices. Variations in the local abundance of a highly migratory animal along its migration route are not uncommon. The national survey's report that dolphin totally disappeared from the offshore harvest in the North Atlantic in 2008 may be questionable, but being the northern extreme for the species' normal habitat could make the area susceptible to periodic no-shows by the animal. The increased dolphin harvest in the Mid-Atlantic during a year when fishing effort declined by one third suggests an actual increase in the abundance of fish and that each angler-trip possessed the potential to harvest more dolphin than previously harvested in the area.

The cleanest look at the catch per unit of effort (fish caught per angler-trip), or CPUE, for dolphin in each area is achieved by using the total dolphin harvest in the EEZ and the total fishing effort in the EEZ by region. All regions did show an improvement in the harvest rate, with the exception of the North Atlantic where no dolphin were reported harvested. Anglers in the Mid-Atlantic enjoyed the largest improvement in their dolphin harvest, more than doubling their rate from 2007. The Gulf of Mexico had the second-best improvement in dolphin harvest, increasing 18 percent. The South Atlantic Bight which harvests the largest proportion of dolphin also increased its harvest rate by 16 percent over what was seen in 2007.

Table 3. Dolpi	in harvested	in EEZ per	angler-trip.
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Region	08 CPUE
North Atlantic	0.000
Mid-Atlantic Bight	0.059
South Atlantic Bight	0.404
Gulf of Mexico	0.161

According to the MRFSS data, the CPUE for the recreational harvest of dolphinfish for the U.S. Atlantic and Gulf fisheries combined increased by 32% in 2008 from the 2007 level. This is somewhat of a surprise, since comments made by dozens of dolphin taggers from Florida to New Jersey in 2008 indicated that they were having trouble finding dolphin.

Dolphin Tagging Progress by Zones, May 1, 2009.

Zone	Area	Southern Limit	Northern Limit	Number Tagged
1	Bahamas	22N	28N	80
2	FL Straits	23N	25N	4
3	South Florida	25N	27N	53
4	Central Florida	27N	30N	2
5	North FL & GA	30N	32N	2
6	Southern SC	32N	33N	6
7	N. SC - S. NC	33N	35N	0
8	Northern NC	35N	36.5N	0
9	Virginia	36.5N	38N	0
10	N. Mid-Atlantic	38N		0
11	Gulf of Mexico			0
12	W Central Atlantic			15
13	Caribbean Sea			5
	Total			167

2008 State Dolphin Harvest

The MRFSS regional data showed that the 2008 dolphin fishing varied among the areas and from the 2007 season. Regional level results are interesting, but anglers want to know how the fishing fared in their state. Using the total dolphin harvest for each state, as used in the regional evaluation, should provide fewer biasing factors from the data collection methodology.

The following table reports the number of dolphinfish harvested for each state as indicated by the MRFSS program. States have been organized by the region to which they belong, starting with the North Atlantic. This region is the northern limit of the dolphin's normal range and has the smallest share in the harvest of the species. Dolphin fishing in this area is dependant on warm Gulf Stream water pushing into this northerly region bringing the dolphin with it. In years when this flow is lacking the species can be completely absent in the local fisheries.

Table 5. Annual number of dolphin harvested by state with the net harvest change observed in 2008.

	State	Number	Number	Net
Region		2007	2008	Change
North	MA	936	0	-100.0%
Atlantic	RI	349	0	-100.0%
	DE	253	3,956	1464.0%
Mid-	MD	6,317	8,960	41.8%
Atlantic	NJ	6,386	4,521	-29.3%
Bight	VA	12,618	30,208	139.4%
South	GA	1,004	83	-91.7%
Atlantic	NC	608,422	381,787	-37.2%
Bight	SC	34,920	10,401	-70.2%
	E FL	572,914	665,530	16.2%
	W FL	218,721	196,270	-10.3%
Gulf of	AL	31,633	637	-98.0%
Mexico	LA	16,827	51,297	204.8%

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Regional data for the Mid-Atlantic Bight (MAB) showed an 86 percent increase in the number of dolphin harvested in 2008 over the 2007 fishing year. However, as shown in Table 5, not all states making up the MAB enjoyed the improved fishing. New Jersey was the only Mid-Atlantic state where the data indicated a 29 percent decline in the harvest of dolphin in 2008 from that seen in 2007. Except for New York, for which no data was reported, the remaining states were shown to have improved 2008 harvest levels from 42 to 1,464 percent. Anglers out of Virginia enjoyed the lion's share of the improved dolphin fishing, accounting for 63 percent of the dolphin harvested in the MAB during 2008.

States making up the South Atlantic Bight (SAB) have historically accounted for roughly 70 percent of the U.S. recreational dolphin harvest, so harvest changes in this region set the tone for the fishery as a whole. Only East Florida among the SAB states was shown by the MRFSS's data to enjoy an increase in the harvest of dolphin in 2008 from that of 2007. Like Virginia in the MAB, East Florida anglers harvested 63 percent of the dolphin taken in the SAB in 2008. North Carolinians, who had been harvesting an increasing share of the SAB dolphin harvest, dropped 37 percent in their dolphin harvest from 2007. The two states having the lowest share in the SAB dolphin harvest were shown to have the highest percentages of decline in the region: Georgia with 92 percent and South Carolina with 70 percent.

Similar to the other regions, the Gulf of Mexico, sustained a regional decline in the harvest of dolphin. The 2008 MRFSS data did indicate that one Gulf state had an increase in its dolphin harvest from the 2007 fishing year. Louisiana, normally accounting for the smallest share of the Gulf dolphin harvest, was shown to have increased its landings of dolphin in 2008 by more than 200 percent. Alabama suffered a 98 percent decline in its dolphin harvest during 2008 from its previous year's level. Western Florida, while showing a 10 percent decline from its 2007 harvest level, accounted for 79 percent of the dolphin harvest from the U.S. Gulf of Mexico. The fact that the MRFSS data set provides no information on Texas, a state known to harvest dolphin and where dolphin were tagged in 2008, shows one of the many concerns about the quality of this fishery monitoring program.

So how did your state do in this list of winners and losers? Dolphin landings increased in a few lucky states but declined in most. This data by itself does not give the complete picture of the recreational dolphin fishery. A more detailed look at the 2008 fishing year will be presented in an upcoming newsletter.

Recent Financial Supporters 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 Tom Urban, Cudjoe Key, FL



Is it a pompano dolphin? Joel Burgess of Andrews, S.C., caught this odd-looking dolphin while fishing off Georgetown, S.C. in April 2009. At 15 pounds in weight, it would be an exceptionally large specimen for a pompano dolphin. While it has the general body profile of the pompano, the anterior lobe on the anal fin and the shallow fork in the tail shows this fish to be a deformed common dolphin. Photo provided by J. Burgess.

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Juvenile Dolphin Photos and Sightings

The Dolphinfish Research Program (DRP) is seeking information on the occurrence of juvenile dolphin, fish up to 12 inches fork length. Fishermen are asked to report their sightings of schools of small dolphinfish to the DRP. Anglers should report the size of the fish, GPS location of the fish, date, and whether Sargassum or other floating objects were present. (Small dolphin are suckers for sabiki rigs.) A high-resolution digital image of the fish of at least 1MB file size should be e-mailed to the program to confirm the species identification. The photo should show a full side profile of the fish.

Financial Support Needed

Donations to the Dolphinfish Research Program are suffering under the current economy. In 2008 the number of fish tagged dropped below the annual average largely because the high price of fuel reduced the number of fishing trips made. Now the sluggish economy is affecting the financial support of the research program.

Financial contributions in the first four months of this year have fallen off more than 70 percent from the same period last year. Last year more than \$44,000 was received during this time, while a little more than \$10,000 has been received this year with another \$17,000 in promised donations.

In past years donors of one to five thousand dollars have been the backbone of the financial support. However, I am fully aware that many of these fishermen and businesses may not be able to donate as much this year. Out of the thousands of offshore anglers who enjoy the thrill and enjoyment of catching and eating this premier game fish, the vast majority have contributed neither time nor money to help ensure the continuation of the recreational fishery they enjoy. If every regular dolphin fishermen made a modest contribution to the study or took the time to tag a few of their dolphin for science, this program would expand at a phenomenal rate.

The outstanding accomplishments of the research program have been possible only because of the generosity of a few conservation-minded foundations, recreational fishermen, their organizations, and members of the sport fishing industry. The future of this research program rests with the recreational fishing industry and the fishermen who enjoy the excitement and thrill of offshore big game fishing.

Donations are fully tax-deductible. Checks should be made out to Reef Foundation/ Dolphin Research Program and mailed to the program's headquarters at the address shown below.

For More Information, Contact

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The crew of the Reel Gator out of Florida prepare to release one of many dolphin they have tagged in recent years while fishing the Bahamas. Reduced bag limits for troll-caught game fish in the Bahamas has led to an increase in the tagging of dolphin in the islands. Photo by M. Mitchell.

