

Commercial Effort in the Atlantic Spanish Mackerel Fishery



White Paper
September 2019

Background on the Commercial Atlantic Spanish Mackerel Fishery

Spanish mackerel are managed jointly by the South Atlantic Fishery Management Council (South Atlantic Council) and the Gulf of Mexico Fishery Management Council (Gulf Council). The management unit extends from the Gulf of Mexico through the Mid-Atlantic Fishery Management Council's jurisdiction to the New York/Connecticut/Rhode Island line (**Figure 1**). The South Atlantic Council provides two voting seats for Mid-Atlantic Council representatives on the Mackerel Cobia Committee. These individuals participate as full committee members and can make motions and vote on motions, at the committee level.

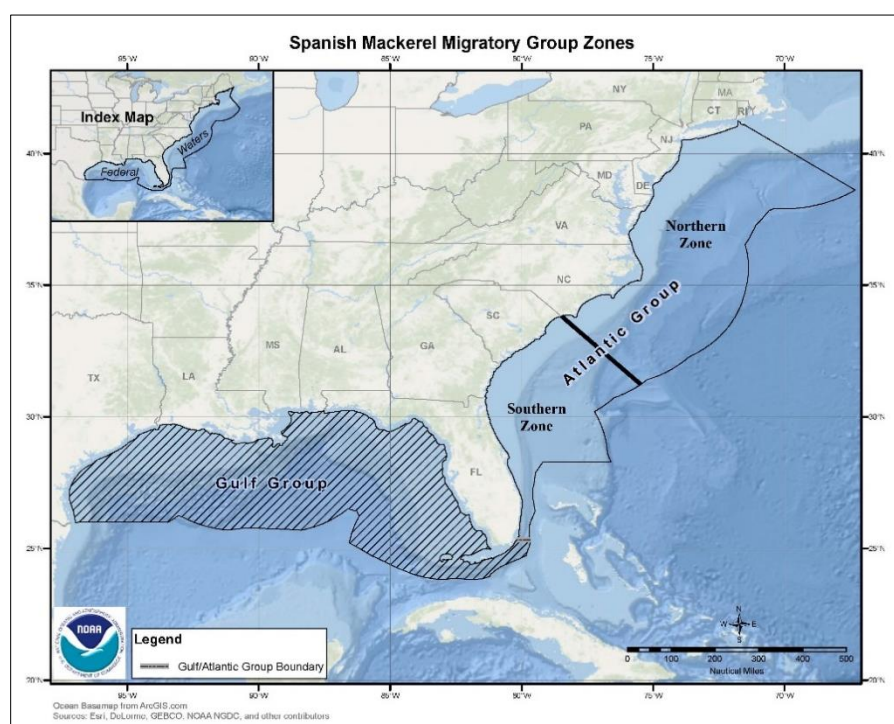


Figure 1. Spanish mackerel migratory groups and zones.

Spanish mackerel are managed as two separate stocks: The Gulf migratory stock and the Atlantic migratory stock. A commercial permit is required to harvest and sell Spanish mackerel. The Spanish mackerel permit is open access and covers both Atlantic and Gulf migratory groups. Additionally, an open access charter/headboat permit is required for Atlantic migratory group CMP species. Currently, management for Atlantic Spanish mackerel runs from the New York/Connecticut/Rhode Island state line to the Miami-Dade/Monroe County, Florida boundary. For management purposes that area is split up into two separate zones, the Northern Zone (NY/CT/RI state line to the North Carolina/South Carolina state line) and the Southern Zone (NC/SC state line and the Miami-Dade/Monroe county, FL boundary). Each zone has its own quota and set of regulations (**Table 1**).

Table 1. Current regulations for the Atlantic Spanish mackerel commercial fishery.

Zones	Northern Zone (NY/CT/RI state line to the NC/SC state line) Southern Zone (NC/SC state line to the Miami-Dade/Monroe County Line, Florida)
Allocations	<ul style="list-style-type: none"> • Total Commercial: 55% <ul style="list-style-type: none"> ○ Northern Zone: 20% ○ Southern Zone: 80%
Annual Catch Limit	<ul style="list-style-type: none"> • Total Commercial: 3,300,000 pounds <ul style="list-style-type: none"> ○ Northern Zone: 662,670 pounds ○ Southern Zone: 2,667,330 pounds
Season	March 1 st to the end of February
Trip/Bag Limit	Northern Zone
	3,500 pounds year-round
	Southern Zone
	Adjusted Quota = 2,417,330 pounds <ul style="list-style-type: none"> • Starting March 1st until 75% of the adjusted quota is reached: 3,500 pounds • From 75% until 100% of the adjusted quota is reached: 1,500 pounds • From 100% adjusted quota until 100% of the full quota is reached: 500 pounds
Minimum Size Limit	12-inches FL

The Atlantic States Marine Fisheries Commission (Commission) began managing Spanish Mackerel in November 1990. In 2011, the Commission's South Atlantic State/Federal Fisheries Management Board (South Atlantic Board) approved an Omnibus Amendment for Spot, Spotted Seatrout, and Spanish Mackerel. The Amendment included a process for the South Atlantic

Board to review and respond to changes in federal regulations, allowing for complementary management throughout the range of Atlantic Spanish mackerel.

Current Concerns Regarding Effort in the Commercial Spanish Mackerel Fishery

During their April 2018 and April 2019 meetings, the Mackerel Cobia Advisory Panel (AP) expressed concern about increased participation in the commercial Spanish mackerel fishery and how this increase may affect Spanish mackerel in the long term. Of concern were recent closures to commercial Spanish mackerel harvest in federal waters off the northern zone. During the 2017/2018 season, 100,000 pounds of quota was transferred from the southern zone (NC/SC line to the Miami-Dade/Monroe County line, Florida) to the northern zone to prevent an early closure. However, the northern zone quota was still projected to be met and federal waters were closed to commercial harvest of Spanish mackerel on November 7, 2018. The southern zone did not close but harvested 95% its remaining quota. During the 2018/2019 season there was no transfer of quota between the two zones. The northern zone was closed to commercial harvest on November 4, 2018 and the southern zone was closed to commercial harvest on February 5, 2019.

During the current season (2019/2020), the Northern Zone was closed to commercial harvest on August 24, 2019. A transfer of quota from the Southern Zone to the Northern Zone was requested by the North Carolina Division of Marine Fisheries (NC DMF). However, The Florida Fish and Wildlife Conservation Commission (FWC) denied the request due the Southern Zone being projected to close early as well.

The following points were raised during the April 2018 AP meeting:

- The commercial Spanish mackerel fishery is growing, and the commercial ACL has come close to being caught. Participation in the fishery is going to continue to increase and limited entry would address issues before they became a serious problem.
- A limited entry system would give the Council an easier way to regulate the commercial sector and would professionalize the fleet.
- When there are a limited number of fish available, there should be a limited number of fishermen. It is always useful to define the universe of participants.
- Many other South Atlantic Council commercial permits are limited access, including king mackerel.
- An AP member noted that the Gulf is not experiencing the same issues with Spanish mackerel as the South Atlantic. It was suggested that, since the commercial Spanish mackerel permit covers the Gulf, South Atlantic, and Mid-Atlantic that a separate permit or endorsement could be required for harvest in the South Atlantic region.

The following motion was approved by the AP:

AP MOTION: REQUEST THE COUNCIL CONSIDER A LIMITED ENTRY SYSTEM FOR ATLANTIC SPANISH MACKEREL.

APPROVED BY AP (11 IN FAVOR-0 OPPOSED-3 ABSTENTIONS).

The following points were raised during the April 2019 AP meeting:

- Participation in the commercial Spanish mackerel fishery has increased substantially. In Florida especially, there are now too many individuals in the fishery resulting in low prices. The goal should be to protect fishermen who are experienced and have been participating in the fishery for a long time. If there are a limited number of fish to catch, there should be a limited number of fishermen to catch them.
 - The free-for-all nature of the Spanish mackerel fishery is causing user grouper conflicts.
- The Council should consider a limited access program for the gillnet fishery in the Atlantic southern zone with a control date of five years back.
 - In the southern zone, gillnetting for Spanish mackerel primarily occurs from Cape Canaveral, Florida to Port Salerno, Florida.
- A portion of the Spanish mackerel gillnet fishery takes place in areas subject Atlantic Large Whale Take Reduction Plan regulations. Having inexperienced fishermen operating in these areas with complex regulations could cause problems.
- Permit system similar to limited access for king mackerel gillnet permits in the Gulf southern zone may work for the Atlantic southern zone.
- The Council should work with the states to ensure that they require the federal commercial Spanish mackerel permit to harvest in state waters.
 - Would be helpful to know how many fishermen without a permit have Spanish mackerel landings.
- In North Carolina, the commercial Spanish mackerel fishery primarily occurs in state waters. There are concerns about increases in participation because Spanish mackerel is a very easy fishery to get into and be successful. It will be very important to work with the states on this issue.
 - Suggestion for the state to allow a 500-pound limit if federal waters close to keep state waters open (similar to what occurs in Florida state waters) allowing fishermen to land fish instead of throwing them back.
 - With increasing restrictions in the SOUTHERN flounder fishery, there is concern that more fishermen are going to be moving into the Spanish mackerel fishery.
- Concerns about recent Spanish mackerel recruitment based on SEAMAP data.

The following motions were approved by the AP:

AP MOTION: RECOMMEND THE COUNCIL LOOK INTO WAYS TO MANAGE EFFORT IN THE COMMERCIAL SPANISH MACKEREL FISHERY INCLUDING LIMITED ENTRY AND WORKING WITH THE STATES.

MOTION APPROVED (8-IN FAVOR, 2-OPPOSED)

AP MOTION: RECOMMEND THE COUNCIL CONSIDER A GILLNET ENDORSEMENT FOR THE SOUTHERN ZONE WITH QUALIFYING CRITERIA.

MOTION APPROVED (8-IN FAVOR, 1-OPPOSED)

During the March 2019 and June 2019 South Atlantic Council meetings, the Council reviewed the concerns and recommendations provided by the AP regarding increased

participation in the commercial Spanish mackerel fishery. Based on AP recommendations, the Council chose to set a control date for the Spanish mackerel fishery of March 7, 2019, the date of the Mackerel Committee Meeting in March 2019 when limited entry was first discussed. Additionally, the Council directed staff to prepare a white paper with a thorough analysis of effort in the commercial Spanish mackerel fishery and a discussion of possible avenues to control effort, including: a limited access commercial permit, a limited access gillnet endorsement in the southern zone, and collaboration with state agencies.

MOTION: DIRECT STAFF TO PREPARE A WHITE PAPER ON THE NECESSITY OF CONTROLLING EFFORT IN THE COMMERCIAL SPANISH MACKEREL FISHERY, ESPECIALLY THE GILLNET FISHERY.

APPROVED BY COUNCIL

MOTION: MOVE TO MAKE THE CONTROL DATE FOR THE SPANISH MACKEREL COMMERCIAL PERMIT FROM THE DATE OF MARCH 2019 MACKEREL COBIA COMMITTEE MEETING (MARCH 7, 2019).

APPROVED BY COUNCIL

Spanish Mackerel Management History

The CMP FMP was approved in 1982 and implemented by regulations effective in February of 1983. Managed species included king mackerel, Spanish mackerel, and cobia. The FMP treated king and Spanish mackerel as unit stocks in the Atlantic and Gulf of Mexico. The FMP established allocations for the recreational and commercial sectors harvesting these stocks, and the commercial allocations were divided between net and hook-and-line fishermen. Key mile markers in the history of Spanish mackerel management are highlighted in blue.

Amendment 1: Implemented in September of 1985. Provided a framework procedure for pre-season adjustment of total allowable catch (TAC). Eliminated commercial allocations among gear users, except purse seines. Established minimum size limits for Spanish mackerel at 12 in fork length (FL) or 14 in total length (TL).

Amendment 2: Implemented in July 1987. Recognized two migratory groups. Established commercial (76%) and recreational (24%) allocations for TAC based on average ratio of catch from 1979-1985, established April 1st to March 31st fishing year, established Dade/Monroe county line as the migratory group boundary, and set commercial quotas and bag limits. Established a commercial Spanish mackerel permit requirement.

Amendment 3: Implemented in April 1990. Prohibited drift gillnets for coastal pelagic species and purse seines for the overfished migratory groups of mackerels.

Amendment 4: Implemented in October 1989. Reallocated Atlantic migratory group Spanish mackerel equally between recreational and commercial fishermen because capacity and demand of both user groups could harvest all of the available quota and qualitative information indicated that recreational catches had been affected by increasing commercial effort in the mid-1970s.

Amendment 5: Implemented in August 1990. Extended the management area for Atlantic migratory groups of mackerels through the Mid-Atlantic Council's area of jurisdiction. Deleted a provision specifying that bag limit caught mackerel may be sold. Size limit for Spanish mackerel is 12" FL or 14" TL.

Amendment 6: Implemented in November 1992. Provided for commercial Atlantic Spanish mackerel possession limits. In northern zone, boats are restricted to possession limits of 3,500 pounds. In southern zone trip limit are 1,500 pounds per vessel per day during April 1 to November 30. From December 1 until 80% of quota is taken: unlimited harvest on Monday, Wednesday, and Friday; 1,500 pounds per vessel per day on Tuesday and Thursday; 500 pounds per vessel per day on Saturday and Sunday. Trip limit 1,000 pounds per vessel per day when 80% of quota is reached. Changed commercial permit requirements to allow qualification in one of three preceding years. Minimum size limit is 12-inches FL.

Amendment 8: Implemented March 1998. Established allowable gear in the South Atlantic and Mid-Atlantic areas. Increased the income requirement for a king or Spanish mackerel permit to 25% of earned income or \$10,000 from commercial sale of catch or charter or head boat fishing in one of the three previous calendar years, but allowed for a one-year grace period to qualify under permits that are transferred.

1998 Framework Action: Implemented September 1999. Reallocated Atlantic migratory group Spanish mackerel (55% Commercial, 45% Recreational) because commercial catches were increasing and exceeding the sector allocation while the recreational sector remained well below its allocation. Established an incidental catch allowance for vessels using gillnets with mesh size less than 3.5 inches.

Amendment 9: Implemented in April 2000. Allowed the retention and sale of cut-off (damaged), legal-sized king and Spanish mackerel within established trip limits.

Amendment 10: Implemented July 2000. Incorporated essential fish habitat provisions for the South Atlantic.

Amendment 11: Partially approved in December 1999. Addressed Sustainable Fishery Act Definitions.

Amendment 15: Implemented August 2005. Changed the fishing season to March 1st through February 28/29th for the Atlantic migratory groups of king and Spanish mackerel.

Amendment 18: Implemented in January 2012. Established annual catch limits and accountability measures for Gulf and Atlantic migratory groups for cobia, king mackerel, and Spanish mackerel.

Amendment 19: Implemented in July 2010. Established coral habitat areas of particular concern (HAPCs).

Amendment 20A: Implemented in July 2014. Prohibited sale of recreationally caught king and Spanish mackerel, with an exception for sale of fish caught on for-hire trips on dual-permitted vessels in the Gulf region, and an exception for sale of fish caught in state-permitted tournaments in both the Gulf and Atlantic regions and donated to a state or federally permitted dealer, as long as the proceeds from the dealer sale are donated to charity.

Amendment 20B: Implemented in March 2015. Created a transit provision for areas closed to king mackerel. Established Northern and Southern zones with separate commercial quotas for Atlantic king and Spanish mackerel.

Amendment 21: Implemented in January 2012. Addressed recreational fishing measures in South Carolina Special Management Zones (SMZs).

Amendment 22: Implemented in January 2014. Required weekly electronic reporting for headboats in the South Atlantic.

Amendment 23: Implemented in August 2014. Required Atlantic king mackerel and Spanish mackerel permit holders to sell to a federal dealer; required weekly electronic reporting for federal dealers.

Framework Amendment 1: Implemented in December 2014. Updated the ACLs for Gulf and Atlantic Spanish mackerel.

Framework Amendment 2: Implemented in August 2015. Modified the quota and trip limit system for commercial harvest of Atlantic migratory group Spanish mackerel in the Southern Zone (3,500 pounds for the Southern Zone. When 75% of adjusted Southern Zone quota is met or projected to be met, the trip limit would be reduced to 1,500 pounds. When 100% of adjusted Southern Zone quota is met or projected to be met, the trip limit is reduced to 500 pounds until the end of the fishing year or until the Southern Zone commercial quota is met or projected to be met, at which time the commercial sector in the Southern Zone would be closed to harvest of Spanish mackerel).

Framework Amendment 5: Implemented in August 2017. Removed the restriction on fishing for or retaining the recreational bag and possession limits of king and Spanish mackerel on a vessel with a Federal commercial permit for king or Spanish mackerel when commercial harvest of king or Spanish mackerel in a zone or region is closed.

Commercial Atlantic Spanish Mackerel Landings Trends

Overall Landings for Atlantic Spanish Mackerel

Commercial landings of Atlantic Spanish mackerel in pounds (as reported) from 2000 through 2017 by zone are presented in **Table 2**. Total landings relative to the ACL are presented graphically in **Figure 2**. Landings are presented by zone to ensure confidentiality. The Northern zone includes North Carolina and the Mid-Atlantic states. The Southern Zone includes South Carolina, Georgia, and the east coast of Florida to the Miami-Dade/Monroe Country boundary.

Table 2. Atlantic Spanish mackerel total commercial landings (pounds) and ACL 2000 through 2017, by zone.

Fishing Year	Northern Zone Landings	Southern Zone Landings	Total Landings	Commercial ACL	%ACL
2000-2001	659,325	1,892,607	2,551,932	3,870,000	65.9%
2001-2002	653,490	2,162,003	2,815,493	3,870,000	72.8%
2002-2003	698,828	2,354,067	3,052,895	3,870,000	78.9%
2003-2004	539,797	3,151,738	3,691,535	3,870,000	95.4%
2004-2005	522,576	3,129,649	3,652,225	3,870,000	94.4%
2005-2006	486,676	2,667,777	3,154,453	3,870,000	81.5%
2006-2007	515,388	3,156,272	3,671,660	3,620,000	101.4%
2007-2008	537,230	2,520,826	3,058,056	3,620,000	84.5%
2008-2009	568,592	2,591,622	3,160,214	3,620,000	87.3%
2009-2010	1,101,977	3,073,997	4,175,974	3,620,000	115.4%
2010-2011	959,621	3,600,921	4,560,542	3,620,000	126.0%
2011-2012	906,885	3,095,993	4,002,878	3,880,660	103.1%
2012-2013	934,187	2,208,754	3,142,941	3,130,000	100.4%
2013-2014	628,668	2,517,549	3,146,217	3,130,000	100.5%
2014-2015	682,167	2,189,814	2,871,981	3,330,000	86.2%
2015-2016	575,920	2,043,861	2,619,781	3,330,000	78.7%
2016-2017	640,183	2,558,623	3,198,806	3,330,000	96.1%
2017-2018	845,495	2,430,385	3,275,880	3,330,000	98.4%

Source: ALS

Note: From 2000-2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st.

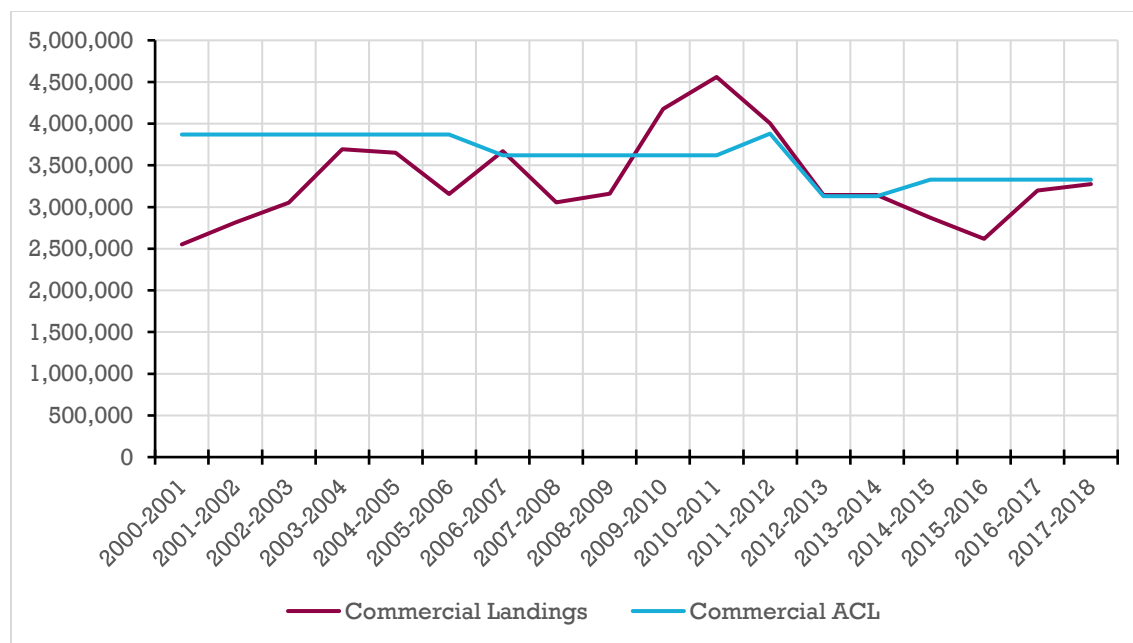


Figure 2. Commercial landings (pounds) of Atlantic Spanish mackerel from 2000 through 2017 (red line) and the quota/commercial ACL (blue line).

Source: ALS

Note: From 2000-2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st.

Atlantic Spanish mackerel commercial landings since 2000 have ranged from a low of 2,551,932 pounds in 2000 to a high of 4,560,542 pounds in 2010 (**Table 2**). Majority of Atlantic Spanish mackerel landed commercially in the Northern Zone are landed in North Carolina. Southern Zone commercial landings are primarily from Florida. Over the time period examined, landings have generally fluctuated. After peaking in 2010, commercial landings of Atlantic Spanish mackerel decreased until 2015, at which point they began to increase. Generally, landings over the time period have averaged around 3.3 million pounds (current commercial ACL is 3,330,000 pounds) (**Figure 2**).

Recreational landings of Atlantic Spanish mackerel in pounds whole weight from 2000 through 2017 by zone are presented in **Table 3**. Total landings by year relative to the recreational ACL are shown in **Figure 3**. Recreational landings of Atlantic Spanish mackerel have ranged from a low of 758,723 pounds whole weight in 2017 to a high of 2,014,442 pounds in 2000 (**Table 3**). In terms of geographical distribution, like commercial landings, recreational landings of Atlantic Spanish mackerel can be attributed to mainly to North Carolina in the Northern Zone and Florida in the Southern Zone. During the time period examined, Atlantic Spanish mackerel recreational landings in peaked in the Northern Zone in 2008 and in the Southern Zone in 2000. The recreational ACL for Atlantic Spanish mackerel was specified in 2012 and revised in CMP Framework Amendment 1 based on the results from SEDAR 28 (2012). Recreational landings of Atlantic Spanish mackerel have not exceeded the recreational ACL since it was established in 2012.

Table 3. Atlantic migratory group Spanish mackerel total recreational landings (pounds whole weight) and recreational ACL (where applicable) from 2000 through 2017, by zone.

Fishing Year	Northern Zone Landings	Southern Zone Landings	Total Landings	Recreational ACL	%ACL
2000-2001	769,444	1,244,998	2,014,442	N/A	N/A
2001-2002	514,972	1,189,090	1,704,062	N/A	N/A
2002-2003	519,328	1,139,406	1,658,735	N/A	N/A
2003-2004	428,718	1,086,739	1,515,458	N/A	N/A
2004-2005	524,006	633,792	1,157,798	N/A	N/A
2005-2006	325,071	830,020	1,155,090	N/A	N/A
2006-2007	453,937	936,097	1,390,033	N/A	N/A
2007-2008	703,802	833,398	1,537,200	N/A	N/A
2008-2009	904,626	1,005,373	1,909,999	N/A	N/A
2009-2010	816,978	1,095,918	1,912,896	N/A	N/A
2010-2011	611,204	870,029	1,481,233	N/A	N/A
2011-2012	468,388	741,479	1,209,867	N/A	N/A
2012-2013	629,732	519,743	1,149,475	2,560,000	45%
2013-2014	674,871	920,040	1,594,911	2,560,000	62%
2014-2015	472,333	384,764	857,098	2,727,000	31%
2015-2016	456,027	365,802	821,829	2,727,000	30%
2016-2017	468,113	498,816	966,929	2,727,000	35%
2017-2018	500,645	258,078	758,723	2,727,000	28%

Source: SEFSC

Note: From 2000-2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st.

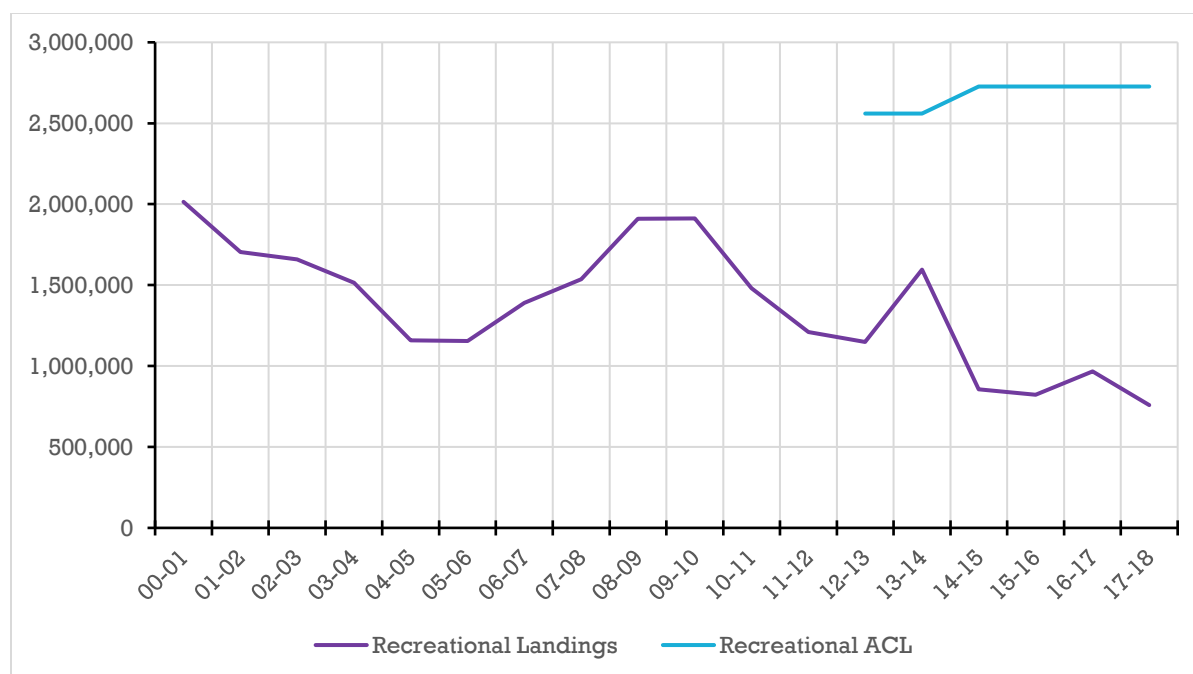


Figure 3. Total recreational landings (pounds whole weight) of Atlantic Spanish mackerel from 2000 through 2017 (purple line). Recreational ACL (blue line) is shown since 2012, when first implemented. Source: SEFSC

Note: From 2000- 2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st.

Commercial Atlantic Spanish Mackerel Landings by Zone

Commercial landings of Atlantic Spanish mackerel in pounds (as reported) from 2000 through 2017 in the Northern Zone and Southern Zone relative to their respective quotas are presented in **Figure 4** and **Figure 5**, respectively. Since zone quotas were established in 2015, the Northern Zone has exceeded their quota in one year. Alternatively, the Southern Zone has not exceeded its quota. It is important to note that during the 2017/2018 season, 100,000 pounds of quota was transferred from the southern zone (NC/SC line to the Miami-Dade/Monroe County line, Florida) to the northern zone to prevent an early closure. However, the northern zone quota was still projected to be met and federal waters were closed to commercial harvest of Spanish mackerel on November 7, 2018. The southern zone did not close but harvested 95% its remaining quota.

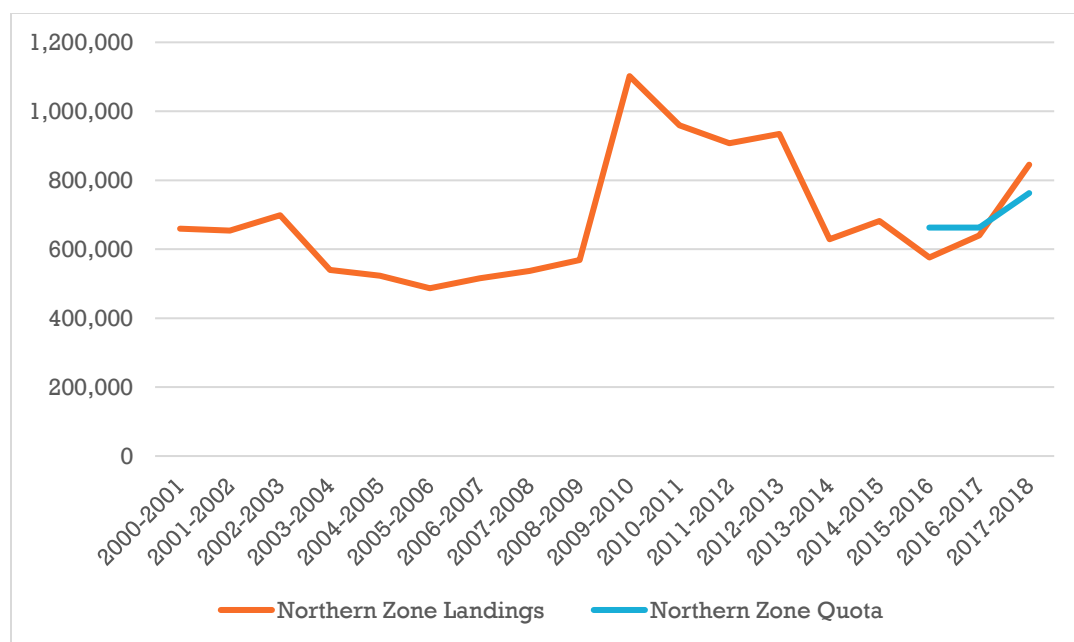


Figure 4. Commercial landings (pounds) of Atlantic Spanish mackerel in the Northern Zone from 2000 through the 2017.

Source: ALS

Note: From 2000-2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st. During the 2017/2018 season, 100,000 pounds of quota was transferred from the southern zone to the northern zone.



Figure 5. Commercial landings (pounds) of Atlantic Spanish mackerel in the Southern Zone from 2000 through the 2017.

Source: ALS

Note: From 2000-2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st. During the 2017/2018 season, 100,000 pounds of quota was transferred from the southern zone to the northern zone.

Commercial Atlantic Spanish Mackerel Landings by Gear

Currently, automatic reel, bandit gear, handline, rod and reel, cast net, run-around gillnet, and stab net are the only authorized gears for harvest of Atlantic Spanish mackerel. Commercial landings by gear for *federally permitted vessels* are shown in **Table 4**. Over the time series commercial Spanish mackerel has been primarily harvested by gillnets and handline gear. Harvest of Spanish mackerel using cast net has increased in recent years.

Table 4. Commercial landings (pounds) of Atlantic Spanish mackerel from federally permitted vessels by gear from 2000 through the 2017.

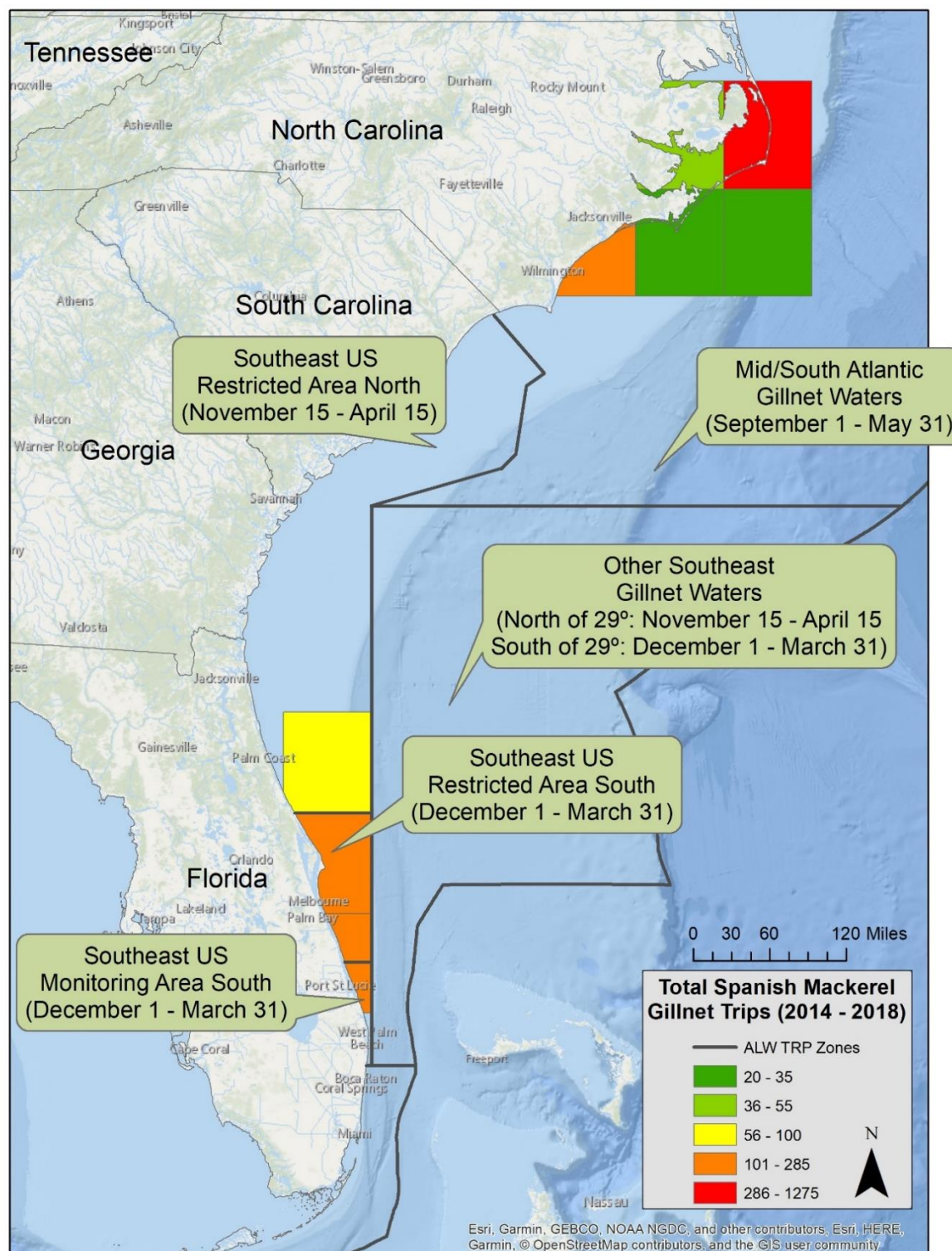
Fishing Year	Cast Net	Electric Reel	Gillnet	Handline	Troll	Other
2000-2001	46,621	0	1,457,412	258,062	152,512	282,512
2001-2002	0	*	1,080,608	248,712	91,857	416,428
2002-2003	0	*	1,467,800	244,572	101,965	569,399
2003-2004	*	850	903,061	345,006	69,964	848,309
2004-2005	0	2,592	1,206,710	524,714	84,553	716,010
2005-2006	0	14,988	1,627,658	512,382	80,459	654,102
2006-2007	0	3,828	1,240,081	846,869	104,570	641,349
2007-2008	0	1,185	1,700,636	555,350	109,955	223,872
2008-2009	0	18,031	916,169	637,433	116,400	442,000
2009-2010	0	5,958	1,661,242	785,989	212,301	539,845
2010-2011	0	1,920	1,011,630	837,650	186,135	751,362
2011-2012	0	954	763,193	966,832	127,895	523,027
2012-2013	*	8,454	918,726	772,903	102,139	101,802
2013-2014	*	1,731	965,990	853,982	74,842	173,094
2014-2015	120,756	2,782	744,856	925,530	64,843	31,678
2015-2016	164,640	1,031	849,712	844,137	47,645	6,804
2016-2017	177,049	3,439	817,241	947,139	51,918	6,763
2017-2018	198,570	4,251	563,265	957,200	69,154	10,889

Source: SEFSC Economic Query System

Note: From 2000- 2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st. Landings for state waters by vessels without federal permits are not included.

Commercial harvest of Atlantic Spanish mackerel using gillnets falls under regulations established via the Atlantic Large Whale Take Reduction Plan (ALW TRP), which aims to reduce the level of serious injury and mortality of Atlantic right whales, humpback whales, and fin whales resulting from interactions with gillnet and trap/pot fisheries. The ALWTRP contains formal regulations (**Appendix B**) with which Spanish mackerel gillnet fishermen must comply. There are five gillnet management zones within the management area of the CMP FMP (Mid/South Atlantic Gillnet Waters, Southeast Restricted Area North, Southeast Restricted Area South, Southeast US Monitoring Area, and the Other Southeast Gillnet Waters). Of importance to Spanish mackerel gillnet fishermen is Southeast US Restricted Area South which provides detailed requirements for Spanish mackerel gillnets to be exempt from the seasonal (December 1 – March 31) prohibition on fishing with or possessing gillnets. **Figure 6** illustrates current gillnet

zones established by the ALW TRP and the total number of gillnet trips made by federally permitted vessels, by latitude and longitude grid, taken between 2014 and 2018.



Participation in the Commercial Atlantic Spanish Mackerel Fishery

As of August 25, 2019, there are 1,922 commercial Spanish mackerel permits associated with the CMP fishery (**Table 5**). Permit holders with homeports in the Atlantic region account for 59% of total commercial Spanish mackerel permits. North Carolina and Florida account for 90% permits with homeports in the Atlantic region. Permit holders with homeports in the Gulf of Mexico (including the Florida Keys) account for 41% of total commercial Spanish mackerel permits. The number of federally permitted commercial trips landing Atlantic Spanish mackerel has remained steady through the time period examined (**Table 6**). The number of federally permitted vessels participating in the fishery has decreased over the timeframe, however the average pounds per trip has been increasing since 2013 (**Figure 7**).

Table 5. Number of commercial Spanish mackerel permits by state and region.

Home Port State	Number of Permits
Texas	10
Louisiana	47
Mississippi	7
Alabama	29
Florida West Coast	358
Florida Keys	334
<i>Gulf Total</i>	<i>785</i>
Florida East Coast	718
Georgia	10
South Carolina	36
North Carolina	300
Virginia	11
Maryland	9
Delaware	2
New Jersey	32
New York	8
<i>Atlantic Total</i>	<i>1126</i>
Other States	11
<i>Total Permits</i>	<i>1922</i>

Source: SERO FOIA Permit Page, August 25, 2019

Table 6. Total number of commercial trips taken landing Atlantic Spanish mackerel, average pounds per trip of Spanish mackerel, and number of vessels landing Atlantic Spanish mackerel for federally permitted vessels by year.

Year	Trips	Average lbs/trip	Vessels	Year	Trips	Average lbs/trip	Vessels
2000	3,089	421	492	2009	4,303	612	471
2001	3,064	447	450	2010	4,259	545	478
2002	3,297	425	459	2011	4,409	482	440
2003	2,953	557	405	2012	4,372	417	463
2004	2,941	520	389	2013	4,428	357	408
2005	3,112	575	371	2014	4,841	381	485
2006	3,819	585	421	2015	3,789	362	470
2007	4,385	568	437	2016	4,002	406	457
2008	3,553	445	421	2017	3,531	433	431

Source: SEFSC Economic Query System

Note: From 2000- 2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st. Landings for state waters by vessels without federal permits are not included.

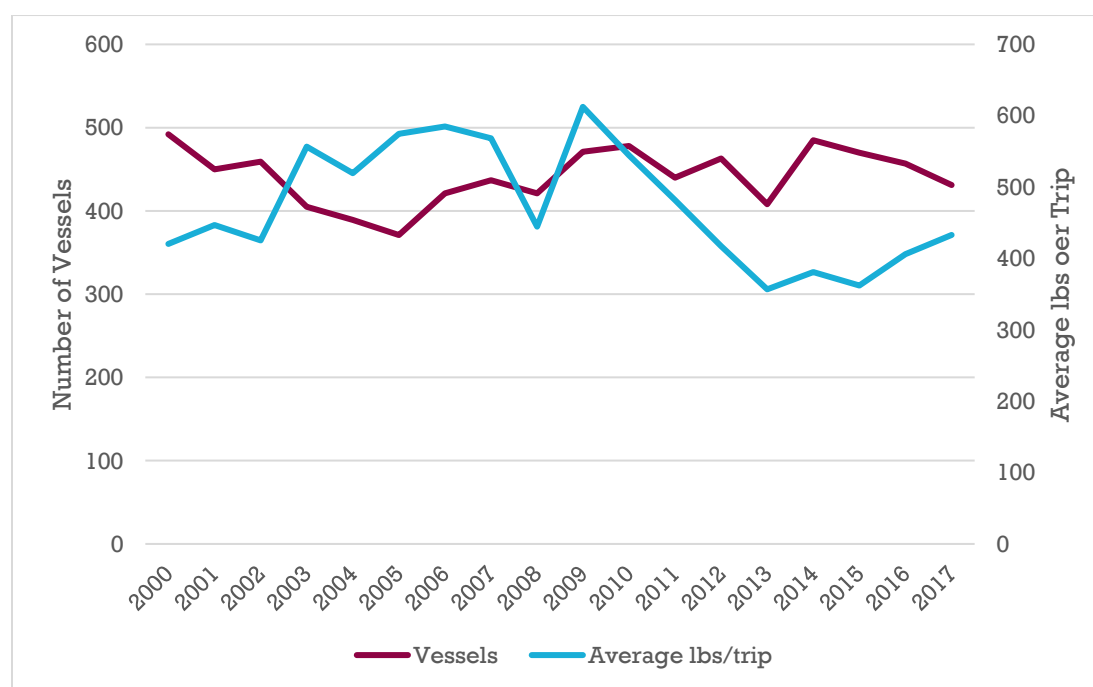


Figure 7. Number of federally permitted vessels participating in the commercial Atlantic Spanish mackerel fishery and average pounds per trip by year.

Source: SEFSC Economic Query System

Note: From 2000- 2004 the fishing year started on April 1st. In following years, the fishing year started on March 1st. Landings for state waters by vessels without federal permits are not included.

Seasonality of the Commercial Atlantic Spanish Mackerel Fishery

Figures 8 and 9 show the seasonality and distribution by zone of commercial landings.

Figure 8 displays the average monthly commercial landings of Atlantic Spanish mackerel from 2000 through 2017. **Figure 9** displays the same information by zone. The commercial fishery for

Atlantic Spanish mackerel occurs mainly during the winter in the Southern Zone. In the Northern Zone, the commercial fishery occurs mainly in the summer. Commercial landings of Atlantic Spanish mackerel peak annually during the month of January in the Southern Zone and during the month of September in the Northern Zone (**Figure 9**).

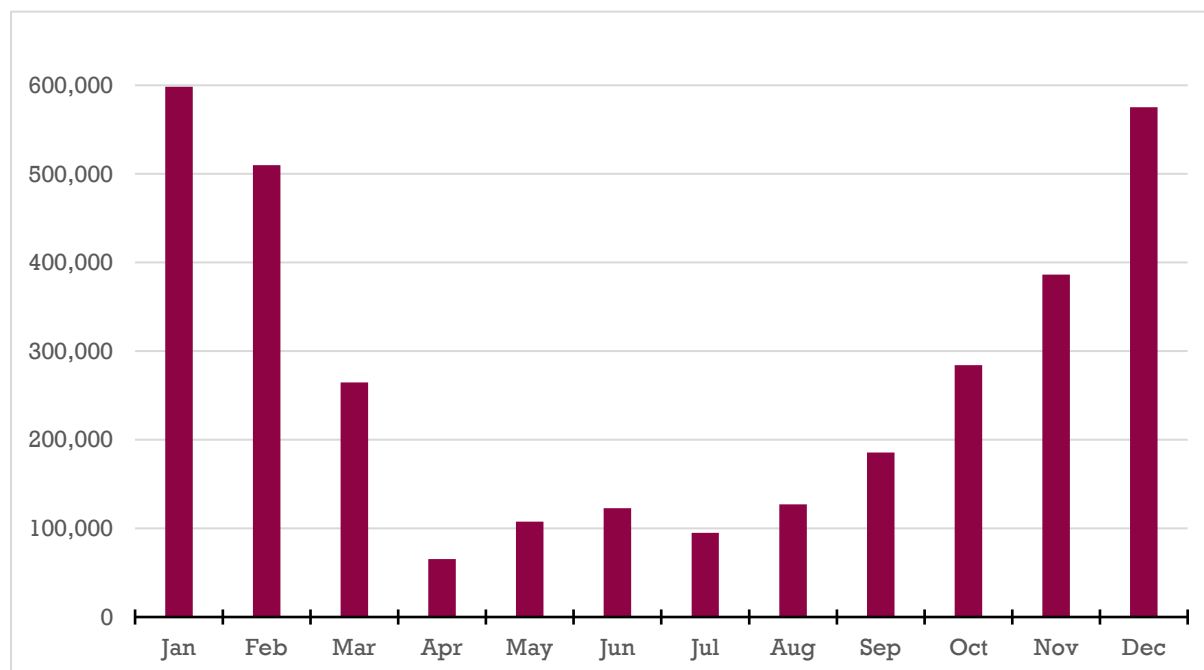


Figure 8. Average monthly commercial landings (pounds) of Atlantic Spanish mackerel, 2000-2017.
Source: ALS

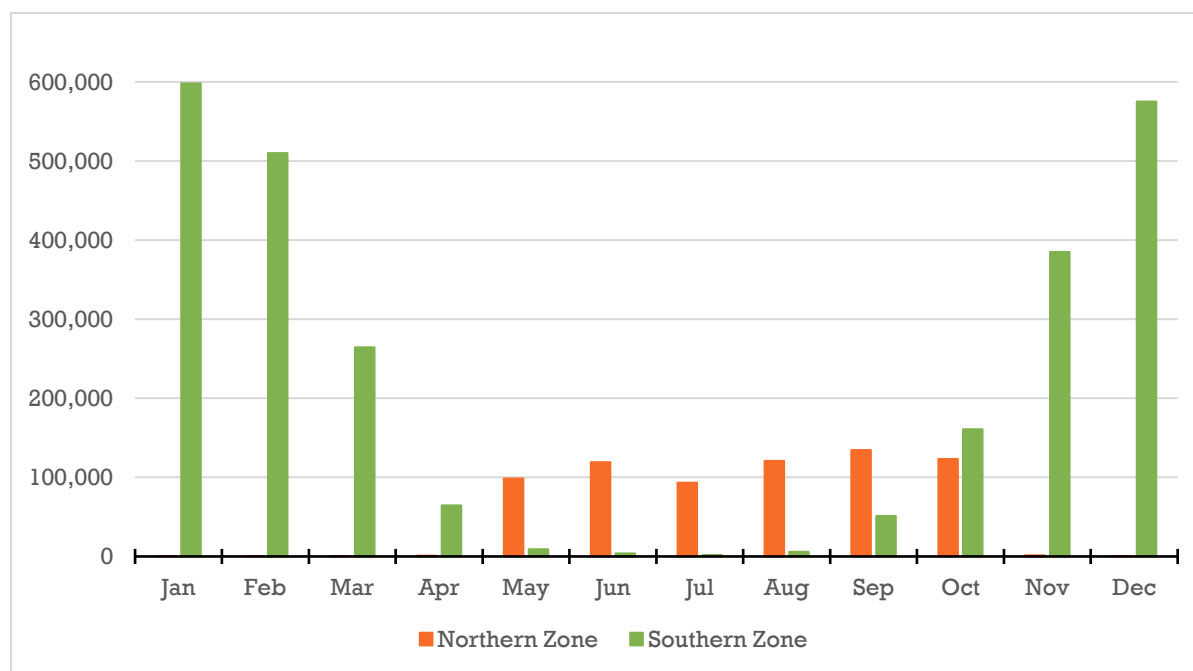


Figure 9. Average monthly commercial landings (pounds) of Atlantic Spanish mackerel by zone from 2000 through 2017.
Source: ALS

Economics of the Commercial Atlantic Spanish Mackerel Fishery

Figure 10 shows the average inflation adjusted price per pound for Atlantic Spanish mackerel (in 2017 dollars) from 2000 through 2017. Total ex-vessel value for Spanish mackerel in the South Atlantic and Mid-Atlantic Region is presented in **Figure 11** in inflation adjusted figures (2017 dollars). For the South Atlantic Region, the ex-vessel price per pound for Spanish mackerel was fairly flat until the 2010/2011 fishing year, after which prices tended to increase and remain higher. The overall ex-vessel value peaked in 2011/2012 at approximately \$4.27 million (2017 dollars), with the ex-vessel value decreasing to \$3.4 million in 2015/16 (2016 dollars). In relation to the approximate 60 species of finfish that the South Atlantic Fishery Management Council manages, Spanish mackerel accounted for the third highest ex-vessel value of any species in 2016, indicating that the species is of great economic importance to the commercial sector.

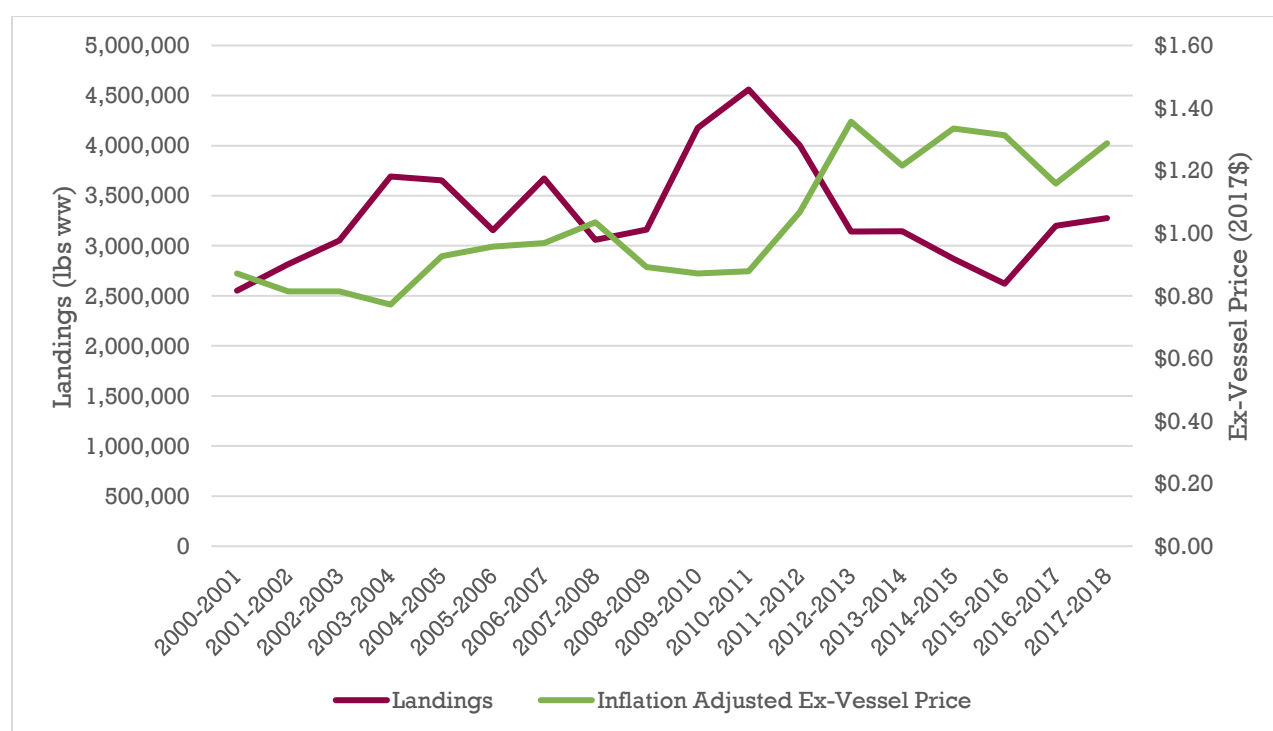


Figure 10. Average annual ex-vessel price per pound (2017 dollars) commercial Atlantic Spanish mackerel landings from fishing year 2000-2001 through 2017-2018.

Sources: U.S. Bureau of Economic Analysis and ACCSP.

Note: Inflation adjustments use the U.S. GDP deflator.

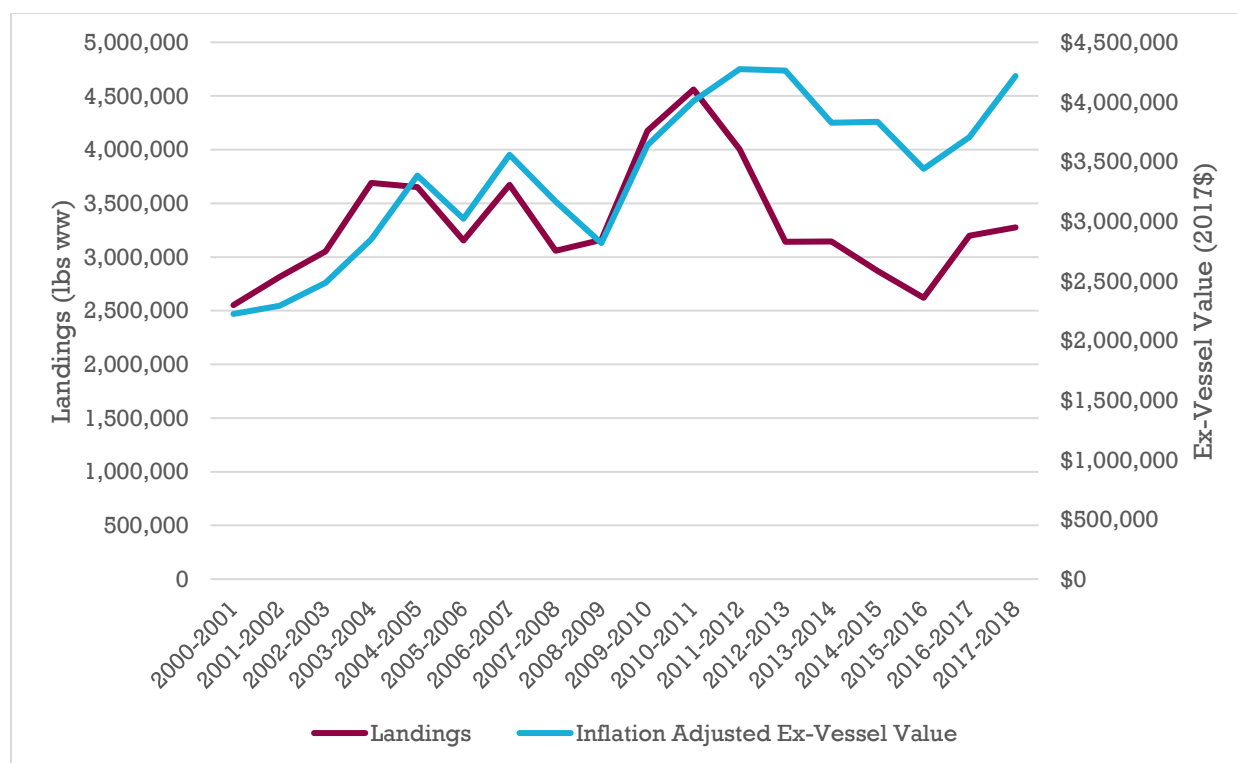


Figure 11. Weight and inflation adjusted (2017 dollars) ex-vessel value of commercial Atlantic Spanish mackerel landings in the South Atlantic and Mid-Atlantic Regions from fishing year 2000-2001 through 2017-2018.

Sources: U.S. Bureau of Economic Analysis and ACCSP.

Note: Inflation adjustments use the U.S. GDP deflator.

Fishery Performance Report

At their April 2018 meeting, Mackerel Cobia AP and Cobia Sub-Panel (Sub-Panel) reviewed fishery information for Atlantic Spanish mackerel and developed a fishery performance report (**Appendix A**). The purpose of the FPR was to assemble information from AP members' experience and observations on the water and in the marketplace to complement scientific and landings data. The following information on demand and effort in the commercial fishery was provided:

- In North Carolina both the commercial and recreational sectors are experiencing a shift in effort toward Spanish mackerel.
 - The commercial drift gillnet fishery in North Carolina, which targets Spanish mackerel among other species, has grown in popularity with some of the larger vessels operating in the state.
- In North Carolina, prices for Spanish mackerel average around \$1.50 to \$2.00 for a medium sized mackerel. Fishermen targeting Spanish mackerel from the beach rarely make a lot of money. Spanish mackerel is not a marketable fish and as a result as soon as any amount comes on the market prices will drop.
 - Majority of Spanish mackerel landed in North Carolina is sold to northern markets such as: New York, Boston and Canada. There is no local demand for Spanish mackerel in North Carolina.

- After Florida banned gillnets in state waters (1995), commercial fishing effort shifted to Spanish mackerel because it was readily available.
 - Fishing using a cast net allowed fishermen to bring in 2,000 to 3,000 pounds of Spanish mackerel in just a few hours. However, in recent years the fish appear to have adjusted their behavior in response to the fishing pressure. Additionally, commercial fishermen report increased interactions with sharks and porpoises.
- Fishermen who usually operate in the Gulf of Mexico will travel up to the Vero Beach area to target Spanish mackerel during certain times of the year.
- In Florida, market price for Spanish mackerel fluctuates throughout the season. During the winter months, prices are a little higher than the rest of the year. However, the most recent fishing season (2017/2018) has seen a glut of Spanish mackerel on the market, resulting in very low prices.
- Prior to the ban on gillnets in Florida state waters prices for Spanish mackerel were stable. After the net ban and the subsequent shift in effort towards the cast net and hook and line fisheries the price began to increase.
 - However, over the last three years, prices for Spanish mackerel have decreased. The decrease in price corresponds to an increase in fishing effort.

Possible Paths to Address Closures in the Commercial Atlantic Spanish Mackerel Fishery

Limited Entry for the Commercial Spanish Mackerel Permit

Due to the joint nature of the CMP FMP and the commercial Spanish mackerel permit, moving forward with limited entry for the permit would require either (a) working with the Gulf Council to establish a limited entry program that would cover both Gulf and Atlantic migratory groups of Spanish mackerel or (b) working with the Gulf Council to split the CMP FMP into two separate fishery management plans and/or splitting the commercial Spanish mackerel permit into separate Gulf and Atlantic permits and then moving forward with limited entry for the commercial Atlantic Spanish mackerel fishery only.

Option A – Limited Entry for the (Gulf and Atlantic) Commercial Spanish Mackerel Permit

The commercial Gulf Spanish mackerel fishery has not been experiencing the early closures seen in the commercial Atlantic Spanish mackerel fishery (**Table 7**). As a result, the Gulf Council may not be amenable to moving forward with a limited entry program for the commercial Spanish mackerel permit.

Table 7. Gulf Spanish Mackerel landings in pounds as reported from the 2000/2001 through the 2017/2018 fishing year.

Fishing Year	Recreational Landings	Commercial Landings	Total Landings	ACL	% ACL
2000/2001	2,787,759	1,054,259	3,842,018	9,100,000	42.2
2001/2002	3,453,003	810,099	4,263,102	9,100,000	46.8
2002/2003	3,171,267	1,745,064	4,916,331	9,100,000	54.0
2003/2004	2,742,259	941,702	3,683,961	9,100,000	40.5
2004/2005	2,665,254	1,986,512	4,651,766	9,100,000	51.1
2005/2006	1,595,371	1,221,294	2,816,665	9,100,000	31.0
2006/2007	2,845,319	1,534,040	4,379,359	9,100,000	48.1
2007/2008	2,724,709	902,827	3,627,536	9,100,000	39.9
2008/2009	2,525,545	2,360,043	4,885,588	9,100,000	53.7
2009/2010	1,890,078	942,501	2,832,579	9,100,000	31.1
2010/2011	2,964,208	1,248,711	4,212,919	9,100,000	46.3
2011/2012	2,677,119	1,347,945	4,025,064	9,100,000	44.2
2012/2013	3,578,421	1,413,904	4,992,325	5,150,000	96.9
2013/2014	5,232,534	1,464,381	6,696,915	5,150,000	130.0
2014/2015	1,946,040	914,834	2,860,874	12,700,000	22.5
2015/2016	2,616,377	1,214,888	3,831,265	11,800,000	32.5
2016/2017	2,607,122	1,086,142	3,693,264	11,300,000	32.7
2017/2018 ^a	2,184,055	792,047	2,976,102	11,300,000	26.3

Source: SERO ACL Monitoring Webpage, August 5, 2019.

Note: The Gulf Spanish mackerel fishing year runs from April 1st through March 31st.

^a Preliminary landings.

Option B – Further Separating the CMP FMP and Limited Entry for Commercial Atlantic Spanish Mackerel Fishery

The South Atlantic and Gulf Councils originally considered splitting the commercial CMP permits and/or the CMP FMP into two separate FMPs as part of CMP Amendment 28. At the time, the South Atlantic Council had not approved development of Amendment 28 and as a result it was only developed as a Gulf Council options paper. The Gulf Council felt further separating management of CMP species was appropriate because the Gulf and South Atlantic Councils have a history of working separately on actions that affect their respective migratory groups. Recent amendments had few joint actions and primarily served to further separate management between the two Councils (for example, Amendment 8 allowed each Council to develop framework amendments for actions and affect their migratory groups without approval for the other Councils and Amendment 18 revised the framework procedure to allow additional management measures to be addressed via a framework amendment). Additionally, development of joint actions had illustrated increasing disagreement between the two Councils.

The South Atlantic Council had initially proposed a permit split in 2013, but at the time the Gulf Council was not interested in moving forward. By 2015, the Gulf Council had agreed to support a permit split and began developing Amendment 28, but the South Atlantic Council was no longer interested

The following actions were considered in the development of the Amendment 28 options paper:

- Reorganize management of CMP species in the Gulf of Mexico and Atlantic Region
 - Considered retaining a single FMP with separate commercial permits or creating two separate FMPs with the boundary at the Miami-Dade/Monroe County, Florida boundary OR the Gulf/South Atlantic Council boundary.
- Qualification criteria for obtaining and/or retaining a Gulf of Mexico commercial king mackerel permit.
 - Three options for qualification criteria were considered:
 - an individual currently holding a valid/renewable commercial king mackerel permit will receive a fully transferable Gulf-specific permit if they have [landings] in [timeframe] in the Gulf and/or hailing port listed on their current permit is within the Gulf region.
 - an individual currently holding a valid/renewable commercial king mackerel permit will receive a nontransferable Gulf-specific permit if they do not meet the qualifications for the fully transferable permit and have commercial landings of any Gulf federally managed species and/or have a hailing port listed on their current permit as of [date] was within the Gulf region.
 - Establish spatial restrictions for all Gulf-specific commercial king mackerel permits, whereby the permit holder may only fish in a specific Gulf commercial zone based on predetermined criteria.

Limited Entry Commercial Gillnet Endorsement

- Currently, automatic reel, bandit gear, handline, rod and reel, cast net, run-around gillnet, and stab net are the only authorized gears for harvest of Atlantic Spanish mackerel.
 - Note: gillnets are not an allowed gear in Florida *state* waters.
- Examples of other limited access gear endorsements in the Gulf and South Atlantic include: Eastern Gulf Reef Fish Bottom Longline Endorsement, Gulf King Mackerel Gillnet Endorsement, Snapper Grouper Golden Tilefish Longline Endorsement, and the Snapper Grouper Black Sea Bass Pot Endorsement.
 - The above endorsements are all attached to a limited access commercial permit (Gulf of Mexico Reef Fish, King Mackerel, and Snapper Grouper, respectively). Attaching a limited access endorsement to an open access permit may be possible but would likely be more complex than attaching an endorsement to a limited access permit.
 - *Gulf King Mackerel Gillnet Endorsement background:* The limited access system for king mackerel gill net permits in the Gulf Southern Zone was implemented via Amendment 7 to the CMP FMP. Permittees with the net endorsement could fish for king mackerel only with nets in that area. This requirement effectively implemented an allocation between net and hook-and-line fishermen because it prevented gillnet vessels from fishing on both gear sub quotas. This was implemented because gillnet vessels can take quota quickly (Amendment 7 references 252,000 pounds being landed in a 24-hour fishery). The Gulf Council decided to only require a permit for gillnet vessels because public comment indicated that they would be comfortable refraining from using hook-and-line gear early in the season before gills could be used if they had a separate allocation. Additionally, at the time there were fewer than 20 vessels participating in the gillnet fishery.

Collaboration with the Atlantic States Marine Fisheries Commission and State Agencies

- Currently, the Commission's Interstate FMP for Spanish Mackerel (Interstate FMP) aims to complement federal management in state waters, conserve Atlantic Spanish mackerel throughout its range, and achieve compatible management among states harvesting Atlantic Spanish mackerel.
 - The 2018 Review of the Commission's Interstate FMP found that current regulations established in each state (**Table 8**) were in compliance with the Interstate FMP.
- Working collaboratively with states and the Commission will be important as landings in the Mid-Atlantic states are likely to continue increasing given quantitative and anecdotal information regarding the movement of species northward and increasing importance of the commercial and recreational Spanish mackerel fishery in the Mid-Atlantic states.
- A substantial portion of Spanish mackerel landings occur in North Carolina and Florida state waters; thus, state management measures will play an important role in addressing commercial harvest. FWC recently re-established in-season vessel limit reductions and NC DMF has begun discussions on how to address Spanish mackerel harvest in their state waters.

Table 8. Current regulations for commercial Atlantic Spanish mackerel in Atlantic state waters.

State	Commercial Regulations
Florida	<p>Size Limit: 12-in FL</p> <p>Trip Limits:</p> <ul style="list-style-type: none"> • March 1 to November 30: 3,500 lbs • December 1 until the end of the season: <ul style="list-style-type: none"> ○ Monday through Friday: 3,500 lbs ○ Saturday and Sunday: 1,500 lbs • If the federal trip limit is reduced to 1,500 pounds: 1,500 lbs • If the federal trip limit is reduced to 500 pounds or federal waters are closed to commercial harvest (whichever comes first): 500 lbs <p>Allowable Gear: beach or haul seine, cast net, hook and line, or spearing.</p>
Georgia	<p>Size Limit: 12-in FL</p> <p>Trip Limit: 3,500 lbs</p>
South Carolina	<p>Size Limit: 12-in FL</p> <p>Trip Limit: 3,500 lbs</p> <p>Matches federal regulations – including closure of state waters if federal waters are closed.</p>
North Carolina	<p>Size Limit: 12-in FL</p> <p>Trip Limit: 3,500 lbs combined Spanish and king landings.</p>
Virginia	<p>Size Limit: 14-in TL</p> <p>Trip Limit: 3,500 lbs</p> <p>Matches federal regulations – including closure of state waters if federal waters are closed.</p>
PRFC	<p>Size Limit: 14-in TL</p> <p>Trip Limit: 3,500 lbs</p> <p>Closes if Virginia and Maryland close.</p>
Maryland	<p>Size Limit: 14-in TL</p> <p>Trip Limit: 3,500 lbs</p>
Delaware	<p>Size Limit: 14-in TL</p> <p>Trip Limit: 3,500 lbs</p>
New Jersey	<p>Size Limit: 14-in TL</p> <p>Trip Limit: 3,500 lbs</p>
New York	<p>Size Limit: 14-in TL</p> <p>Trip Limit: 3,500 lbs</p>

Other Management Options

- Modifications to established trip limits.
 - In general, the effect of decreasing the trip limit would depend on how fishermen are affected by either higher trip limits and a shorter season, or lower trip limits and longer seasons.
 - Lower trip limits may reduce the rate of harvest, resulting in a longer fishing season. Alternatively, lower trip limits may cause inefficiencies by increasing the number of trips and trip costs to harvest the same overall poundage of fish.
- Modifications to commercial and recreational allocations and/or zone allocations.
 - The allocation between the commercial (55%) and recreational sector (45%) was most recently modified via a 1998 Framework Action (effective September 1999).
 - Allocations for Atlantic Spanish mackerel were first established in CMP Amendment 2 based on the average ration of catch from 1979-1985.
 - Commercial – 76%
 - Recreational – 24%
 - CMP Amendment 4 revised allocations to be a 50/50 split based on qualitative information.
 - The resource was overfished from 1979-1985, resulting in lower recreational catches.
 - Recreational catches were affected by increase commercial effort in the mid-1970s.
 - Qualitative information indicated that recreational catch was high during the 1970s.
 - Capacity and demand of both user groups had expanded such that either group could harvest all the available resource, making a 50/50 allocation the most equitable.
 - Allocations between the Northern and Southern Zone were established in CMP Amendment (effective March 2015) based on the average proportion of landings in that zone from the 2002/2003 fishing season through the 2011/2012 fishing season.
- Others??

Appendix A. Spanish Mackerel Fishery Performance Report (April 2018)

At their April 2018 meeting, the South Atlantic Fishery Management Council's (Council) Mackerel Cobia Advisory Panel (AP) and Cobia Sub-Panel (Sub-Panel) reviewed fishery information for Atlantic migratory group Spanish mackerel (Atlantic Spanish mackerel) and developed this fishery performance report (FPR). The purpose of the FPR is to assemble information from AP members' experience and observations on the water and in the marketplace to complement scientific and landings data. The FPR for Atlantic Spanish mackerel will be provided to the Scientific and Statistical Committee (SSC) and the Socio-Economic Panel (SEP) to complement material being used in stock assessments and to inform future management.

Advisory Panel Members:

Ira Laks (Chairman; Charter/FL)
Stephen Swann (Vice-Chairman; Recreational/FL)
Stephen Donalson (Recreational/FL)
Steve English (Commercial/FL)
Skip Feller (Mid-Atlantic Liaison/VA)
Ryan Howard (Charter/GA)
Bill Kelly (Commercial/FL)

Keith Bowen (Commercial/FL)
Robert Olsen (Recreational/SC)
Greg Peralta (Recreational/SC)
Gary Robinson (Commercial/FL)
Tom Roller (Charter/NC)
Randy McKinley (Commercial/NC)
Chris Elkins (NGO/NC)

Sub-Panel Members:

Wes Blow (Recreational/VA)
Collins Doughtie (Recreational/SC)
Bill Gorham (Recreational/NC)

Bill Weeks (Recreational/GA)
Patrick Link (Recreational/VA)

Fishery Overview:

Summary information on the Atlantic Spanish mackerel fishery is presented in a Fishery Information Document intended to provide an overview of several aspects of the fishery including life history of the species, stock status, management overview, and trends in landings and fishery economics for both the commercial and recreational (for-hire and private) sectors. The information was provided as background to elicit the discussion presented in this Fishery Performance Report. The Fishery Information Document presents data from 2000 through 2016.

Observations on Stock Abundance:

North Carolina

In southeastern North Carolina, fishermen are no longer catching Spanish mackerel along the piers or the beaches. There is still some fishing offshore, but fishermen aren't seeing as many Spanish mackerel as they did a few years ago. Though, the trolling fleet has been catching a lot of undersized Spanish mackerel, which may be due to an increase in their food source.

In the fall the Spanish mackerel will leave North Carolina and head offshore. By the time they

reach central Florida they've moved within three or four miles of the coast and once they've reached the Port Salerno area they are within a mile of the shore. In the spring the fish begin to head back up the beach toward North Carolina.

Florida

Spanish mackerel begin showing up in the St. Augustine area around April and remain until the winter. By November and December recreational fishermen report seeing very few Spanish mackerel. When fishermen begin catching Spanish mackerel out on the beach, that is usually a good sign that the fish can be easily caught offshore as well.

In south Florida, Spanish mackerel used to be primarily an inshore fishery through the spring and winter, but in recent years fishermen haven't been seeing Spanish mackerel along the beaches and piers.

Observations on Fish Size:

South Carolina and Georgia

In South Carolina, fishermen have been seeing an increase in the number of small Spanish mackerel in the estuaries. Approximately two miles offshore fishermen report seeing very large Spanish mackerel.

Florida

In northeastern Florida, commercial fishermen are seeing smaller fish and as a result are moving to a smaller mesh size to target them. Hook and line fishermen are also seeing smaller fish. In southeastern Florida, off Palm Beach County, large Spanish mackerel tend to sit at the edge of the reef in approximately 110-feet of water. The number of large fish fluctuates from year to year, but there have been fewer fish in recent years. The decrease in large Spanish mackerel could be attributed to sharks.

Observations on Effort Shifts:

North Carolina

In North Carolina both the commercial and recreational sectors are experiencing a shift in effort toward Spanish mackerel. For-hire and private recreational fishermen do not specifically target Spanish mackerel but will harvest them when they are available. In recent years, there have been fewer king mackerel nearshore and as a result for-hire fishermen have shifted their effort toward the larger Spanish mackerel that congregate around nearshore reefs in August and September. As a result, there is a lot of pressure on those populations and they are getting harder and harder to find. Charity fishing tournaments for Spanish mackerel are also incredibly popular in North Carolina.

The commercial drift gillnet fishery in North Carolina, which targets Spanish mackerel among other species, has grown in popularity with some of the larger vessels operating in the state.

Florida

In southeastern Florida, Spanish mackerel is a staple of the inshore charter fleet. On the other hand, offshore charter vessels will only target Spanish mackerel opportunistically.

After Florida banned gillnets in state waters (1995), commercial fishing effort shifted to Spanish mackerel because it was readily available. Fishing using a cast net allowed fishermen to bring in 2000 to 3000 pounds of Spanish mackerel in just a few hours. However, in recent years the fish appear to have adjusted their behavior in response to the fishing pressure. Additionally, commercial fishermen report increased interactions with sharks and porpoises.

Fishermen who usually operate in the Gulf of Mexico will travel up to the Vero Beach area to target Spanish mackerel during certain times of the year.

Observations on Recruitment and Spawning:

North Carolina

In North Carolina, the larger, egg-laying Spanish mackerel are targeted during the summer months, with a peak in June. Spawning fish are usually seen in the sounds.

South Carolina

In South Carolina, fishermen report seeing fish in spawning condition during May and June and occasionally into the first part of July. Over the last five years, these spawning fish haven't been as abundant. However, this past year the spawning fish have come back into the harbors and inlets. This trend coincides with the return of king mackerel to the area.

Florida

In Florida, fish are rarely seen in spawning conditions. MC AP members noted that Spanish mackerel are typically sold whole rather than gutted. As a result, the commercial industry does not know much about key spawning periods.

Observations on Price and Demand:

North Carolina

In North Carolina, prices for Spanish mackerel average around \$1.50 to \$2.00 for a medium sized mackerel. Fishermen targeting Spanish mackerel from the beach rarely make a lot of money. Spanish mackerel is not a marketable fish and as a result as soon as any amount comes on the market prices will drop. Majority of Spanish mackerel landed in North Carolina is sold to northern markets such as: New York, Boston and Canada. There is no local demand for Spanish mackerel in North Carolina.

Overall demand for charter trips has improved, but this is likely in response to improvements in the economy rather than changes in the Spanish mackerel fishery. In North Carolina, there is increasing demand for half-day, family charter trips. Demand has increased so much that for hire captains are purchasing extra boats to run half-day trips. During the time demand for those trips is high, Spanish mackerel are readily available inshore. The charter fleets in Virginia and Georgia are experiencing the same trend.

Florida

In Florida, market price for Spanish mackerel fluctuates throughout the season. During the winter months, prices are a little higher than the rest of the year. However, the most recent fishing season has seen a glut of Spanish mackerel on the market, resulting in very low prices.

Prior to the ban on gillnets in Florida state waters (1995) prices for Spanish mackerel were stable. After the net ban and the subsequent shift in effort towards the cast net and hook and line fisheries the price began to increase. However, over the last three years, prices for Spanish mackerel have decreased. The decrease in price corresponds to an increase in fishing effort.

For-hire customers booking charters in Florida are not focused on Spanish mackerel, they just want to catch a fish. In fact, Spanish mackerel are rarely targeted by for-hire captains in Florida. This is because deeper waters are more accessible in Florida than in other South Atlantic states and it can be challenging to sell customers on inshore trips.

Recreational fishermen also got rid of their larger boats during the recession and low bag-limits for snapper and grouper species has resulted in a shift in effort toward both king and Spanish mackerel.

Observations on Community Dependence:

The Virginia, North Carolina, South Carolina, and Georgia for-hire fleets are very dependent on Spanish mackerel. It is one of the most important summer fisheries because the fish are easy to target inshore, which allows charter fishermen to run multiple trips a day.

North Carolina

Many the larger for-hire vessels operating out of Morehead City and Beaufort were able to make it through periods of low demand during the recession by booking half-day charters that would primarily land Spanish mackerel. In northeastern North Carolina, Spanish trolling has become a staple of many charter trip packages.

For commercial fishermen in North Carolina, one of the biggest challenges is the loss of fish houses. The few that are remaining don't like to give ice out to fishermen because they don't have enough supply to go around and conflict has become commonplace. This is a big problem in North Carolina where fishermen must travel long distances to get offshore. Fish that haven't been on ice are lower quality and have a lower market value.

Florida

Communities in central and southern Florida, especially Port Salerno, are highly dependent on the commercial Spanish mackerel fishery. The commercial infrastructure in the area, specifically docks and fish houses, is supported by Spanish mackerel landings.

Throughout Florida, the commercial Spanish mackerel fleet has shifted to primarily trailer boats. Commercial fishermen had to adapt because there are fewer fish houses on the water, most are now located a few miles inland. Charter fishermen are starting to move towards trailers as well due to increasing dockage fees. The number of trailers ramps is insufficient to support the number of boats and this has resulted in conflict among users.

Commercial Spanish mackerel fishermen have adapted to regulatory changes, namely the gillnet ban in Florida waters, by perfecting the use of alternative gears.

Observations on Management Measures:

The MC AP agreed that the 12-inch minimum size limit for Spanish mackerel was appropriate. The commercial sector targets fish that are 16-inch or larger because the smaller fish are not marketable. However, charter boats that target marlin use Spanish mackerel for bait and they want smaller 12-inch to 14-inch fish. The commercial sector is able to use gear to target fish of a certain size, so modifying the size limit is unnecessary. Additionally, private recreational fishermen who fish off the pier usually catch 12-inch fish and the lower minimum size allows them to keep fish,

In North Carolina, an MC AP member noted that some of the charter boats use heavier tackle that kills sub-legal Spanish mackerel and it can be frustrating to throw the fish back.

In general, the MC AP members felt that the allocation between the recreational and commercial sectors (45% and 55%, respectively) was appropriate. The commercial fishery doesn't have enough market space to add more fish. However, if demand increases, sector allocations may need to be addressed.

Allocations between the Northern Zone and the Southern Zone (19.9% and 80.1%, respectively) may need to be addressed. Effort in North Carolina has increased over the last few years, especially as other species have become harder to access. During the 2017/2018 season, the Northern Zone fishery shut down early, even after receiving a transfer of 100,000 pounds of quota from the Southern Zone. It may be possible to mitigate the problem using other regulatory mechanisms, such as lower trip limits or gear requirements.

Some of the MC AP members felt that Council should consider a limited entry program for commercial Spanish mackerel fishery. If there are a limited number of fish available to harvest, there should be a limited number of fishermen. A limited entry system would help limit the number of boats participating in the fishery and would professionalize the fleet. MC AP members felt that with the increase in effort, a limited entry system would head off any problems and prevent the market from being flooded with Spanish mackerel, lowering the price. Additionally, if the Council chooses to move forward with limited entry for the commercial sector, a gillnet permit or endorsement would be appropriate, as the gillnet fishery operates as a separate sector.

MC AP members also suggested that the Northern Zone move to an adjusted quota system, similar to what is used in the Southern Zone.

Environmental Observations:

North Carolina

In North Carolina, the availability of Spanish mackerel is closely tied to weather conditions. In the spring (May and June), the inshore waters tend to be clear and the fish will move closer to the beach. Once it becomes rainy and windy in the summer months, water quality decreases, salinity drops, and fish move away from the beach. The fish will return in August and September, if there hasn't been a significant amount of tropical weather.

Other Observations:

North Carolina

In North Carolina there is very little conflict between recreational and commercial Spanish mackerel fishermen. In general, commercial fishermen operate in the middle of the Albemarle and Pamlico Sounds, whereas recreational fishermen operate in the inlets where there is minimal tide. Alternatively, in Port Salerno, Florida the Spanish mackerel are found along a two mile stretch of reef. As a result, commercial and recreational fishermen are operating near each other, which has resulted in friction between the sectors.

In Florida and North Carolina, Spanish mackerel is becoming a more specialized fishery. Along the North Carolina coast, fly fishing has become a key component of charter trips.

Appendix B. Atlantic Large Whale Take Reduction Plan Gillnet Regulations

ALW TRP Gillnet Management Zone	Dates	Gillnet Type	Regulations
Universal Requirements	-	All	<ul style="list-style-type: none"> No buoy line floating at the surface. No wet storage of gear (all gear must be hauled out of the water at least once every 30 days) Fishermen are encouraged, but not required, to maintain knot-free buoy lines. All groundlines must be made of sinking line. <p>Additional requirements related to gear marking, weak links, anchoring, and night fishing and storage (drift gillnets).</p>
Mid/South Atlantic Gillnet Waters (Bounded on the north from 72°30' W. long. south to 36°33.03' N. lat., and east to the eastern edge of the EEZ, and bounded on the south by 32°00' N. lat. and east to the eastern edge of the EEZ)	September 1 st to May 31 st	Anchored	<ul style="list-style-type: none"> Sinking Groundlines Gear Marking- BLUE Weak Link & Anchoring Requirements- Breaking strength of no greater than 1,100 lb. Gillnets set within 300 yards (900ft) of the shoreline in NC, that do not return to port with the vessel, will also have an optional gillnet configuration: net panels configured with 5 or more weak links per net panel, depending on panel length, with a breaking strength no greater than 600 lb, and be anchored with the holding power of at least an 8-lb Danforth-style anchor on the offshore end of the string and a 31-lb dead weight on the inshore end of the string. The entire string must be set within 300 yards (900ft) of the shoreline.
		Drift	<ul style="list-style-type: none"> Gear marking- GREEN Night fishing & storage restrictions

ALW TRP Gillnet Management Zone	Dates	Gillnet Type	Regulations
Southeast US Restricted Area North (Waters north of 29°00' N. to 32°00' N. from the shoreline eastward to 80°00' W, and off South Carolina, within 35 nautical miles of the shoreline)	November 15 th to April 15 th	All	<ul style="list-style-type: none"> Fishing with or possessing gillnets is prohibited. Vessels transiting through the area may possess gillnet if the following three conditions are met: <ul style="list-style-type: none"> Nets are covered with canvas or other similar material and lashed or otherwise securely fastened to the deck, rail, or drum; All buoys, highflyers, and anchors are disconnected from all gillnets; and No fish are onboard

ALW TRP Gillnet Management Zone	Dates	Gillnet Type	Regulations
Southeast US Restricted Area South (waters north of 27°51' N. to 29°00' N. from the shoreline eastward to 80°00' W)	December 1 to March 31 st	All	<p>The Southeast U.S. Restricted Area South is CLOSED to fishing with or possessing gillnets with exceptions for shark and Spanish mackerel gillnet fishing.</p> <p>Spanish mackerel exemption: Fishing with gillnet for Spanish mackerel is exempt from the closure from December 1 through December 31 and from March 1 through March 31 IF:</p> <ul style="list-style-type: none"> • Gillnet mesh size is between 3-½ in and 4-7/8 in stretched mesh; • A valid commercial vessel permit for Spanish mackerel is issued to the vessel and is onboard; • No person may fish with, set, place in the water, or have on board a vessel a gillnet with a float line longer than 800 yards; • The gillnet is removed from the water before night or immediately if visibility decreases below 500 yards; • No net is set within 3 nm of a right, humpback, or fin whale; and • The gillnet is removed immediately from the water if a right, humpback, or fin whale moves within 3 nm of the set gear. • No person may fish with, set, or place in the water more than one gillnet at any time; • No more than two gillnets, including any net in use, may be possessed at any one time; provided, however, that if two gillnets, including any net in use, are possessed at any one time, they must have stretched mesh sizes (as allowed under the regulations) that differ by at least ¼”; • No net is soaked for more than 1 hour. The soak period begins when the first mesh is placed in the water and ends either when the first mesh is retrieved back on board the vessel or the gathering of the gillnet is begun to facilitate retrieval on board the vessel, whichever occurs first; providing that, once the first mesh is retrieved or the gathering is begun, the retrieval is continuous until the gillnet is completely removed from the water; • No net is set at night or when visibility is less than 500 yards; • Gear marking-YELLOW
Other Southeast Gillnet Waters	November 15 th to April 15 th	Non-shark	<ul style="list-style-type: none"> • Gear marking-YELLOW • Weak links ≤1,100 lbs.

ALW TRP Gillnet Management Zone	Dates	Gillnet Type	Regulations
(the area from 32°00' N. lat. (near Savannah, GA) south to 26°46.5' N. lat and extending from 80°00' W. long. east to the eastern edge of the EEZ)	(North of 29°00'N lat.)		<ul style="list-style-type: none"> Sinking groundline
		Shark with webbing 5-in or greater stretched mesh.	<ul style="list-style-type: none"> Gear marking- GREEN and BLUE Nets cannot be set within 3nm of a right, humpback, or fin whale Gear is immediately removed from the water if a right, humpback, or fin whale approaches within 3nm of the set gear
	December 1 st to March 31 st (South of 29°00'N lat.)	Non-shark	<ul style="list-style-type: none"> Gear marking-YELLOW Weak links ≤1,100 lbs. Sinking groundline
		Shark with webbing 5-in or greater stretched mesh.	<ul style="list-style-type: none"> Gear marking- GREEN and BLUE Nets cannot be set within 3nm of a right, humpback, or fin whale Gear is immediately removed from the water if a right, humpback, or fin whale approaches within 3nm of the set gear
Southeast US Monitoring Area (area along the Florida coast from 27°51' N. south to 26°46.5' N., and extending from the shoreline or exemption line eastward to 80°00' W).	December 1 st to March 31 st	Shark with webbing 5-in or greater stretched mesh.	<ul style="list-style-type: none"> Gear Marking- GREEN and BLUE Fishing vessel must be compliant with VMS requirements found in 50 CFR 635.69. Fishing vessel must carry an observer if selected by NMFS.