Snapper Grouper Regulatory Amendment 23

SEP DISCUSSION DOCUMENT

Regulatory Amendment 23 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Regulatory Amendment 23) would include actions pertaining to management of the commercial golden tilefish fishery. The Council has indicated that the following items should be included in the amendment:

- Modification to the fishing year start date for the hook-and-line component of the commercial golden tilefish fishery.
- Management measures to lengthen the fishing season for the longline component of the commercial golden tilefish fishery.

Why is the Council Considering Action?

At their October 2014 meeting, the Snapper Grouper Advisory Panel (AP) put forth a recommendation to the Council to revise the fishing year start date for the commercial hook-and-line sector of the golden tilefish fishery. The AP recommended a start date of March 15. The recommendation was aimed at separating when the longline sector and the hook-and-line sector can operate since the fishing year for both sectors begins on January 1. Golden tilefish can only be harvested using longline gear by 23 vessels that obtained endorsements and under a trip limit of 4,000 pounds. Since the endorsement program became effective, the ACL for the longline component has been met very early in the season (March 5th in 2014 and February 19th in 2015). Fishermen who harvest golden tilefish using hook-and-line claim that the market is flooded early in the year so they would prefer to begin fishing on their quota after the longline quota is met to increase the value of their product and extend the time that golden tilefish is available to consumers. Therefore, the Council is exploring options in Regulatory Amendment 23 to change the fishing year start date for the hook-and-line sector.

In addition, Regulatory Amendment 23 explores options to lengthen the fishing season for the longline sector. As stated above, the season has lasted 64 and 50 days in 2014 and 2015, respectively. Such a short fishing season has the potential to result in market flooding and derby conditions. In 2013, longline fishermen approached the Council with recommendations for how to "stretch out" the season. The Council considered options in Regulatory Amendment 16 but the amendment was not developed to completion because analyses of the proposed actions did not result in a sufficient difference in season length.

This document provides background information on the commercial sector of the golden tilefish fishery, followed by potential actions and alternatives. Appendix A contains alternatives and analyses from Regulatory Amendment 16. The minutes from the Snapper Grouper Committee, June 2013, are available online at: http://safmc.net/meetings/pdf/SGCmteMinJun13.pdf. The discussion about golden tilefish longline starts on p. 97. Appendix B contains an economic description of the fishery from Regulatory Amendment 12 (SAFMC 2013).

Golden Tilefish Commercial Harvest in the South Atlantic

Stock Status and Annual Catch Limit

- The SEDAR 25 (2011) stock assessment of the golden tilefish stock indicated that the U.S. southeast stock of tilefish is currently not overfished and overfishing is not occurring. The stock assessment results show that the biomass of golden tilefish has increased substantially since the last assessment and is now above BMSY.

Annual Catch Limit = 606,250 lbs gw

Commercial ACL (97%) = 541,295 lbs gw

Longline quota (75%) = 405,971 lbs gw

Hook and line quota (25%) = 135,324 lbs gw

Recreational ACL (3%) = 3,019 fish

Federal permit requirements:

Hook and line: valid Snapper Grouper Unlimited or Limited Commercial permit is required.
Longline: valid Snapper Grouper Unlimited or Limited Commercial permit and valid Golden Tilefish longline endorsement

Trip limits:

Hook and line: 500 lbs gw
Longline: 4,000 lbs gw

Golden tilefish longline endorsement program:

- Implemented in 2013 through Amendment 18B and established 23 endorsements.
- In recent years prior to Am 18B, there had been 35-40 participants in the longline sector.
- The qualifying requirement was that the individual had an average of 5,000 pounds gw golden tilefish caught (with longline gear) for the best 3 years within the period 2006 through 2011.
- Most endorsement holders are in Florida, primarily around Cape Canaveral. Some are in South Carolina.
- Anecdotal information that a recent new entrant paid $100,000 for an endorsement.
- Recently the Council clarified that landings history will not be tied to the endorsement, only to the Snapper Grouper permit. See http://safmc.net/sites/default/files/meetings/pdf/Advisory%20Panels/2015/SG_Apr/A6b_CatchHistorySummary_SGAP_Apr2015.pdf.

Commercial Landings:

Table 1. Commercial landings of golden tilefish by gear type, 1993-2014.

Year	Hook and Line	Longline	Other Gear	TOTAL
1993	13,312	1,175,917	1,123	1,190,352
1994	18,339	731,683	1,627	751,649
1995	20,251	602,582	216	623,049
1996	13,540	351,646	361	365,547
1997	27,742	318,772	451	346,965
1998	24,262	393,479	1,881	419,622
1999	25,167	490,425	5,058	520,650
2000	36,493	666,420	3,459	706,372
2001	21,928	414,884	892	437,704
2002	39,463	349,833	4,487	393,783
2003	15,869	293,671	311	309,851
2004	22,062	257,360	conf.	279,422
2005	33,854	288,688	1,585	324,127
2006	32,180	332,578	2,216	366,974
2007	38,921	245,477	1,033	285,431
2008	19,746	279,312	1,183	300,241
2009	13,745	298,975	591	313,311
2010	24,774	343,673	1,109	369,556
2011	35,252	333,182	na	368,434
2012	100,131	465,759	na	565,890
2013	70,087	409,180	na	479,267
2014	139,703	564,515	na	704,218

Data Sources: NMFS ACL database, NMFS Commercial Landings

Additional detailed information about the commercial sector of the golden tilefish fishery is included in Appendix B, but only includes information through 2010.

Possible Actions and Alternatives

Action 1. Modify the fishing year start date for the hook-and-line sector of the commercial golden tilefish fishery

Alternative 1 (No action). Do not modify the fishing year start date for the hook-and-line sector of the commercial golden tilefish fishery. The fishing year begins on January 1 and ends on December 31.

Alternative 2. Change the fishing year for the hook-and-line sector of the commercial golden tilefish fishery to:

Sub-alternative 2a. March 1 – February 28/29.
Sub-alternative 2b. April 1 – March 31.
Sub-alternative 2c. May 1 – April 30.

Alternative 3. Allow the start date of the fishing year for the hook-and-line sector to coincide with closure of the longline sector.

Others??

Action 2. Extend the fishing season for the longline sector of the commercial golden tilefish fishery in the South Atlantic.

Alternative 1 (No Action). Do not take action to extend the fishing season for the longline sector of the commercial golden tilefish fishery. Vessels with golden tilefish longline endorsements are limited to 4,000 pounds whole weigh (lbs ww) per trip with no step-down trip limit.

Alternative 2. Require vessels with golden tilefish longline endorsements to fish for two weeks beginning on January 1 and stop fishing for the following two weeks. Continue fishing in this manner until the golden tilefish longline ACL is met or is projected to be met.

Alternative 3. Require vessels with golden tilefish longline endorsements to fish every other week beginning on January 1 and until the golden tilefish longline ACL is met or is projected to be met.

NOTE: See **Appendix A** for analyses for Alternatives 2 and 3.

Alternative 4. Implement a trip limit step-down when 75% of the ACL is met:

Sub-alternative 4a. 1,000 lbs ww
Sub-alternative 4b. 500 lbs ww

Appendix A. Analyses from Regulatory Amendment 16* (June 2013)

*NOTE: The SAFMC decided to stop work on these actions in June 2013, but may consider something like this for Reg Amendment 23.
This analysis was preliminary.
The SAFMC is now using Reg Amendment 16 for another action (black sea bass pot closure). In 2013, this amendment number was used for a potential golden tilefish amendment.

Action 1: Extend the fishing season for longline vessels in the golden tilefish portion of the snapper grouper fishery in the South Atlantic.

Alternative 1 (No Action). Vessels with golden tilefish longline endorsements are limited to 4,000 pounds per trip with no step-down trip limit.

Alternative 2. Require vessels with golden tilefish longline endorsements to fish for two weeks beginning on January 1 and stop fishing for the following two weeks. Continue fishing in this manner until the golden tilefish longline ACL is met or is projected to be met.

Alternative 3. Require vessels with golden tilefish longline endorsements to fish every other week beginning on January 1 and until the golden tilefish longline ACL is met or is projected to be met.

4.1.1 Biological Effects

The current closures of snapper grouper and other commercial fishing seasons greatly affect the intensity and duration of longline fishing for golden tilefish. In the South Atlantic, the commercial fishing seasons for the following species are closed from January 1 through April 30 each year: gag, black grouper, red grouper, scamp, red hind, rock hind, coney, graysby, yellowfin grouper, yellowmouth grouper, and red porgy. The commercial wreckfish season is closed from January 15 through April 15, and greater amberjack from April 1 through April 30. The red snapper, goliath grouper, Nassau grouper, speckled hind and warsaw grouper seasons are closed year-round. The black sea bass season, which begins on June 1 and ends on May 1, has closed before January 1 for the past five fishing seasons. Combined, these closures substantially reduce the numbers of species that vessels with an endorsement (and unlimited snapper grouper permit) can land from January 1 through April 30.

The commercial golden tilefish sector has been subject to shortened fishing seasons due to the rapid harvest of the annual catch limit (ACL). The fishing year begins on January 1st and the ACL has regularly been harvested quickly. In 2010, the fishery was closed in April; in 2011, it was closed in March and in 2012, the fishery closed in February. For the 2013 fishing year, the fishery closed on May 5, 2013, making it the longest commercial golden tilefish season in four years.

In 2012, Regulatory Amendment 12 was implemented based on results from SEDAR 25 (2011) which increased the golden tilefish annual catch limit to 606,250 pounds whole weight (541,295 pounds gutted weight) for the commercial fishery and 3,019 fish for the recreational sector. However, even with the increased ACL, the fishery closed in May 2013 and 75% of the ACL was harvested by February 2013, triggering a 300-pound trip limit.

The final rule to implement Amendment 18B published in the Federal Register on April 23, 2013 (78 FR 23858). Amendment 18B establishes a commercial golden tilefish endorsement program; an appeals process for those who feel they were incorrectly excluded from the endorsement program; establishes a provision to allow the transfer of endorsements; allocates 75% of the commercial annual catch limit to the longline sector and 25% to the hook-and-line sector; changes the golden tilefish trip limit to remove the 300-pound gutted weight trip limit when 75% of the ACL is caught; and establishes a 500-pound gutted weight trip limit for those who do not qualify for a golden tilefish endorsement.

In order to qualify for an endorsement, Unlimited Snapper grouper permit holders or Trip-Limited permit holders must have landings history that shows average golden tilefish landings using longline gear of at least 5,000 pounds gutted weight for the best three years within the period 2006 through 2011. Based on these criteria, 23 endorsements were mailed to qualifying permit holders in early May 2013. Letters were also mailed to those snapper grouper permit holders who have landed golden tilefish in the past but did not qualify for an endorsement. Permit holders may appeal the decision until August 21, 2013. The endorsement program effectively begins on May 23, 2013 however, because the ACL was reached on May 5, 2013, the endorsements will take effect in the next fishing year.

Although the endorsement program may help alleviate derby conditions associated with the fishery, it is not likely to eliminate them altogether. The endorsement program limits golden tilefish longline fishermen to 23 endorsement holders. However, in past years an average of 15 vessels harvested golden tilefish with longline gear.

Table 4.1.1. Number of vessels that caught golden tilefish with longline (LL) during 2004-2012. Data linked to active permits.

Year	# LL
2004	20
2005	13
2006	11
2007	16
2008	12
2009	12
2010	20
2011	18
2012	
Average	15

Under the no-action alternative, it is expected that the ACL will be harvested in the first half of the year, as has occurred in previous years. The endorsement program is likely to not have an impact on the rate of harvest as most of the recent active golden tilefish longliners have received endorsements. **Alternative 2** and **Alternative 3** propose to alternate between two weeks of fishing and two weeks of closed fishing or one week of open fishing and one week of closed fishing, respectively. Under both alternatives, longline endorsement holders would be subject to the 4,000-pound trip limit during the open periods.

To project when the ACL would be met, 2013 quota monitoring data were obtained from the SEFSC. Preliminary quota monitoring landings for 2013 totaled 531,970 lbs gw. A total of 383,008 lbs gw of landings were reported with longline gear, 47,381 lbs gw were reported with other gears (primarily handline, bandit, electric), and 101,582 lbs gw did not have a reported gear type for landing.

Vessels qualifying for golden tilefish longline endorsements (n=23) were matched with quota monitoring landing records by vessel ID (as indicated in permit records) to determine the amount of longline landings in 2013 attributed to vessels qualifying for longline endorsements. Of the 383,008 lbs gw of landings reported by longline gear, 319,564 lbs gw were reported by vessels qualifying for a longline endorsement and 63,444 lbs gw were reported by vessels not qualifying for a longline endorsement. Additionally, of the 47,381 lbs gw reported for other gears, 16,720 lbs gw were attributed to vessels qualifying for a longline endorsement. These landings were added to the longline landings for vessels with longline endorsements in determining weekly catch rates.

Because a large portion (19%) of landings did not have a reported gear type, landings with unknown gear type were proportionally allocated on a daily basis based on landings with known gear types. Landings were summarized for each day the season by the following categories: longline endorsement qualifiers, vessels not qualifying for a longline endorsement, other gears, and unknown gears. Unknown landings for each day were then allocated to longline endorsement qualifiers, endorsement non-qualifiers, and other gears based on the proportion of landings each accounted for on that particular day. A total of 413,507 pounds was attributed to longline vessels qualifying for longline endorsements, 72,608 lbs gw to vessels not qualifying for a longline endorsement, and 39,442 lbs gw to vessels using other gears that did not qualify for a longline endorsement (Note: this estimate for other gear is lower than the estimate reported above because landings by other gears associated with longline vessels qualifying for a longline endorsement (16,720 lbs gw) were deducted from the other gear landings and added to longline landings for catch rate estimation).

Once landings were assigned to gear type, weekly average catch rates were computed for vessels qualifying for longline endorsements. Season lengths were then projected using actual data for 2013 when the trip limit was 4,000 lbs (Jan 1-Feb 17 and Mar 13-21). If the proposed season was open when the 4,000 lb trip limit was not in effect during 2013, then random samples of daily catch rates were taken from reported landings during Jan 1-Feb 17 and Mar 13-21. Two sets of random samples were drawn to evaluate the sensitivity of projection results to random samples drawn. Random daily catch rates were then used to estimate average daily catch rates on days when a 300-lb trip limit was previously in place (Feb 18-Mar 12, and after Mar 21). Landings were cumulatively summed until the ACL was met and the closure date was determined. **Table 4.1.2** summarizes these results.

Table 4.1.2. Estimated closure dates for Alternatives 1-3.

Alternative	Closure Date	
	Proj Method 1[1]	**Proj Method 2**[2]
Alt 1 (continuous season)	2-Mar	4-Mar
Alt 2 (two weeks on/two weeks off)	8-Apr	30-Apr
Alt 3 (one week on/one week off)	15-Apr	24-Apr

Under **Alternative 1 (No Action)**, with continuous fishing the fishery would be expected to be open for 63 days. Projections estimate that under **Alternative 2** the fishery would be open for 64 days and under **Alternative 3** would be open for 58 days (**Table 4.1.3**).

Table 4.1.3. Estimated days commercial longline golden tilefish season would be open under proposed alternatives.

Alternative	Closure Date	
	Proj Method 1[3]	**Proj Method 2**[4]
Alt 1 (continuous season)	61	63
Alt 2 (two weeks)	56	64
Alt 3 (weekly)	56	58

Alternative 1 (No Action) would likely perpetuate the existing level of risk for interactions between ESA-listed species and the fishery. **Alternatives 2 and 3** are unlikely to have adverse effects on listed *Acropora* species. Previous ESA consultations determined the snapper grouper fishery was not likely to adversely affect these species. These alternatives are unlikely to alter fishing behavior in a way that would cause new adverse effects to *Acropora* species. **Alternative 2** and **Alternative 3** are unlikely to have adverse effects on listed Atlantic sturgeon since golden tilefish are harvested well offshore from where Atlantic sturgeon occur. The impacts from **Alternative 2** and **Alternative 3** on sea turtles and smalltooth sawfish are unclear. Ultimately, the degree of risk reduction to ESA-listed species is relative to overall effort reduction. If the action alternatives reduce fishing effort in the golden tilefish component of the snapper grouper fishery, the risk of interaction between sea turtles and smalltooth sawfish would likely decrease.

4.1.2 Economic Effects

Alternative 1 (No Action) is not expected to have any additional economic effect as it is the status quo. **Alternatives 2** and **3** are not expected to have an economic effect unless it can be shown that spreading out the season over a longer period of time will reduce the number of fish on the market at one

[1] Projection method 1 uses actual daily landings reported in 2013 when trip limit = 4,000 lbs gw. If proposed season is open when the 300 lb trip limit was in place then daily average landings were randomly selected based on landings reported during Jan 1-Feb 17 and Mar 13-21.

[2] Projection method 2 was the same as projection method 1 but used a different random sample of daily catch rates.

[3] Projection method 1 uses actual daily landings reported in 2013 when trip limit = 4,000 lbs gw. If proposed season is open when the 300 lb trip limit was in place then daily average landings were randomly selected based on landings reported during Jan 1-Feb 17 and Mar 13-21.

[4] Projection method 2 was the same as projection method 1 but used a different random sample of daily catch rates.

time and increase the ex-vessel value received by the fishermen. There are no data to indicate specifically how, or if either **Alternative 2** or **Alternative 3** will affect ex-vessel values.

4.1.3 Social Effects

Implementation of a system that allows alternating open and closed harvest for the longline sector of the golden tilefish fishery (**Alternatives 2** and **3**) will affect primarily the 23 longline endorsement holders, and associated crew, dealers, and businesses. Most (19) of the endorsement holders are based in Florida, and primarily in Volusia County (communities include Port Orange and Daytona Beach) and the community of Sebastian in Indian River County. The system of alternating two weeks (**Alternative 2**) or one week (**Alternative 3**) of longline harvest has support by several of the endorsement holders.

The current system that incorporates only a 4,000-lb trip limit has resulted in derby conditions, which will likely continue under **Alternative 1 (No Action)**. The recent establishment of the golden tilefish longline endorsement program was intended to cap participation but did not reduce conditions or include a provision to lengthen the season. **Alternatives 2** and **3** are expected to lengthen the season, which should result in benefits to the longline fleet, crew, dealers, and associated businesses and communities.

4.1.4 Administrative Effects

Alternative 1 (No Action) would result in no new administrative burden. The agency would bear administrative burdens associated with rulemaking, outreach and enforcement for **Alternative 2** and **Alternative 3**. However, there would be no difference in administrative burden on the agency between **Alternative 2** and **Alternative 3**. **Alternatives 2** and **Alternative 3** would require extensive outreach to fishery participants to inform them of the on/off closure schedule. Due to the endorsement program, the pool of participants has been limited to 23, making outreach easier. Both action alternatives would require fishery participants to remain aware of the on/off schedule to avoid any enforcement action.

In June 2013, the Snapper Grouper Committee approved the following motion: RECOMMEND TO THE COUNCIL THAT DEVELOPMENT OF REGULATORY AMENDMENT 16 NOT PROCEED ANY FURTHER. The Council subsequently approved the Committee's recommendation.

Appendix B.

Economic Description of the Commercial Fishery from Amendment 18B (SAFMC 2012) and Regualtory Amendment 12 (SAFMC 2013).

Economic Description of the Commercial Fishery

Additional information on the commercial snapper grouper fishery is contained in previous amendments [Amendment 13C (SAFMC 2006), Amendment 15A (SAFMC 2007), Amendment 15B (SAFMC 2008), and Amendment 16 (SAFMC 2008)] and is incorporated herein by reference.

Vessel, Harvest, and Revenue (1993-2010)

The golden tilefish portion of the snapper grouper fishery has seen a declining trend in the total number of trips taken and the number of vessels participating in the fishery since 1993 (Table B-1). Snapper Grouper Amendment 6 (SAFMC 1993) reduced the quota of golden tilefish from approximately 1.8 million pounds to about 600,000 pounds. From 1993 to 1996, approximately 100 vessels per year participated in the fishery. By 2009 and 2010, that number had been reduced by approximately 50%. Regulatory actions in Amendment 6 (SAFMC 1993) account for the decrease in dealers that purchased golden tilefish from 1993 to 1994. From 1994 until 2010, there was a gradual trend in reducing the number of federally permitted snapper grouper dealers. The last year, 2010, saw only 13 dealers purchasing golden tilefish.

Table 3-1 also tracks changes over time in the dockside price per pound as well as total annual dockside revenue for golden tilefish. The columns labeled with "(nominal $)" indicate the price paid per pound or the overall annual revenue of golden tilefish using the value of that year's dollar. The columns labeled with "(2010 $)" indicate the price paid per pound or the overall annual revenue of golden tilefish using the value of the dollar in 2010. Dollar comparisons from one year to the next should only be made with dollar values in the "(2010 $)" columns as they are all on the same scale. Higher values in landings were associated with the larger landings in the earlier years of the time series where it was not unusual for landings to be valued at $1,000,000 or greater (2010 $). However, the higher total revenue figures in the early years were partially due to the greater number of pounds landed. When the price per pound is compared across years, there is a gradual trend shifting upwards over time. In 1993 the average price per pound paid for golden tilefish was $2.20 (2010 $). By 2010, that amount had increased to $3.02 (2010 $), or an increase of about 37% in price per pound value. This increase lead to the value of the 2010 fishery being the first time since 2000 that the fishery total revenue was greater than$1,000,000, in spite of lower quotas.

Table B-1. Golden tilefish sector statistics, 1993-2010.

Year	Trips with a least one lb of GT	Number of Vessels that landed GT	Avg # trips taken per vessel	Number of Dealers that purchased GT	GT lbs, gutted weight	Dockside price per pound (nominal $)	Dockside price per pound (2010 $)	GT revenue (nominal $)	GT revenue (2010 $)
1993	869	107	8	90	1,190,353	$1.46	$2.20	$1,747,252	$2,636,670
1994	767	99	8	25	751,649	$1.69	$2.48	$1,266,321	$1,863,218
1995	688	102	7	19	623,048	$1.78	$2.54	$1,093,914	$1,565,187
1996	518	96	5	24	365,547	$2.01	$2.79	$707,401	$983,129
1997	554	91	6	22	346,966	$1.78	$2.42	$574,138	$780,026
1998	462	84	6	19	419,622	$1.85	$2.48	$763,541	$1,021,439
1999	553	84	7	20	520,650	$1.97	$2.58	$1,019,049	$1,333,792
2000	715	97	7	14	706,373	$2.10	$2.66	$1,467,817	$1,858,690
2001	472	87	5	20	437,705	$2.03	$2.49	$867,138	$1,067,671
2002	570	86	7	22	393,783	$2.07	$2.51	$792,300	$960,343
2003	397	65	6	20	309,851	$2.04	$2.42	$627,546	$743,696
2004	343	67	5	18	279,485	$2.09	$2.42	$572,598	$660,977
2005	358	66	5	15	324,127	$2.41	$2.69	$768,694	$858,261
2006	339	61	6	19	366,974	$2.40	$2.60	$894,157	$967,145
2007	595	67	9	15	285,431	$2.83	$2.97	$764,811	$804,331
2008	370	57	6	18	300,241	$2.68	$2.71	$769,115	$778,949
2009	384	49	8	14	313,311	$2.55	$2.60	$770,172	$782,805
2010	352	51	7	13	369,556	$3.02	$3.02	$1,097,989	$1,097,989

Source: NMFS Logbooks, October 19, 2011.

The 2009 and 2010 golden tilefish seasons were greatly truncated compared to previous years (Table B-2). From October 2006 through July 2009, the quota was taken up earlier, by about a month sooner each subsequent year. In 2010 the season lasted only until mid April. Even averaged out across all five years in the series shown in Table B-2, the majority of the quota was landed by the end of March.

Table B-2. Golden tilefish landings in pounds (gw) by month, 2006-2010.

Month	Year					Avg %	Cum %
	2006	2007	2008	2009	2010	by month	by month
January	26,605	34,105	73,243	86,393	106,000	20%	20%
February	16,602	48,914	37,872	61,961	142,923	19%	39%
March	23,370	47,668	40,025	68,952	94,493	17%	56%
April	47,427	56,296	63,085	46,042	9,137	14%	69%
May	68,986	15,397	49,190	12,717	-	9%	78%
June	44,829	4,814	5,936	30,016	-	5%	83%
July	13,714	5,498	7,583	7,154	16,796	3%	86%
August	32,030	30,513	19,088	-	-	5%	91%
September	42,667	41,701	162	6	70	5%	97%
October	50,696	455	34	26	138	3%	100%
November	49	70	103	-	-	0%	100%
December	-	-	3,921	43	-	0%	100%

Source: NMFS Logbooks, October 19, 2011.

Similarly, in Table B-3 the value of the fishery closely tracks the landings, indicating there is minimal fluctuation in the value of fish caught in terms of its dockside price per pound regardless of when in the season it is caught. While the price per pound fluctuates between seasons, it is relatively stable within a given season. Based on information shown in Tables B-2 and B-3, the overall length of the season does not seem to influence the dockside value of the fish. Based on these data, it is not possible to tell what leads to price per pound fluctuations between years.

Table B-3. Golden tilefish landings revenue by month, 2006-2010.

Month	Year 2006	2007	2008	2009	2010	Avg % by month	Cum % by month
January	$60,832	$89,672	$191,172	$214,782	$345,992	21%	21%
February	$40,340	$133,881	$79,580	$129,883	$404,508	18%	39%
March	$57,063	$123,328	$114,210	$155,892	$275,368	17%	56%
April	$122,665	$129,215	$159,353	$134,248	$31,055	13%	70%
May	$169,631	$41,993	$119,230	$31,609	-	8%	78%
June	$92,881	$14,436	$16,261	$83,222	-	5%	83%
July	$29,482	$17,460	$21,785	$20,370	$40,649	3%	86%
August	$82,121	$92,639	$54,888	-	-	5%	91%
September	$111,017	$120,631	$411	$24	$158	5%	97%
October	$128,079	$1,397	$101	$55	$258	3%	100%
November	$47	$158	$385	-	-	0%	100%
December	-	-	$11,740	$87	-	0%	100%

Source: NMFS Logbooks, October 19, 2011.

Table B-4 shows the number of vessels for each year that landed at least one pound of golden tilefish aggregated into landings value groupings that allows one roughly to see the distribution of landings value while still maintaining confidentiality. Only one grouping in the table, $5,001 to $25,000 for 2006 had confidential information. In order to account for all participating vessels, the values from that grouping were added to those of the $1,001 - $5,000 grouping. All dollar value groupings in Table B-4 are in nominal, non-inflated dollars.

Prior to 2007, at least 50% of all vessels that had at least one pound of golden tilefish, regardless of the total number of participating vessels, had less than $1,000 revenue from the fishery. A number of years had closer to 60% of the vessels with landings values less than $1,000. Roughly 9% to 22% of the vessels had annual revenue over $25,000 from the golden tilefish portion of the snapper grouper fishery with a few exceptions. Between 1993 and 2003 roughly 40% of vessels had landings revenue between $100 and $5,000. Beginning in 2004, vessels earning in that range increased to about 60% of the participating vessels.

Table B-4. Total annual revenue from golden tilefish by numbers of vessels, 1993-2010.

Year	Up to $100	$100.01 - $1,000	$1,000.01 - $5,000	$5,000.01 - $25,000	More than $25,000	Total Vessels
1993	35	24	11	15	22	107
	33%	22%	10%	14%	21%	100%
1994	28	25	12	16	18	99
	28%	25%	12%	16%	18%	100%
1995	31	28	15	14	14	102
	30%	27%	15%	14%	14%	100%
1996	30	26	15	14	11	96
	31%	27%	16%	15%	11%	100%
1997	30	27	16	10	8	91
	33%	30%	18%	11%	9%	100%
1998	23	26	11	12	12	84
	27%	31%	13%	14%	14%	100%
1999	29	23	12	6	14	84
	35%	27%	14%	7%	17%	100%
2000	22	34	15	12	14	97
	23%	35%	15%	12%	14%	100%
2001	26	26	12	12	11	87
	30%	30%	14%	14%	13%	100%
2002	25	24	17	11	9	86
	29%	28%	20%	13%	10%	100%
2003	19	21	8	6	11	65
	29%	32%	12%	9%	17%	100%
2004	13	24	13	9	8	67
	19%	36%	19%	13%	12%	100%
2005	14	21	13	12	6	66
	21%	32%	20%	18%	9%	100%
2006	19	17	15	*conf.	10	61
	31%	28%	25%	-	16%	100%
2007	9	22	14	15	7	67
	13%	33%	21%	22%	10%	100%
2008	12	23	10	6	6	57
	21%	40%	18%	11%	11%	100%
2009	9	16	11	5	8	49
	18%	33%	22%	10%	16%	100%
2010	4	11	15	10	11	51
	8%	22%	29%	20%	22%	100%

(In 2010 dollars)
*confidential – data are combined with the "$1,000.01 - $5,000" category
Source: NMFS Logbooks, October 19, 2011.

Table B-5 shows efficiency of targeting golden tilefish for the years 2006 – 2010 for vessels that landed at least one pound of golden tilefish. Vessels are aggregated according to the same groupings as in Table B-4 based on the total value of the landed golden tilefish catch for that vessel for that year. Golden tilefish appear to be no more valuable per pound, on average, than the other fish sold on trips where golden tilefish were landed as indicated by the fact that the percent of pounds landed made up by golden tilefish was very close to the percent of the total value of the trips where golden tilefish were caught. It appears that vessels whose annual landings of golden tilefish is greater than $25,000 are adept at targeting the species with roughly 80-90% of landings comprised by golden tilefish on these trips. In general, participants in the golden tilefish portion of the snapper grouper fishery who have revenues greater than $5,000 tend to be longline vessels (reference Table B-6). Many of the vessels landing up to $5,000 annually are not targeting golden tilefish specifically, but primarily land them as they are bottom fishing with hook and line or bandit gear for snappers and groupers, in general. All dollar value groupings in Table B-5 are in nominal, non-inflated dollars.

Table B-5. Average percent of pounds and value of the total catch of golden tilefish on trips by vessels where at least one pound of golden tilefish was caught by annual landings value groupings, 2006-2010.

Year	Total Annual Golden Tilefish Landings Value	Number of vessels	Total Pounds	Percent of Overall Total Lbs
2006	Up to $100	19	430	0%
	$100.01 - $1,000	17	3,047	1%
	$1,000.01 - $5,000	15	18,607	5%
	$5,000.01 - $25,000	conf.*	conf.*	
	More than $25,000	10	344,890	94%
	Total	61	366,974	
2007	Up to $100	9	146	0%
	$100.01 - $1,000	22	2,380	1%
	$1,000.01 - $5,000	14	12,364	4%
	$5,000.01 - $25,000	15	57,505	20%
	More than $25,000	7	213,037	75%
	Total	67	285,431	
2008	Up to $100	12	273	0%
	$100.01 - $1,000	23	4,036	1%
	$1,000.01 - $5,000	10	13,408	4%
	$5,000.01 - $25,000	6	25,397	8%
	More than $25,000	6	257,126	86%
	Total	57	300,241	

Table B-5. Continued. Average percent of pounds and value of the total catch of golden tilefish on trips by vessels where at least one pound of golden tilefish was caught by annual landings value groupings, 2006-2010.

Year	Total Annual Golden Tilefish Landings Value	Number of vessels	Total Pounds	Percent of Overall Total Lbs
2009	Up to $100	9	182	0%
	$100.01 - $1,000	16	2,152	1%
	$1,000.01 - $5,000	11	10,807	3%
	$5,000.01 - $25,000	5	38,045	12%
	More than $25,000	8	262,125	84%
	Total	49	313,311	
2010	Up to $100	4	84	0%
	$100.01 - $1,000	11	1,223	0%
	$1,000.01 - $5,000	15	11,701	3%
	$5,000.01 - $25,000	10	31,607	9%
	More than $25,000	11	324,941	88%
	Total	51	369,556	

Source: NMFS Logbooks, October 19, 2011.

In each year from 2006 through 2010 roughly 10-20% of the vessels participating in the fishery account for 75-94% of the landings (Tables B-5 and B-6). Typically, these vessels use longline gear to land golden tilefish. Conversely, the majority of vessels with landings in the fishery harvest relatively small amounts. There is a significant hook and line component, however, even with the current regulations requiring a 300 lb trip limit after 75% of the ACL is caught, a number of longline vessels in the past have continued to fish the lower 300 lb trip limit which adds to the total annual revenue of longline vessels. All dollar value groupings in Table B-6 are in nominal, non-inflated dollars.

Table B-6. Pounds of golden tilefish landed by vessels in each annual value grouping, 2006-2010.

Year	Total Annual Golden Tilefish Landings Value	Total Pounds Landed by All Vessels	Percent of Total Landings
2006	Up to $100	2,401	0%
	$100.01 - $1,000	19,844	2%
	$1,000.01 - $5,000	185,753	21%
	$5,000.01 - $25,000	conf.*	conf.*
	More than $25,000	686,159	77%
	Total	894,157	

Table B-6. Continued. Pounds of golden tilefish landed by vessels in each annual value grouping, 2006-2010.

Year	Total Annual Golden Tilefish Landings Value	Total Pounds Landed by All Vessels	Percent of Total Landings
2007	Up to $100	2,176	0%
	$100.01 - $1,000	22,675	3%
	$1,000.01 - $5,000	115,329	15%
	$5,000.01 - $25,000	193,795	25%
	More than $25,000	430,835	56%
	Total	764,811	
2008	Up to $100	3,803	0%
	$100.01 - $1,000	19,788	3%
	$1,000.01 - $5,000	65,004	8%
	$5,000.01 - $25,000	58,332	8%
	More than $25,000	622,188	81%
	Total	769,115	
2009	Up to $100	1,779	0%
	$100.01 - $1,000	21,206	3%
	$1,000.01 - $5,000	18,439	2%
	$5,000.01 - $25,000	198,694	26%
	More than $25,000	530,053	69%
	Total	770,172	
2010	Up to $100	1,615	0%
	$100.01 - $1,000	29,795	3%
	$1,000.01 - $5,000	89,934	8%
	$5,000.01 - $25,000	249,798	23%
	More than $25,000	726,847	66%
	Total	1,097,989	

*confidential – data are combined with the "$1,000.01 - $5,000" category
Source: NMFS Logbooks, October 19, 2011.

Vessels, Harvest, and Revenue by Gear (1993-2010)

The longline fishery dominates commercial landings of golden tilefish. Longline landings from 1993 through 2010 ranged from a low of 86% in 2007 to a high of 99% in 1993 (Table B-7). In recent years, the longline fishery accounted for 93-95% of all golden tilefish landings. Clearly, the 300 lb trip limit was not enough to keep longline vessels out of the fishery. The total number of vessels for each year is less than the sum of the vessels by gear type as often vessels will land golden tilefish using multiple gears.

Table B-7 shows by year the average landings, both pounds and value, for all vessels that participated in the fishery by gear. The average annual pounds landed by vessels using hook and line gear ranged from a low of 215 lbs in 1996 to a high of 774 lbs in 2010. Conversely, the average annual pounds landed by vessels using longline gear ranged from a low of 9,504 lbs in 1996 to a high of 30,234 lbs in 2006. Other gears that were used to land golden tilefish included fish traps, spears, and gill nets among others and landings from other gears made up a very small portion of the overall landings in each year.

Table B-7. Golden tilefish sector statistics by gear, 1993-2010.

Year	Gear	Lbs Golden Tilefish	Percent of Total GT Landings	GT Revenue (nominal $)	GT Revenue (2010 $)	Vessels	Avg. Annual lbs (gw) by Vessel	Avg. Annual Revenue by Vessel (nominal $)	Avg. Annual Revenue by Vessel (2010 $)
1993	H & L	13,312	1%	$19,362	$29,218	61	218	$317	$479
	Longline	1,175,917	99%	$1,726,233	$2,604,951	48	24,498	$35,963	$54,270
	Other	1,123	0%	$1,657	$2,501	9	125	$184	$278
	Total	1,190,353		$1,747,252	$2,636,670	107	11,125	$16,329	$24,642
1994	H & L	18,339	2%	$30,655	$45,104	63	291	$487	$716
	Longline	731,683	97%	$1,232,983	$1,814,166	43	17,016	$28,674	$42,190
	Other	1,627	0%	$2,683	$3,947	8	203	$335	$493
	Total	751,649		$1,266,321	$1,863,218	99	7,592	$12,791	$18,820
1995	H & L	20,251	3%	$35,918	$51,392	72	281	$499	$714
	Longline	602,582	97%	$1,057,660	$1,513,314	35	17,217	$30,219	$43,238
	Other	216	0%	$336	$481	4	54	$84	$120
	Total	623,048		$1,093,914	$1,565,187	102	6,108	$10,725	$15,345
1996	H & L	13,540	4%	$28,259	$39,273	63	215	$449	$623
	Longline	351,646	96%	$678,416	$942,847	37	9,504	$18,336	$25,482
	Other	361	0%	$726	$1,010	4	90	$182	$252
	Total	365,547		$707,401	$983,129	96	3,808	$7,369	$10,241
1997	H & L	27,742	8%	$50,282	$68,313	71	391	$708	$962
	Longline	318,772	92%	$522,970	$710,509	25	12,751	$20,919	$28,420
	Other	451	0%	$885	$1,202	4	113	$221	$301
	Total	346,966		$574,138	$780,026	91	3,813	$6,309	$8,572
1998	H & L	24,262	6%	$44,139	$59,047	55	441	$803	$1,074
	Longline	393,479	94%	$715,730	$957,480	27	14,573	$26,509	$35,462
	Other	1,881	0%	$3,671	$4,912	8	235	$459	$614
	Total	419,622		$763,541	$1,021,439	84	4,995	$9,090	$12,160

Year	Gear	Lbs Golden Tilefish	Percent of Total GT Landings	GT Revenue (nominal $)	GT Revenue (2010 $)	Vessels	Avg. Annual lbs (gw) by Vessel	Avg. Annual Revenue by Vessel (nominal $)	Avg. Annual Revenue by Vessel (2010 $)
1999	H & L	25,167	5%	$50,136	$65,621	56	449	$895	$1,172
	Longline	490,425	94%	$959,015	$1,255,216	22	22,292	$43,592	$57,055
	Other	5,058	1%	$9,898	$12,955	13	389	$761	$997
	Total	520,650		$1,019,049	$1,333,792	84	6,198	$12,132	$15,878
2000	H & L	36,493	5%	$77,264	$97,839	63	579	$1,226	$1,553
	Longline	666,420	94%	$1,382,013	$1,750,036	27	24,682	$51,186	$64,816
	Other	3,459	0%	$8,540	$10,814	19	182	$449	$569
	Total	706,373		$1,467,817	$1,858,690	97	7,282	$15,132	$19,162
2001	H & L	21,928	5%	$41,627	$51,254	57	385	$730	$899
	Longline	414,884	95%	$823,644	$1,014,119	28	14,817	$29,416	$36,219
	Other	892	0%	$1,866	$2,298	11	81	$170	$209
	Total	437,705		$867,138	$1,067,671	87	5,031	$9,967	$12,272
2002	H & L	39,463	10%	$77,611	$94,073	64	617	$1,213	$1,470
	Longline	349,833	89%	$705,723	$855,404	24	14,576	$29,405	$35,642
	Other	4,487	1%	$8,965	$10,866	12	374	$747	$906
	Total	393,783		$792,300	$960,343	86	4,579	$9,213	$11,167
2003	H & L	15,869	5%	$31,788	$37,671	50	317	$636	$753
	Longline	293,671	95%	$595,113	$705,261	17	17,275	$35,007	$41,486
	Other	311	0%	$645	$765	8	39	$81	$96
	Total	309,851		$627,546	$743,696	65	4,767	$9,655	$11,441
2004	H & L	22,062	8%	$47,496	$54,827	49	450	$969	$1,119
	Longline	257,360	92%	$524,924	$605,944	22	11,698	$23,860	$27,543
	Other	conf.	conf.	conf.	conf.	conf.	conf.	conf.	conf.
	Total	279,485		$572,598	$660,977	67	4,171	$8,546	$9,865

Year	Gear	Lbs Golden Tilefish	Percent of Total GT Landings	GT Revenue (nominal $)	GT Revenue (2010 $)	Vessels	Avg. Annual lbs (gw) by Vessel	Avg. Annual Revenue by Vessel (nominal $)	Avg. Annual Revenue by Vessel (2010 $)
2005	H & L	33,854	10%	$81,428	$93,996	51	664	$1,597	$1,843
	Longline	288,688	89%	$683,323	$762,942	16	18,043	$42,708	$47,684
	Other	1,585	0%	$3,944	$4,403	11	144	$359	$400
	Total	324,127		$768,694	$858,261	66	4,911	$11,647	$13,004
2006	H & L	32,180	9%	$78,455	$84,859	54	596	$1,453	$1,571
	Longline	332,578	91%	$811,305	$877,530	11	30,234	$73,755	$79,775
	Other	2,216	1%	$4,397	$4,756	8	277	$550	$595
	Total	366,974		$894,157	$967,145	61	6,016	$14,658	$15,855
2007	H & L	38,921	14%	$113,021	$118,861	56	695	$2,018	$2,123
	Longline	245,477	86%	$648,832	$682,359	16	15,342	$40,552	$42,647
	Other	1,033	0%	$2,958	$3,111	6	172	$493	$518
	Total	285,431		$764,811	$804,331	67	4,260	$11,415	$12,005
2008	H & L	19,746	7%	$49,694	$50,329	46	429	$1,080	$1,094
	Longline	279,312	93%	$716,302	$725,461	13	21,486	$55,100	$55,805
	Other	1,183	0%	$3,119	$3,159	11	108	$284	$287
	Total	300,241		$769,115	$778,949	57	5,267	$13,493	$13,666
2009	H & L	13,745	4%	$35,852	$36,440	36	382	$996	$1,012
	Longline	298,975	95%	$733,103	$745,128	13	22,998	$56,393	$57,318
	Other	591	0%	$1,218	$1,238	5	118	$244	$248
	Total	313,311		$770,172	$782,805	49	6,394	$15,718	$15,976
2010	H & L	24,774	7%	$72,408	$72,408	32	774	$2,263	$2,263
	Longline	343,673	93%	$1,021,981	$1,021,981	22	15,622	$46,454	$46,454
	Other	1,109	0%	$3,600	$3,600	7	158	$514	$514
	Total	369,556		$1,097,989	$1,097,989	51	7,246	$21,529	$21,529

*confidential – data are combined with the "Longline" category
Source: NMFS Logbooks, October 19, 2011.

3.3.1.3 Vessels, Harvest, and Revenue by State (1993-2010)

Table B-8 shows golden tilefish landings by state from 1993 through 2010. Landings from Georgia are combined with Florida because in many years there were no landings from Georgia. Landings from Georgia are confidential in nearly all years in which they occurred. In every year in the time series, except 1993 and 2004, Florida had more landings than all the other states combined. The highest concentration of landings percentages have been in Florida since 2007. In each of the last four years of the time series, Florida landed at least 86% of the entire golden tilefish quota.

Since 2007, the negative economic impacts of shortened seasons are proportionately less on Florida compared to other states. In fact, more fish are caught in Florida the shorter the season. The quota has remained the same for the past several years while the stock has been rebuilding. Consequently, the fact that there are more fish means the fish are caught more quickly in the season. Golden tilefish are more plentiful further north in their range in late summer and fall. When the golden tilefish portion of the snapper grouper fishery closes earlier in the calendar year as has been happening in recent years, vessels from the Carolinas did not land proportionally as much fish as in previous years unless they are willing to migrate south to participate in the fishery off the east coast of Florida when it occurs there when the fishery opens each year in January.

Table B-8. Golden tilefish sector statistics by state, 1993-2010.

Year	State	Lbs Golden Tilefish	Percent of Total GT Landings	GT Revenue (nominal $)	GT Revenue (2010 $)	Participating Vessels	Avg. Annual lbs (gw) by State	Avg. Annual Revenue by State (nominal $)	Avg. Annual Revenue by State (2010 $)
1993	NC	100,037	8%	$166,163	$250,747	18	5,558	$9,231	$13,930
	SC	127,144	11%	$175,521	$264,867	21	6,054	$8,358	$12,613
	GA/FL-East	586,591	49%	$863,121	$1,302,482	60	9,777	$14,385	$21,708
	Other	376,580	32%	$542,447	$818,573	24	15,691	$22,602	$34,107
	Total	1,190,353		$1,747,252	$2,636,670	107	11,125	$16,329	$24,642
1994	NC	120,723	16%	$238,652	$351,144	22	5,487	$10,848	$15,961
	SC	145,879	19%	$227,819	$335,204	10	14,588	$22,782	$33,520
	GA/FL-East	421,528	56%	$698,187	$1,027,287	60	7,025	$11,636	$17,121
	Other	63,519	8%	$101,663	$149,583	16	3,970	$6,354	$9,349
	Total	751,649		$1,266,321	$1,863,218	99	7,592	$12,791	$18,820
1995	NC	72,420	12%	$136,087	$194,716	28	2,586	$4,860	$6,954
	SC	140,636	23%	$233,166	$333,618	11	12,785	$21,197	$30,329
	GA/FL-East	409,180	66%	$723,450	$1,035,122	57	7,179	$12,692	$18,160
	Other	812	0%	$1,210	$1,732	14	58	$86	$124
	Total	623,048		$1,093,914	$1,565,187	102	6,108	$10,725	$16,184
1996	NC	53,762	15%	$128,220	$178,198	18	2,987	$7,123	$9,900
	SC	64,579	18%	$85,054	$118,206	11	5,871	$7,732	$10,746
	GA/FL-East	194,913	53%	$396,414	$550,927	49	3,978	$8,090	$11,243
	Other	52,293	14%	$97,713	$135,799	26	2,011	$3,758	$5,223
	Total	365,547		$707,401	$983,129	96	3,808	$7,369	$10,241

1997	NC	35,774	10%	$80,576	$109,471	18	1,987	$4,476	$6,082
	SC	112,019	32%	$128,247	$174,236	12	9,335	$10,687	$14,520
	GA/FL East	195,538	56%	$360,597	$489,908	50	3,911	$7,212	$9,798
	Other	3,634	1%	$4,718	$6,410	23	158	$205	$279
	Total	346,966		$574,138	$780,026	91	3,813	$6,309	$8,572
1998	NC	17,861	4%	$41,670	$55,745	16	1,116	$2,604	$3,484
	SC	101,498	24%	$165,725	$221,701	11	9,227	$15,066	$20,155
	GA/FL East	241,860	58%	$457,050	$611,426	44	5,497	$10,387	$13,896
	Other	58,403	14%	$99,096	$132,568	19	3,074	$5,216	$6,977
	Total	419,622		$763,541	$1,021,439	84	4,995	$9,090	$12,160
1999	NC	5,021	1%	$10,580	$13,848	15	335	$705	$923
	SC	103,666	20%	$193,600	$253,395	9	11,518	$21,511	$28,155
	GA/FL East	372,019	71%	$745,325	$975,525	47	7,915	$15,858	$20,756
	Other	39,944	8%	$69,544	$91,023	24	1,664	$2,898	$3,793
	Total	520,650		$1,019,049	$1,333,792	84	6,198	$12,132	$15,878
2000	NC	16,481	2%	$49,742	$62,988	13	1,268	$3,826	$4,845
	SC	134,142	19%	$247,132	$312,942	6	22,357	$41,189	$52,157
	GA/FL East	529,985	75%	$1,124,114	$1,423,460	58	9,138	$19,381	$24,542
	Other	25,764	4%	$46,830	$59,300	29	888	$1,615	$2,045
	Total	706,373		$1,467,817	$1,858,690	97	7,282	$15,132	$19,162
2001	NC	16,574	4%	$31,185	$38,397	12	1,381	$2,599	$3,200
	SC	121,440	28%	$222,640	$274,128	7	17,349	$31,806	$39,161
	GA/FL East	270,355	62%	$561,346	$691,163	50	5,407	$11,227	$13,823
	Other	29,336	7%	$51,966	$63,983	29	1,012	$1,792	$2,206
	Total	437,705		$867,138	$1,067,671	87	5,031	$9,967	$12,272

2002	NC	2,637	1%	$6,098	$7,508	14	188	$436	$528
	SC	156,879	40%	$285,292	$351,269	7	22,411	$40,756	$49,400
	GA/FL East	207,892	53%	$453,433	$558,293	47	4,423	$9,648	$11,694
	Other	26,375	7%	$47,477	$58,457	27	977	$1,758	$2,131
	Total	393,783		$792,300	$975,527	86	4,579	$9,213	$11,167
2003	NC	14,764	5%	$40,600	$48,115	11	1,342	$3,691	$4,374
	SC	114,368	37%	$208,494	$247,084	10	11,437	$20,849	$24,708
	GA/FL East	170,143	55%	$358,720	$425,115	29	5,867	$12,370	$14,659
	Other	10,576	3%	$19,731	$23,383	23	460	$858	$1,017
	Total	309,851		$627,546	$743,696	65	4,767	$9,655	$11,441
2004	NC	35,929	13%	$94,190	$108,728	6	5,988	$15,698	$18,121
	SC	93,357	33%	$170,761	$197,117	8	11,670	$21,345	$24,640
	GA/FL East	112,661	40%	$243,286	$280,837	42	2,682	$5,793	$6,687
	Other	37,537	13%	$64,361	$74,295	17	2,208	$3,786	$4,370
	Total	279,485		$572,598	$660,977	67	4,171	$8,546	$9,865
2005	NC	688	0%	$1,227	$1,243	12	57	$102	$114
	SC	55,652	17%	$118,732	$120,250	8	6,957	$14,842	$16,571
	GA/FL East	203,836	63%	$514,703	$521,285	41	4,972	$12,554	$14,016
	Other	63,951	20%	$134,031	$135,745	15	4,263	$8,935	$9,977
	Total	324,127		$768,694	$778,523	66	4,911	$11,647	$13,004
2006	NC	1,840	1%	$3,988	$4,313	9	204	$443	$479
	SC	109,290	30%	$243,853	$263,758	8	13,661	$30,482	$32,970
	GA/FL East	253,010	69%	$640,610	$692,901	34	7,441	$18,841	$20,379
	Other	2,834	1%	$5,706	$6,172	16	177	$357	$386
	Total	366,974		$894,157	$967,145	61	6,016	$14,658	$15,855

2007	NC	1,383	0%	$3,904	$4,106	6	231	$651	$684
	SC	24,295	9%	$50,957	$53,590	4	6,074	$12,739	$13,398
	GA/FL East	258,406	91%	$706,808	$743,331	46	5,618	$15,365	$16,159
	Other	1,347	0%	$3,141	$3,303	16	84	$196	$206
	Total	285,431		$764,811	$804,331	67	4,260	$11,415	$12,005
2008	NC	5,665	2%	$6,883	$6,971	7	809	$983	$996
	SC	17,427	6%	$38,326	$38,817	4	4,357	$9,582	$9,704
	GA/FL East	276,322	92%	$722,068	$731,301	40	6,908	$18,052	$18,283
	Other	827	0%	$1,836	$1,860	11	75	$167	$169
	Total	300,241		$769,115	$778,949	57	5,267	$13,493	$13,666
2009	NC	1,972	1%	$6,030	$6,129	5	394	$1,206	$1,226
	SC	22,796	7%	$50,293	$51,118	4	5,699	$12,573	$12,780
	GA/FL East	279,723	89%	$689,712	$701,025	39	7,172	$17,685	$17,975
	Other	8,820	3%	$24,136	$24,532	7	1,260	$3,448	$3,505
	Total	313,311		$770,172	$782,805	49	6,394	$15,718	$15,976
2010	NC	5,688	2%	$15,446	$15,446	4	1,422	$3,862	$3,862
	SC	28,331	8%	$79,101	$79,101	6	4,722	$13,183	$13,183
	GA/FL East	318,118	86%	$961,283	$961,283	41	7,759	$23,446	$23,446
	Other	17,420	5%	$42,159	$42,159	6	2,903	$7,026	$7,026
	Total	369,556		$1,097,989	$1,097,989	51	7,246	$21,529	$21,529

Source: NMFS Logbooks, October 19, 2011.

Economic Activity

The commercial economic impacts associated with the harvesting of golden tilefish by U.S. commercial fishing vessels and the activities of the seafood and retail industries that depend on fish and seafood products can be estimated. These impacts are expressed in terms of employment (full-time and part-time jobs), personal income, and output (sales by U.S. businesses). Using 2010 values, the harvesting sector accounted for 27 jobs, and $1,097,000 in income. When harvester data are combined with all aspects of the seafood industry (retail, restaurants, etc.) related to golden tilefish harvest, the values increase to 210 jobs, $6,161,000 in income, and $14,457,000 in output (Table B-9).

Table B-9. Impacts are expressed in terms of employment (full-time and part-time jobs), personal income, and output (sales by U.S. businesses).

Species	Average Revenue (millions)[1]	Total Jobs	Harvester Jobs	Output (Sales) Impacts (millions)[1]	Income Impacts (millions)[1]
Golden Tilefish	$1.097	210	27	$14.457	$6.161

[1]2010 dollars
Source: NMFS SERO