

**2017 FALL NORTHEAST REGIONAL COORDINATION COUNCIL (NRCC)
MEETING
November 15-16
Baltimore, MD**

Final Report prepared by Gregg Waugh

Charlie Phillips (SAFMC Chair) and Gregg Waugh (SAFMC Executive Director) attended to discuss “Management and Science Challenges Associated With Climate Change and Shifting Stocks”. This topic was added to the NRCC agenda based on discussions by the MAFMC Chair (Mike Luisi), SAFMC then Chair (Michelle Duval), MAFMC Executive Director (Chris Moore), and SAFMC Executive Director (Gregg Waugh). The following material was prepared and included in their briefing book materials for the meeting; results from the meeting are added below:

First, we would like to thank the NRCC for including this topic and for inviting us to attend your meeting. We look forward to working cooperatively to address the management and science challenges as stocks continue to move northwards.

The South Atlantic and Mid-Atlantic Councils sent a letter to the Northeast and Southeast Fisheries Science Center Directors (August 17, 2016) strongly urging them to allocate means for conducting a coastwide, deepwater species survey along the Atlantic Coast (**Attachment 1**). A response dated September 30, 2016 was received and indicated this request would be addressed more substantively (**Attachment 1**) in the fall of 2016. It would be helpful to know if there has been any further communication between the science centers on this request and whether any work has begun.

Response to request for coastwide, deepwater species survey: Chris Moore stated that the MAFMC funded a project to conduct a proof of concept survey. The work has been completed and they will be receiving a report at their December 2017 meeting. Chris asked if the proof of concept works, how do we proceed to get funding. Dr. Jon Hare, NEFSC Director, recognized the importance and need for this work but stated that there is no budget for this now and he is not sure how to get funding for this in the future. SK and SCMFIS (Science Center for Marine Fisheries) and other such groups are the most likely source to follow the proof of concept work with a 2-3 year pilot project. There was general agreement to pursue funding to get this work started.

As background, we have included information on increasing catches of snapper grouper species (**Attachment 2**) and coastal migratory pelagic species (**Attachment 3**) in the Mid-Atlantic and New England Council areas of jurisdiction.

Specific points of concern are as follows:

1. What changes need to be made to ongoing data collection programs to collect data on new species as they show up in catches (e.g., blueline tilefish, groupers, king mackerel)? For landings, we need to ensure that these species become a priority for biological sampling via whatever commercial and recreational sampling

programs there are in the MA and NE (for blueline, none of those catches that were landed in NJ were sampled in 2014 because it was not a priority species).

2. How do we ensure such data are made available for stock assessments conducted in the southeast? We need to be able to incorporate some automated or automatic data request for every South Atlantic SEDAR to sift through the NEFSC fishery-dependent and -independent programs to make sure we are capturing whatever might be available (i.e., don't just stop at getting all coastwide landings from ACCSP, or assume a species hasn't made it into those surveys).
3. How do we gain some participation by northeast assessment scientists in assessments conducted in the southeast?
4. Is there a potential for some assessments to be conducted by northeast assessment scientists? If the NRCC schedules an assessment for a typically "southern" species, there needs to be a way for southeast assessment scientists to also participate.
5. How do we ensure recreational and commercial catches in the Mid-Atlantic and New England areas are reported in a timely manner for ACL monitoring by the southeast regional office? Perhaps how the SEFSC is using verified/reported landings from a date certain from the previous year as a means to project what state waters harvests of cobia might be contributing to federal ACLs in the current year would work (**Attachment 4**).

Response to requests 1-5: Chris Moore asked what is the NEFSC's and SEFSC's plan to deal with these species as they move northwards. Dr. Jon Hare said plans are in the works to have a Center-to-Center and Region-to-Region Workshop and they plan to reach out to the 3 Councils and the Commission. Further, the Climate Action Plan calls for these types of Center-to-Center discussions. Dr. Hare said there already been some participation by NEFSC assessment staff in the blueline tilefish SEDAR assessment.

GARFO agreed to look at how to get existing trip reports to address these species. Michael Pentony, Assistant Regional Administrator for Sustainable Fisheries Division, said that under the existing Vessel Trip Report (VTR) requirements, federally permitted vessels (except for clam permits) in New England and the Mid-Atlantic must report all species harvested; they will check to ensure there is a way on the forms for fishermen to report these species.

Note: Chris Moore indicated after the meeting that he has tasked MAFMC staff to work with SAFMC and GARFO staff to get those SAFMC managed species added to the VTR forms. Work on this is ongoing now.

There was general agreement that procedures need to be in place to ensure all harvest in the Mid-Atlantic and New England areas are available for ACL monitoring by the

Southeast. Further, that procedures need to be in place to ensure all fishery dependent and fishery in-dependent data are readily available for SEDAR stock assessments.

Dr. Hare stated that stock ID must be added to the list to be addressed for species as they are being assessed. This will help determine where data needs to be pulled from for stock assessments.

Tom Nies provided information after the meeting on a way to do this, assuming the SEFSC is told about the upcoming assessment. Benchmark/research tack assessments are performed by Stock Assessment Working Groups. See https://www.nefsc.noaa.gov/saw/pdfs/SAW_WG_participation_and_function_FINAL.pdf

Governance Issue: the need to address governance was also discussed. Charlie Phillips and Gregg Waugh noted that the material in the SAFMC overview outlines how the Council provides 2 voting seats for the MAFMC on the South Atlantic Council's Mackerel Cobia Committee in recognition that the Mackerel Cobia Fishery Management Unit includes the Mid-Atlantic Council's area of jurisdiction. In one instance, cobia actions were approved as a Committee of the Whole to allow MAFMC members to vote on final action; the South Atlantic Council also voted to approve all actions. The Dolphin Wahoo Fishery Management Unit covers the entire east coast and so the South Atlantic Council provides one voting seat to each of the Mid-Atlantic and New England Councils on the South Atlantic Council's Dolphin Wahoo Committee. The Snapper Grouper Fishery Management Unit ends at the NC/VA border, however, in recognition of the expansion of snapper grouper species into the Mid-Atlantic, the South Atlantic Council provides one voting seat to the Mid-Atlantic Council on the Snapper Grouper Committee. The South Atlantic Council has written a letter to the Mid-Atlantic Council requesting that the Mid-Atlantic Council request Mid-Atlantic States to implement basic bag and trip limits for snapper grouper species. This type of Council-to-Council involvement and requests to the States for action is one way of dealing with the governance of these species as they move northwards.

Tom Nies, NEFMC Executive Director, asked about requesting the Secretary of Commerce to simply designate the South Atlantic Council as responsible Council for snapper grouper species along the east coast. This was discussed and it was agreed to explore this idea but it was recognized it may not be the best long-term solution as it could lead to conflict between Councils and some of the States. Also, the Councils could not be sure what decision would be made if a request was forwarded to change a Council's authority to manage certain species.

The options of having the Atlantic States Marine Fisheries Commission (ASMFC) change the composition of the South Atlantic Board to address this type of situation was also discussed. Bob Beal, ASMFC Executive Director, said this had been done to some extent for cobia.

Based on discussions among the 3 Councils, it was agreed that a group comprised of each Council's Chair, Vice-Chair, and Executive Director would meet periodically to

coordinate on an approach to address stocks as they move northwards. This group can meet via phone, webinar, and in conjunction with Council Coordination Committee (CCC) meetings. The first such meeting is being scheduled around the February 2017 CCC meeting. This Council group would also meet periodically with the Commission to coordinate State action where appropriate.

Other Items of Interest:

1. **MRIP Update by Dave Van Voorhees** – 2018 will be mail survey only for effort; July 1, 2018 – deadline to provide final calibrated effort and catch statistics to stock assessment scientists; there will be a pilot study in 2018 to test other ways to collect data – we volunteered the South Atlantic as an area to be studied. Once these data are available (July 1, 2018), NMFS will be able to convert the new estimates from the mail survey to the equivalent catch estimates as if under the phone survey so they can be directly compared with the recreational ACLs. The MRIP implementation team needs to work out the details of who does this and the associated deadlines. (NOTE: During 2018, we will not have any estimates of recreational catch that we can compare to our recreational ACLs until after July 1, 2018, and the availability of catch estimates will depend on someone converting the new survey (mail survey for effort) to the old survey.)
2. **Development of Status Determination Criteria (SDC)** – some of the SDC specified by the NEFMC have been disapproved. The SAFMC faced a similar situation for gag, and the NEFMC has also had this happen. New guidance was provided that for the Overfishing Level (OFL), if the scientists don't provide an OFL, then the Council can provide a proxy. The Council's expressed concern about doing this as it is a scientific determination. Dr. John Boreman (MAFMC and SAFMC SSC) also expressed concern.
3. **Fisheries Monitoring: How the various regional fisheries monitoring activities can be coordinated** – the group is trying to find a way to coordinate data. The Atlantic Coastal Cooperative Statistics Program (ACCSP) was suggested as a vehicle. Gregg Waugh stated that the ACCSP is a program that is owned by all of us in partnership, and that especially in this tough funding time, ACCSP should be used rather than spend limited dollars to develop any duplicative programs. There was general agreement that ACCSP should be fully explored to coordinate data storage and it was also noted that ACCSP could help as species move northwards by serving as a repository for all data. The group recognized there are tensions between NMFS Regions/Centers and ACCSP having to do with data ownership, etc. There was general agreement that all such tensions need to be acknowledged, put on the table, and discussed/resolved so that we can all operate as efficiently and effectively as possible.

The group spent some time talking about the need for a unique trip identifier that could be obtained by the fisherman for each trip, and then used by the dealers, observer, etc. to link all data related to a trip. There was general

agreement that this was a very high priority and needed to be completed in the very near future.

4. **Priorities for Assessments** – their process is similar to the SEDAR process but they get many more assessments each year. Some species receive an update and a benchmark in the same year.



August 17, 2016

Dr. Bonnie Ponwith
Southeast Fisheries Science Center
75 Virginia Beach Dr.
Miami, FL 33149

Dr. William Karp
Northeast Fisheries Science Center
166 Water St.
Woods Hole, MA 02543

Dear Dr. Ponwith and Dr. Karp:

As NOAA Fisheries develops priorities for the science enterprise for the next five years as required by Section 404 of the Magnuson Stevens Act and considers how to make the most efficient use of limited resources, we strongly urge you to allocate means for conducting a coastwide, deepwater species survey along the Atlantic coast. The draft Section 404 Report to Congress includes the following items that are directly related to this request:

- Use a national process to expand fishery-dependent and –independent monitoring, including catch, abundance, and biological data collection to increase the number of stocks with adequate assessments;
- Expand surveys of stocks experiencing climate-related distributional shifts. These efforts will support climate-ready fisheries management and ensure long-term sustainability of commercial and recreational fisheries, protected species, and the communities that depend on them;

As you are aware, the Mid-Atlantic and South Atlantic Fishery Management Councils have been grappling with the daunting task of future management of blueline tilefish, a deepwater fishery that has clearly experienced a northward expansion in recent years, yet is data-limited throughout that distribution. Anecdotal information, fishing reports and even recent harvest statistics indicate this is not the only deepwater species for which such expansions are occurring, most certainly due in part to the impacts of climate change. Other examples of data-limited, deepwater species that are susceptible to the effects of climate change include golden tilefish¹, snowy grouper, wreckfish and blackbelly rosefish. Effective coastwide management of the deepwater complex demands an effective fisheries independent data collection system throughout the range of these species.

¹ <https://www.st.nmfs.noaa.gov/ecosystems/climate/northeast-fish-and-shellfish-climate-vulnerability/index>

Over the past year, several efforts have been undertaken to address these data deficiencies: a collaborative deepwater survey design workshop in the South Atlantic with participation by fishermen and scientists to discuss methods, platforms and habitats²; cooperative sampling in portions of both the South and Mid-Atlantic aboard fishing vessels to pilot test gear configurations, depth strata and collect genetic samples; and a Mid-Atlantic Council call for proposals to develop proof-of-concept methods appropriate for bottom types found in throughout that region (<http://www.mafmc.org/newsfeed/2016/request-for-proposals-tilefish-surveying>.) It is our sincere hope that the insight gained from these opportunistic efforts will inform the successful implementation of a coastwide deepwater species survey that efficiently utilizes both industry and research platforms. We urge the agency to work with the councils and regional science centers to develop a long-term plan to implement a coastwide deepwater survey to follow the pilot efforts in the South and Mid-Atlantic.

In addition to the bulleted priorities noted above, the agency has recently issued multiple policy directives that directly support this need and justify the allocation of resources to support it: the Climate Science Strategy and associated regional implementation plans and the Ecosystem-Based Fishery Management Policy and draft Blueprint. The ability of a well-designed survey to address issues of climate-induced distribution shifts and inform our transitions to ecosystem-based fisheries management will ultimately improve our governance and coordination in managing these transboundary species. Our goal is to prevent future scenarios that are driven by lack of effective, coastwide sampling programs.

The development of science priorities through the Section 404 Report, combined with the launch of policies that promote and use large-scale approaches, presents an ideal opportunity for the agency to embark upon a ground-breaking effort that will meet critical data needs and management goals across multiple jurisdictions. We very much appreciate your consideration of our request and look forward to working with you to make this a reality.

Sincerely,



Dr. Michelle Duval
Chair
South Atlantic Fishery Management Council



Michael Luisi
Chair
Mid-Atlantic Fishery Management Council

cc: Dr. Richard Merrick

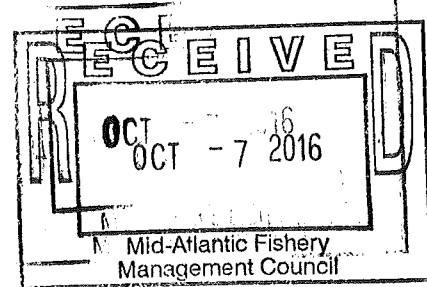
²http://docs.lib.noaa.gov/noaa_documents/NMFS/SEFSC/TM_NMFS_SEFSC/NMFS_SEFSC_TM_685.pdf



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
 Northeast Fisheries Science Center
 166 Water Street
 Woods Hole, MA 02543-1026

September 30, 2016

Michael Luisi
 Chair
 Mid-Atlantic Fishery Management Council
 800 North State Street, Suite 201
 Dover, DE 19901



Michelle Duval, Ph.D.
 Chair
 South Atlantic Fishery Management Council
 4055 Faber Place Drive, Suite 201
 North Charleston, SC 29405

Dear Mike and Michelle:

On behalf of Dr. Bonnie Ponwith, Science and Research Director for the Southeast Fisheries Science Center, and myself, I would like to thank you for your letter, dated August 17, 2017, requesting additional investment by NOAA Fisheries for conducting a coast wide, deepwater species survey along the Atlantic Coast. Our Science Centers share your concern for improving information on important fishery resources in our shared regions and the changing conditions that are challenging our management and science operations.

We appreciate the leadership of both the South and Mid-Atlantic Councils in initiating pilot efforts to better define and explore collaborative deepwater survey design options. We also concur that a consistent multi-jurisdictional approach and long-term plan would be very beneficial. As we finalize our regional Climate Action Plans; and in the case of the NEFSC, transition to new science leadership, we intend to respond to this request more substantively later this fall.

Thank you for communicating this request to our respective Centers. We will follow up with you specific proposed actions in the coming months.

Sincerely,

William A. Karp, Ph.D.
 Science and Research Director
 Northeast Fisheries Science Center

Cc: Jon Hare
 Richard Merrick



Landings of Snapper Grouper Complex Species on the Atlantic coast north of North Carolina

South Atlantic Fishery Management Council
Snapper Grouper Committee
September 2017
Charleston, SC

Introduction

In the South Atlantic region, the Snapper Grouper Complex comprises 55 species and is under the management authority of the South Atlantic Fishery Management Council (SAFMC) in federal waters from the North Carolina/Virginia border south to Key West, Florida. The SAFMC manages black sea bass and scup south of Cape Hatteras, North Carolina. The Mid-Atlantic Fishery Management Council (MAFMC) has management jurisdiction over some snapper grouper species (golden tilefish, scup, and black sea bass) in federal waters north of the North Carolina/Virginia border (north of Cape Hatteras for black sea bass and scup) and through the jurisdiction of the New England Fishery Management Council (NEFMC) to the U.S.-Canada border. The NEFMC does not currently manage any snapper grouper species.

As some species' distributions shift in response to climate change (see Walther et al. 2002, Parmesan and Yohe 2003, Perry et al. 2005, Hickling et al. 2006, Chen et al. 2011, Harball 2013), management agencies should examine the regulations in place and plan for needed adjustments to ensure sustainable fisheries in the future. This document contains background information on landings (commercial and recreational) of snapper grouper species by state from 2010 through 2016 in the Mid-Atlantic and New England regions to inform discussions on addressing this situation. In addition, a summary of management measures applicable to the harvest and possession of snapper grouper species in state waters for states north of North Carolina is included in **Table 1**. The South Atlantic Snapper Grouper Committee/Council will consider working with the MAFMC to have them encourage the states north of North Carolina to potentially implement complementary regulations for snapper grouper species in the Greater Atlantic Region that mirror existing regulations in other Mid-Atlantic states.

Landings of All Snapper Grouper Species in the Mid-Atlantic and New England Regions

Snapper grouper species under federal management in the Mid-Atlantic region include black sea bass, scup, golden tilefish, and blueline tilefish. Black sea bass and scup are managed in cooperation with the Atlantic States Marine Fisheries Commission as a large portion of the landings originates in state waters.

Data from the Atlantic Coastal Cooperative Statistics Survey (ACCSP) were queried to obtain commercial landings of snapper grouper species presented in this document. Commercial landings from 2010 through 2016 were dominated by scup (68%) followed by golden tilefish (18%), and black sea bass (14%). Atlantic spadefish, blueline tilefish,

and triggerfishes comprised the remainder of the commercial catch during that time period (**Figure 1**). Other snapper grouper species were present in small amounts (less than 5,000 pounds whole weight (lbs ww) from 2010 through 2016). Those species, or species groups, include: greater amberjack, snowy grouper, groupers, grunts, hogfish, almaco jack, bar jack, red porgy, banded rudderfish, red snapper, vermilion snapper, snappers, sand tilefish, gray triggerfish, and wreckfish.

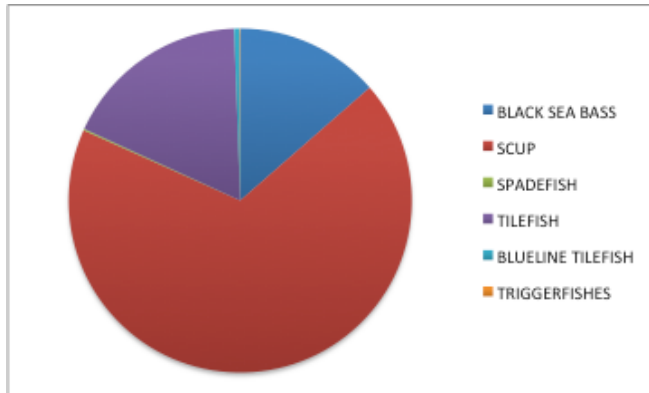


Figure 1. Species composition of commercial landings (lbs ww) of snapper grouper species in Mid-Atlantic region, 2010-2016. Source: ACCSP.

Overall, New York had highest commercial landings over the time period examined, followed by New Jersey (**Figure 2**). Whereas scup comprised the vast majority of the commercial landings in the two states (3.7 and 2 million pounds, respectively), golden tilefish landings figured prominently at about 1.7 and 1.3 million pounds landed in New York and New Jersey, respectively.

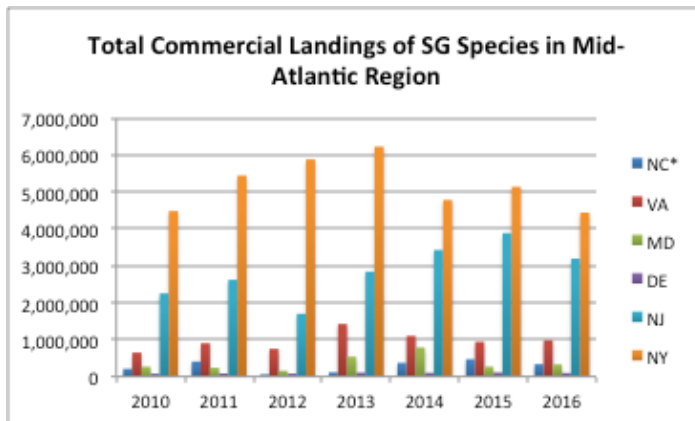


Figure 2. Total commercial landings (lbs ww) of snapper grouper species by state in the Mid-Atlantic region from 2010 through 2016. *Landings of black sea bass and scup north of Cape Hatteras, NC, are included. Source: ACCSP.

Recreational landings trends were examined using data from the Marine Recreational Information Program (MRIP) from 2010 through 2016. Similar to the commercial landings, recreational landings in the region from 2010 through 2016 were comprised mainly of scup (48%) and black sea bass (47%), with Atlantic spadefish, blueline tilefish, gray triggerfish, ocean triggerfish, and golden tilefish making up the remaining 5%

(**Figure 3.**) Other snapper grouper species reported in recreational catches in the Mid-Atlantic region from 2010 through 2016 were almaco jack, banded rudderfish, bar jack, gag, greater amberjack, and lesser amberjack.

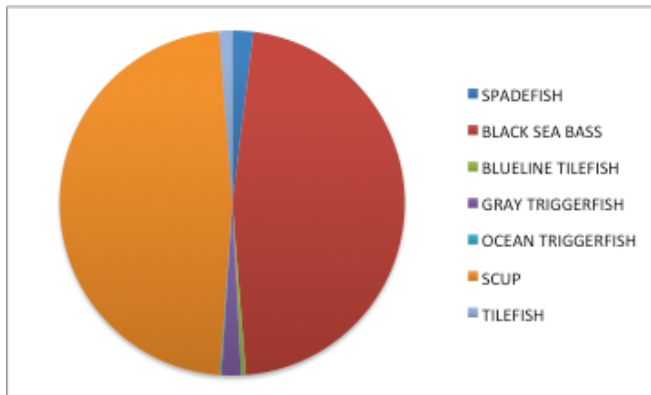


Figure 3. Species composition of recreational landings (lbs ww) of snapper grouper species in Mid-Atlantic region, 2010-2016. Source: MRIP.

Similar to commercial landings, New York had much higher recreational landings than other Mid-Atlantic States from 2010 through 2016, with 2016 being the highest year (**Figure 4**).

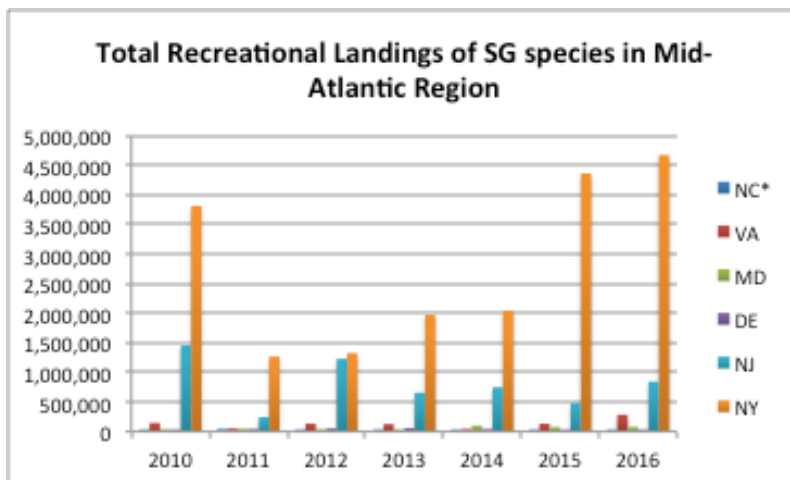


Figure 4. Total recreational landings (lbs ww) of snapper grouper species by state in the Mid-Atlantic region from 2010 through 2016. *Landings of black sea bass and scup north of Cape Hatteras, NC, are included. Source: MRIP.

Along the New England coast, the vast majority of commercial and recreational landings are comprised of scup (93%), while black sea bass make up 6% of the landings, and tilefishes and triggerfishes comprise the remaining 1%. Similarly, recreational landings in New England from 2010 through 2016 were made up almost entirely of scup and black sea bass, albeit black sea bass landings comprised 33%. Rhode Island dominated commercial landings in the New England region from 2010 through 2016 (**Figure 5**) with about 6.6 million pounds landed comprised mainly of scup. Massachusetts had the highest recreational landings during the same time period (about 2.3 million pounds), also comprised mainly of scup (**Figure 5**).

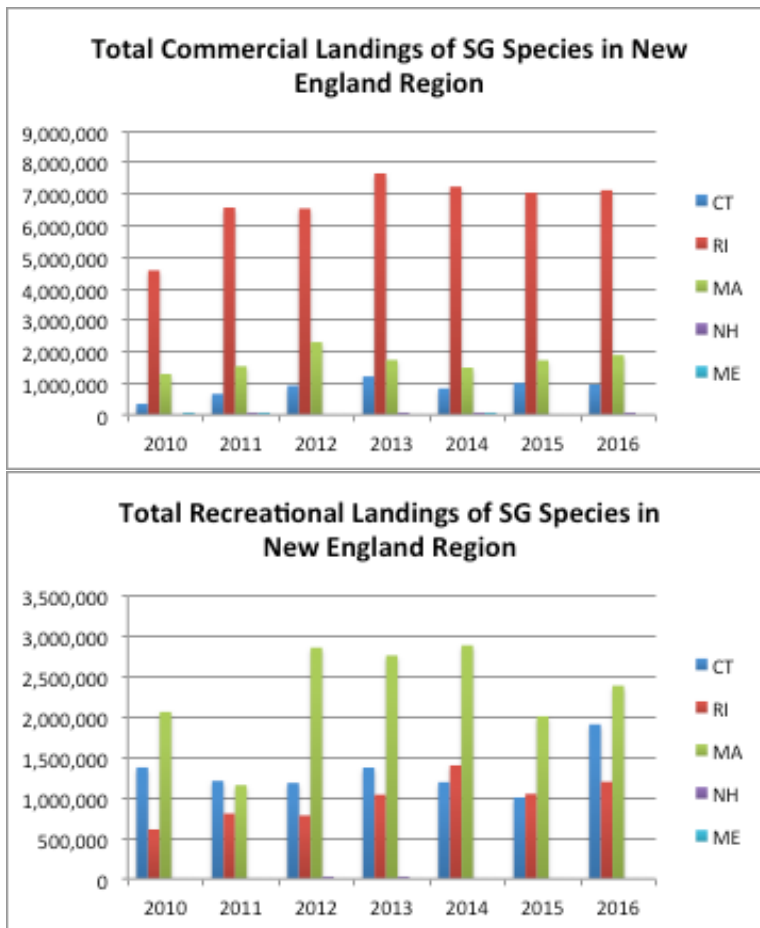


Figure 5. Total commercial and recreational landings (lbs ww) of snapper grouper species by state in the New England Region from 2010 through 2016. Sources: ACCSP & MRIP

Landings of Unmanaged Snapper Grouper Species in the Mid-Atlantic and New England Regions

It is clear from the summary presented above that the bulk of commercial and recreational landings of snapper grouper species in the Mid-Atlantic and New England regions are dominated by black sea bass and scup. To provide focus on species that lack federal management along the Atlantic coast north of the SAFMC's area of jurisdiction, a summary of commercial and recreational landings excluding black sea bass, scup, and golden tilefish is presented below as these are considered separate stocks and are managed accordingly. **Figure 6** shows commercial and recreational landings of snapper grouper species without current federal management in the Mid-Atlantic region from 2010 through 2016.

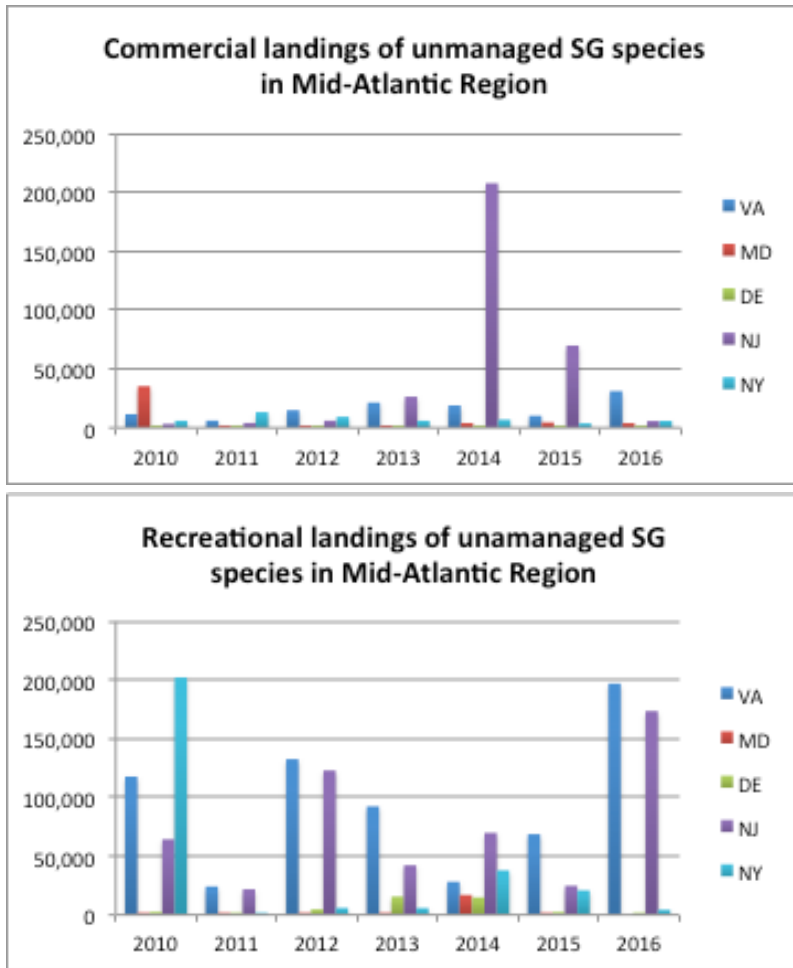


Figure 6. Commercial and recreational landings (lbs ww) of unmanaged snapper grouper species in the Mid-Atlantic region, by state, from 2010 through 2016.

Commercial landings of snapper grouper species that currently lack federal management in the Mid-Atlantic region totaled 541,964 lbs ww from 2010 through 2016 and were highest in New Jersey in 2014 and 2015. The majority of those landings were attributed to blueline tilefish (63%), whereas Atlantic spadefish comprised 18%. Eight percent of the commercial landings comprised triggerfishes (presumably gray triggerfish since that species is well represented in the recreational landings in the Mid-Atlantic region), and 5% was attributed to red porgy. Sand tilefish accounted for about 2% of the commercial landings, with the remaining 4% comprised of amberjack, snowy grouper, groupers, grunts, hogfish, almaco jack, bar jack, banded rudderfish, red snapper, vermilion snapper, snappers, and wreckfish.

The majority of the recreational landings in the Mid-Atlantic region from 2010 through 2016 were comprised of Atlantic spadefish (35%), gray triggerfish (32%), golden tilefish (21%), and blueline tilefish (8%). The remaining 4% was made up of banded rudderfish, bar jack, gag, amberjack, and ocean triggerfish. In total, recreational landings of snapper grouper species that currently lack federal management in the Mid-Atlantic region were 1,519,369 lbs ww from 2010 through 2016. New Jersey and Virginia

reported most of the landings during the time period examined, although recreational landings were high in New York in 2010.

Commercial and recreational landings of unmanaged snapper grouper species in New England are shown in **Figure 7**.

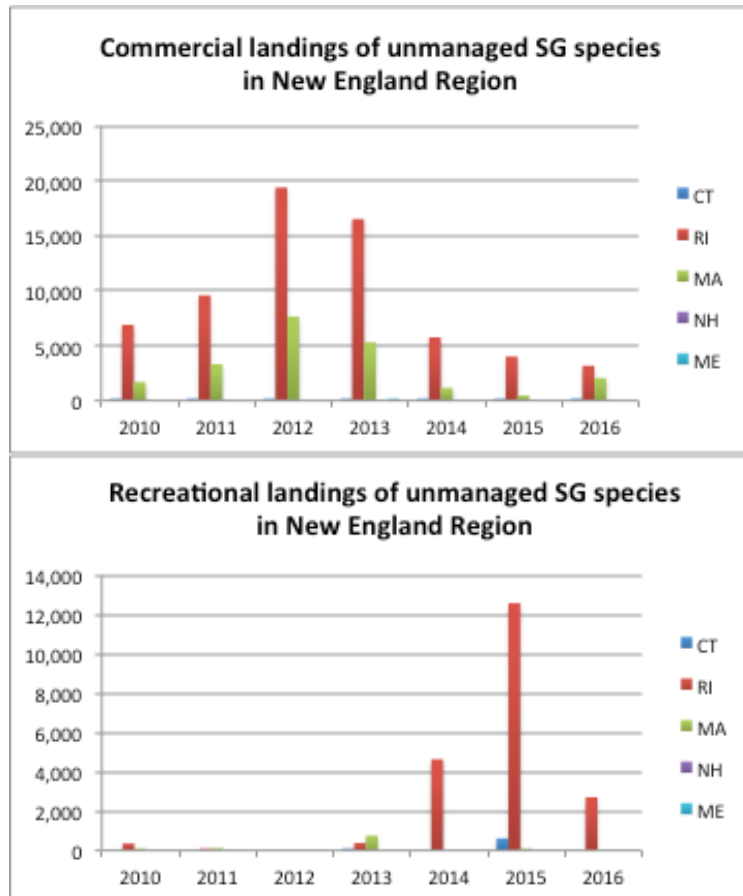


Figure 7. Commercial and recreational landings (lbs ww) of unmanaged snapper grouper species in the New England region, by state, from 2010 through 2016.

In New England, commercial landings of snapper grouper species that lack federal management totaled 87,585 lbs ww from 2010 through 2016 with the state of Rhode Island dominating the landings. In terms of species composition, triggerfishes comprised 79% while blueline tilefish accounted for 16%. The remaining 4% comprised amberjack, snowy grouper, groupers, bar jack, red porgy, banded rudderfish, red snapper, snappers, Atlantic spadefish, sand tilefish, and wreckfish.

Recreational landings of federally unmanaged snapper grouper species in the New England region from 2010 through 2016 totaled 25,525 lbs ww with almost the entirety of those landings reported from Rhode Island from 2014 thorough 2016. Gray triggerfish comprised 96% of the landings. The remaining 4% was made up of almaco jack, banded rudderfish, and ocean triggerfish.

SAFMC Snapper Grouper Species That May Require Management Adjustment

Atlantic Spadefish

Atlantic Spadefish is part of the Snapper Grouper Fishery Management unit for the SAFMC but it is not included in federal fishery management plans in either the Mid-Atlantic or New England regions. Commercial landings of the species in the Mid-Atlantic and New England regions from 2010 through 2016 totaled 96,014 lbs ww mainly in Virginia and Maryland. Recreational landings during the same time period were much higher, totaling 529,828 lbs ww and were mainly from Virginia (99%).

Currently, state regulations are only specified in Virginia waters (**Table 1**). The recreational bag limit is 4 fish per person per day whereas the commercial sector is limited to 6 fish per person per day taken with hook-and-line. In the SAFMC's area of jurisdiction, there are no commercial regulations and the species is included in the recreational 20-fish aggregate bag limit. The SAFMC has recently discussed possibly specifying a bag limit for Atlantic spadefish within the aggregate. The commercial ACL for spadefish in the South Atlantic is 150,552 lbs ww, whereas the recreational sector ACL is 661,926 lbs ww.

Blueline Tilefish

Blueline tilefish landings in the Mid-Atlantic region were insubstantial prior to 2014. Subsequently, commercial landings in New Jersey peaked to about 205,000 lbs ww in 2014 whereas a spike in recreational landings in Virginia was observed in 2016.

A proposed rule to implement Amendment 6 to the MAFMC's Tilefish Fishery Management Plan was published on 6/28/17 to establish management measures and 2017 harvest limits for the blueline tilefish fishery in the Mid-Atlantic region. The MAFMC is proposing establishing a separate management unit for blueline tilefish from the North Carolina/Virginia border northward through Maine that would be managed by the MAFMC. Until a final rule is published, state regulations govern the catch of blueline tilefish. Virginia, Maryland, and Delaware have implemented incidental commercial trip limits of 300 lbs ww and a 7-fish recreational possession limit for all tilefish species combined (**Table 1**). These measures were intended to prevent a large directed commercial fishery and constrain fishing mortality in the recreational fishery. New Jersey also implemented regulations, limiting commercial vessels to 300 lbs (whole weight) of blueline tilefish per trip and recreational fishermen to 7 blueline tilefish per person per trip (**Table 1**). From June 2015 through 2016, emergency measures requested by the MAFMC for federal waters limited commercial landings from Virginia north to 300 lbs ww commercially and 7 fish per person recreationally.

The SAFMC's Scientific and Statistical Committee (SSC) provided an updated blueline tilefish ABC (224,100 lbs ww) and the SAFMC's Regulatory Amendment 25 implemented an ABC and corresponding catch levels and management measures for

blueline tilefish effective July 2016. The total annual catch limit (ACL) for blueline tilefish in the South Atlantic was set at 78% of the stock ABC in order to account for landings in the Mid-Atlantic region.

The MAFMC is funding a pilot survey for blueline and golden tilefish in the Mid-Atlantic to develop better information about the state of the blueline and golden tilefish stocks off the Mid-Atlantic.

The MAFMC and SAFMC are jointly participating in SEDAR 50 to assess the blueline tilefish stock throughout its range, with explicit consideration of the spatial management approach being undertaken by the MAFMC and SAFMC. The assessment results are expected to be reviewed by the Council at the December 2017 meeting. The MAFMC's SSC used a data limited approach to develop an initial ABC for blueline tilefish north of North Carolina of 87,031 pounds, which the MAFMC adopted. The MAFMC's SSC will revisit the blueline tilefish ABC for 2018 at its March meeting.

In the South Atlantic region, commercial harvest of blueline tilefish is restricted to an ACL of 87,521 lbs ww and a trip limit of 300 lbs gw. Recreational harvest is under an ACL of 87,277 lbs ww and possession is limited to 3 fish per person per day May through August only.

Gray Triggerfish

Gray triggerfish are present in both commercial and recreational landings in the Mid-Atlantic and New England regions. From 2010 through 2016, commercial landings totaled 112,089 lbs ww, mainly in Virginia and Rhode Island. Recreational landings totaled 505,978 lbs ww with 63% of the landings reported from New Jersey and 16% from New York. Landings were reported from coastal states from Virginia through Rhode Island. There are presently no federal or state regulations to manage harvest of gray triggerfish in the Mid-Atlantic or New England regions.

In the South Atlantic, gray triggerfish are managed commercially with a combination of trip limits, size limits, and seasons. The commercial fishing year is split into two 6-month seasons, with the commercial ACL (312,304 lbs ww) split evenly between the two seasons. The commercial trip limit is 1,000 lbs ww and the minimum size limit is 12 inches fork length in federal waters off North Carolina, South Carolina, and Georgia and 14 inches fork length in federal waters off east Florida. Recreational harvest is managed with the same minimum size limits as for the commercial sector and a maximum of 20 fish per person per day within the 20-fish aggregate for species without a bag limit. The SAFMC has recently discussed possibly specifying a bag limit for gray triggerfish within the aggregate and lowering the minimum size limit off east Florida to 12 inches fork length. The recreational ACL is 404,675 lbs ww.

Red Porgy

Red porgy were only present in commercial landings during the time period examined. A total of 27,118 lbs ww was reported. New York reported small levels of landings every year, whereas Virginia and Maryland only reported landings in 2016 and

2010, respectively. Highest landings were from Virginia in 2016 when a total of 10,143 lbs ww of red porgy were landed. There is currently no federal or state management of red porgy along the U.S. east coast north of North Carolina.

In the South Atlantic, commercial harvest of red porgy is managed with a 120-fish trip limit from May through December and a minimum size limit of 14 inches total length. There is an annual closure on commercial harvest from January through April. Recreational harvest is limited to 3 fish per person per day (or per trip, whichever is more restrictive), and the recreational minimum size limit is the same as for the commercial sector. The annual catch limit of 164,000 lbs ww is the same for the commercial and recreational sectors.

Snowy Grouper, Groupers, Snappers, and Wreckfish

As with red porgy, these species were only reported in commercial landings in the Mid-Atlantic and New England regions from 2010 through 2016. A total of 3,392 lbs ww of snowy grouper was reported mainly from New Jersey. Landings of other grouper species (excluding wreckfish) totaled 5,556 lbs ww, also mainly in New Jersey with some landings reported from Virginia and Rhode Island. Total commercial landings of snappers were 2,256 lbs ww mainly from New Jersey and New York. Wreckfish landings totaled 3,958 lbs ww mainly from New Jersey.

Of the Mid-Atlantic and New England states, only Maryland and Virginia have implemented regulations on the harvest of these species (**Table 1**): commercial harvest of groupers (including snowy grouper and wreckfish) is limited to 175 lbs whereas recreational harvest is restricted to 1 fish per person per day. Harvest of snappers is only regulated for the recreational sector in Maryland where fishermen are restricted to 20 fish per person per day. Anecdotal information (fishing forums, social media, magazine articles) suggests that recreational harvest of some of these species (i.e., snowy grouper) is taking place north of the SAFMC's area of jurisdiction but the species have a low rate of encounters in the MRIP survey.

In the South Atlantic, commercial and recreational regulations are in place for all of these species as follows:

Snowy grouper – commercial ACL = 135,380 lbs gutted weight (gw); 200 lbs gw trip limit. Recreational ACL = 4,819 fish; limit 1 snowy grouper per vessel per day May through August only.

Groupers – commercial and recreational ACLs for gag, red grouper, black grouper, Shallow Water Grouper Complex (scamp, red hind, rock hind, coney, graysby, yellowfin grouper, and yellowmouth grouper), and Deepwater Complex (yellowedge grouper, silk snapper, misty grouper, queen snapper, sand tilefish, and black fin snapper). Trip limit with step-down for gag, commercial and recreational minimum size limits for gag, red grouper, and black grouper. Spawning season closure (January through April) for Shallow Water Groupers. Recreational aggregate bag limit of 3 per person per day but no more than 1 can be gag or black grouper. No harvest of speckled hind, warsaw grouper, Nassau grouper, or goliath grouper.

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Snappers – commercial and recreational ACLs for vermilion snapper, Snappers Complex (gray snapper, lane snapper, cubera snapper), and yellowtail snapper. No harvest of red snapper in federal waters. Commercial split season and trip limit for vermilion snapper. Commercial and recreational minimum size limit for vermilion snapper and bag limit of 5 per person per day. Commercial and recreational minimum size limits for yellowtail snapper and recreational bag limit of 10 per person per day within the 10-snapper aggregate.

Wreckfish – commercial harvest managed through Individual Transferable Quota (ITQ) program. Recreational harvest only allowed July and August. Recreational ACL and limit of 1 wreckfish per vessel per day.

Summary of Recreational and Commercial Regulations for Snapper Grouper Species in Mid-Atlantic and New England Coastal States

July 2017

Table 1. Summary of commercial and recreational regulations by state in the Mid-Atlantic and New England regions.

State	Species	Current Regulations	
		Recreational	Commercial
ME	Black sea bass	10 fish pp/d 13 inches Open May 19 - Sept 21 & Oct 18 – Dec 31	50 lbs 13 inches Hook-and-line only ASMFC specifies quota by May 1. Closed in state waters when quota reached.
NH	Black sea bass	10 fish pp/d 13 inches	11 inches
MA	Black sea bass	5 pp/d 15 inches Open May 21 – Aug 31	12 inches Weirs: calendar year & no daily limit All gear except weirs: Jan 1 - Mar 31, 100 lbs Fish pots: Jul 9 until quota met, 300 lbs Hook-and-line & mobile gear: Jul 9 until respective quota met, 150 lbs Open fishing days: Sun, Tue, Wed
	Scup	Private rec: 10 inches, 30 fish or 15 per vessel if 5+ anglers on board, open May 1 – Dec 31 For-hire (bonus): 10 inches, 45 fish, May 1- Jun 30 For-hire (regular): 10 inches, Jul 1- Dec 31, 30 fish	*See additional table

Table 1. Continued.

State	Species	Current Regulations	
		Recreational	Commercial
RI	Black sea bass	15 inches May 25 - Aug 3: 3 fish pp/d Sept 1- Sept 21: 7 fish pp/d Oct 22 – Dec 31: 7 fish pp/d	11 inches Quota established annually allocated by the ASMFC and/or NMFS. Jan 1 – Apr 30: 25% of quota, 750 lbs per vessel per week. May 1– Jun30: 25% of quota, 50 lbs per vessel per day. Closed on Fridays. Jul 1 – Jul 31: 19.5% of quota, 50 lbs per vessel per day. Closed on Fridays. August 1 – September 14: Closed. Sept 15 – Oct 31: 19.5% of quota, 50 lbs per vessel per day. Closed on Fridays. Nov 1- Dec 31: 11% of quota, 100 lbs per vessel per day
	Scup	10 inches Open May 1 - Dec 31 30 pp/d For-hire: May 1 – Aug 31: 30 pp/d Sept 1- Oct 31: 45 pp/d Nov 1 – Dec 31: 30 pp/d	9 inches Quota established annually by ASMFC and/or NMFS Winter I sub-period (Jan – Apr): 50,000 pounds per vessel per day, decreasing to 1,000 once 80% of Winter I coastwide Scup quota has been met. Summer - Fall sub-period (May - Oct): General Category (gear types other than floating fish traps): 40% of sub-period quota for all gear types except floating fish traps, which has sub-period allocations and possession limits. Floating fish trap: 60% of the sub-period quota. There is an in-season re-allocation procedure and reporting requirements. Winter II (Nov 1 – Dec): 2,000 pounds per vessel per day, decreasing to 500 pounds per vessel per day once 70% of the federal Winter II coastwide Scup quota has been met.

Table 1. Continued.

State	Species	Current Regulations	
		Recreational	Commercial
CT	Black sea bass	15 inches 5 fish pp/d Open May 1 – Dec 31 For-hire: 8 pp/d	11 inches 50 lbs Endorsement required including from lobster traps (10 fish)
	Scup	10 inches 30 pp/d Open May 1 – Dec 31 For-hire: 45 pp/d Sept 1- Oct 31	9 inches 200 lbs or 20 fish Endorsement required May – Oct 31 except under restricted commercial license (20 fish) or lobster fishery (10 fish)
NY	Black sea bass	15 inches Jun 27 – Aug 31: 3 fish pp/d Sept 1 – Oct 31: 8 fish pp/d Nov 1 – Dec 31: 10 fish pp/d	11 inches 50 lbs per day (July 25: 30 lbs)
	Scup	10 inches 30 fish pp/d Open May 1 – Dec 31 For-hire: 45 fish pp/d Sept 1 – Oct 31	9 inches 800 lbs (July 25: 210 lbs)

Table 1. Continued.

State	Species	Current Regulations	
		Recreational	Commercial
NJ	Black sea bass (pending approval)	12.5 inches 10 pp/d May 26 – June 18 2 pp/d July 1 – Aug 31	11 inches Without NJ Black Sea Bass Permit: 100 lbs Jan 1 - March 31, or 50 lbs Apr 1 - Dec 31 and provided the amount landed does not exceed 10% of the total weight of all species landed and sold. Quota determined annually by ASMFC. 10% of quota set aside for bycatch Quota divided into six seasons (January to February; March to April; May to June; July to August; September to October; and November to December). All commercial landings are applied to the annual quota. Daily trip limits and the number of landings a vessel may make in any one- or two-week period are established for each season.
	Scup	9 inches 50 pp/d Open Jan 1 – Feb 28 & July 1 – Dec 31	9 inches Annual coastwide quotas and daily trip limits (set by ASMFC and/or NMFS but no more than NJ limit): Jan 1 - Apr 30 & Nov 1 - Dec 31 New Jersey scup quota: May 1 - October 31, 5,000 lbs trip limit.
	Blueline tilefish	7 pp per trip	300 lbs (ww) Jan 1 - Dec 31. Any vessel landing blueline tilefish from the EEZ must hold a valid Northeast open access golden tilefish vessel permit.
DE	Black sea bass	12.5 inches 15 pp/d Open May 15 - Sept 21 & Oct 22 – Dec 31	11 inches
	Scup	8 inches 50 pp/d	9 inches
	Tilefish (blueline and golden)	7 pp/d in any combination	

Table 1. Continued.

State	Species	Current Regulations	
		Recreational	Commercial
MD	Black sea bass	12.5 inches 15 pp/d Open May 15 - Sept 21 & Oct 22 – May 14	11 inches Trip limit: quotas by permit. Without permit: 50 lbs
	Groupers ¹	1 pp/d Year round	175 lbs Allowable gear: hook-and-line, net, pot, trap, trotline, seine.
	Scup	8 inches 50 pp/d Year round	9 inches Allowable gear: hook-and-line, net, pot, trap, trotline, seine. Federal trip limits announced annually Federal permit required.
	Snappers ²	20 pp/d in aggregate Year round	
	Tilefishes	7 pp/d in aggregate Year round	300 lbs ww of golden tilefish, blueline tilefish, and sand tilefish combined.
VA	Black sea bass	12.5 inches 15 pp/d Open May 15 – Sept 21 & Oct 22 – Dec 31	11 inches Permit and IFQ Without IFQ: 200 lbs + NC trip limit OR 1,000 lbs + NC trip limit as long as total weight does not exceed 10% of total weight of summer flounder, scup, longfin squid, and Atlantic mackerel OR 100 lbs + NC trip limit once 75% of bycatch quota is met
	Groupers ¹	1 pp/d Permit and reporting required	175 lbs
	Scup	8 inches 30 pp/d	9 inches Jan – Apr: 50,000 lbs per 7-day period beginning on Jan 1; step-down to 1,000 lbs when 80% of coastwide quota is met May – Oct: quota = 11,812 lbs Nov – Dec: quota = 18,000 lbs
	Spadefish	4 pp/d	6 pp/d taken with hook-and-line
	Tilefishes	7 pp/d permit and reporting required	Tilefish species trip limit: 500 lbs ww (445 lbs gw) Blueline tilefish: 300 lbs ww (273 lbs gw)

¹ Groupers (Black grouper, Coney, Gag, Goliath grouper, Graysby, Misty grouper, Nassau grouper, Red grouper, Red hind, Rock hind, Scamp, Snowy grouper, Speckled hind, Tiger grouper, Warsaw grouper, Wreckfish, Yellowedge grouper, Yellowfin grouper, and Yellowmouth grouper) (last updated 1/7/2013)

² All other species currently in SG Complex, including red snapper.

Massachusetts Commercial Regulations for Scup:

Gear/Fishery	Season	Size Limit	Possession Limit
Winter I	Jan 01 – Apr 30	9 in.	50,000 lb.
Fish Weir	May 01 – Quota Dep.	9 in.	No Daily Limit
Trawlers	May 01 - Quota Dep.	9 in.	10,000 lb. weekly limit
Non-Trawl	May 01 – May 31	9 in.	800 lb.
Non-Trawl	Jun 01 – Jun 30	9 in.	400 lb.
Non-Trawl	Jul 01– Quota Dep.	9 in.	1,500 lb.
Winter II	Nov 01 – Quota Dep.	9 in.	TBD

Fish weirs are not subject to daily trip limits or closed fishing days. However, the combined landings of all fish weirs are subject to a 300,000-pound annual quota allocation.

Trawlers may land scup 7-days per week.

Hook and line and trap fishermen may land scup Sunday - Thursday during May; Sunday, Tuesday and Wednesday in June; and 7-days per week beginning on July 1.

The Winter I and Winter II periods are managed by the federal government and seasons and limits are set by NMFS and complemented by DMF.

References:

Chen, I-C., J. K. Hill, R. Ohlemüller, D. B. Roy, and C. D. Thomas. 2011. Rapid range shifts of species associated with high levels of climate warming. *Science* 333: 1024-1026.

Harball, E. 2013. Climate Change Shifts Range and Behavior of Ocean Species. *Scientific American*. Available at: <https://www.scientificamerican.com/article/climate-change-shifts-range-and-behavior-of-ocean-species/>

Hickling, R., D.B. Roy, J.K. Hill, R. Fox, and C.D. Thomas. 2006. The distributions of a wide range of taxonomic groups are expanding polewards. *Glob. Change Biol.* 12: 450-455.

Parmesan, C. and G. Yohe. 2003. A globally coherent fingerprint of climate change impacts across natural systems. *Nature* 421: 37-42.

Perry, A. L., P. J. Low, J. R. Ellis, and J. D. Reynolds. 2005. Climate Change and Distribution Shifts in Marine Fishes. *Science* 308: 1912-1915.

Walther, G-R., E. Post, P. Convey, A. Menzel, C. Parmesan, T. J.C. Beebee, J-M Fromentin, O. Hoegh-Guldberg, and F. Bairlein. 2002. Ecological responses to recent climate change. *Nature* 416: 389-395.

Landings of Coastal Migratory Pelagics on the Atlantic coast north of North Carolina

South Atlantic Fishery Management Council
Northeast Regional Coordinating Council
November 15-16, 2017
Baltimore, MD

Introduction

In the South Atlantic region, king mackerel, Spanish mackerel, and cobia are managed jointly by the South Atlantic Fishery Management Council (South Atlantic Council) and the Gulf of Mexico Fishery Management Council (Gulf Council), in consultation with the Mid-Atlantic Fishery Management Council (Mid-Atlantic Council), through the Coastal Migratory Pelagics Fishery Management Plan (CMP FMP). All three CMP species are managed as two separate migratory stocks: a Gulf migratory stock and an Atlantic migratory stock. This report focuses on Atlantic migratory stocks only. Atlantic king and Spanish mackerel are managed by the South Atlantic Council, in consultation with the Mid-Atlantic Council, from the Miami-Dade/Monroe county line in Florida through the Mid-Atlantic Council's jurisdiction that ends at the New York/Connecticut line. Atlantic cobia is managed by the South Atlantic Council, in consultation with the Mid-Atlantic Council, from the Florida/Georgia line through the Mid-Atlantic Council's jurisdiction. The New England Fisheries Management Council (New England Council) has jurisdiction from the New York/Connecticut line to the U.S./Canada border, but does not currently manage any of the CMP FMP species.

As species distributions shift in response to climate change, management agencies will need to reevaluate their current management structures to determine if adjustments are needed to ensure the long-term stability of fisheries in the future (Chen et al. 2011, Cheung et al. 2010, Hollowed et al. 2013, Parmesan and Yohe 2003, Perry et al. 2005, Roessig et al. 2004). Research on how climate change will impact the species within the CMP FMP specifically is limited, but does indicate potential distribution shifts toward the Mid-Atlantic and New England regions (Hare et al. 2016, Najjar et al. 2010). 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 are able to make motions and vote on motions, at the committee level. Special provisions have been adopted in the past for Atlantic cobia whereby the Mackerel Cobia Committee voted as a committee of the whole to give these two individuals voting rights at the Council level. (Note: For Snapper Grouper, the South Atlantic Council provides one voting seat to the Mid-Atlantic Council on the Snapper Grouper Committee. Also, for Dolphin Wahoo, the South Atlantic Council provides one voting seat to each of the Mid-Atlantic and New England Councils on the Dolphin Wahoo Committee.) The South Atlantic Council uses this approach to provide the Mid-Atlantic and New England Councils input on fishery management plans as species move northwards into their areas of jurisdiction.

This report contains background information on commercial and recreational landings of CMP FMP species through the Mid-Atlantic and New England regions. Additionally, management measures related to CMP species north of North Carolina are summarized.

Landings of Coastal Migratory Pelagics species in the Mid-Atlantic

All three CMP species are under federal management in Mid-Atlantic region. Atlantic Spanish mackerel is cooperatively managed with the Atlantic States Marine Fisheries Commission (Commission). In April 2018, the Commission will begin managing Atlantic cobia in state waters. The South Atlantic Council is currently drafting an amendment that considers both removal of Atlantic cobia from the CMP FMP or collaborative management with the Commission.

Data from the Atlantic Coastal Cooperative Statistics Program (ACCSP) were queried to obtain commercial landings of CMP species. Recreational landings were examined using data from the Marine Recreational Information Program (MRIP). To preserve confidentiality, commercial landings from Maryland and Delaware have been combined. Commercial landings are reported in pounds whole weight, recreational landings are reported in number of fish. From 2010 through 2016, commercial landings of CMP species in the Mid-Atlantic averaged 43,647 pounds per year, average recreational landings were 51,762 fish per year.

Commercial

Commercial landings of CMP species in the Mid-Atlantic region from 2003 through 2009 were dominated by Atlantic Spanish mackerel (91%), followed by Atlantic cobia (7%) and Atlantic king mackerel (2%). Atlantic Spanish mackerel still covered a majority of the landings from 2010 through 2016 (59%), however Atlantic cobia comprised a larger portion of CMP landings (41%). Atlantic king mackerel continued to account for only a small portion of CMP landings (1%) (**Figure 1**).

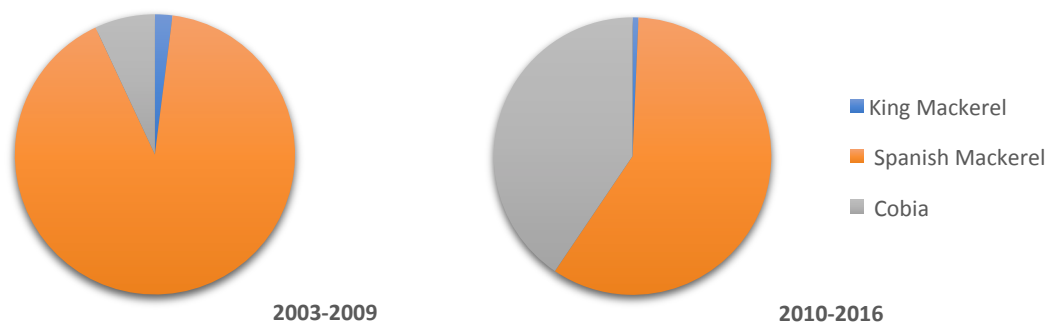


Figure 1. Species composition of commercial landings of coastal migratory pelagics in the Mid-Atlantic region, 2003-2016. Source: ACCSP.

From 2010 through 2016, Virginia had the highest commercial landings of CMP species in the Mid-Atlantic region, with an annual average of 252,862 pounds landed. The other four Mid-Atlantic states saw similar landings over the same time period with average annual landings as follows: Maryland and Delaware (2,978 pounds), New Jersey (1,784 pounds) and New York (2,763 pounds) (**Figure 2**). In Virginia landings were primarily comprised of Atlantic cobia. Alternatively, landings in Maryland, Delaware, New Jersey, and New York were primarily comprised of Atlantic Spanish mackerel.

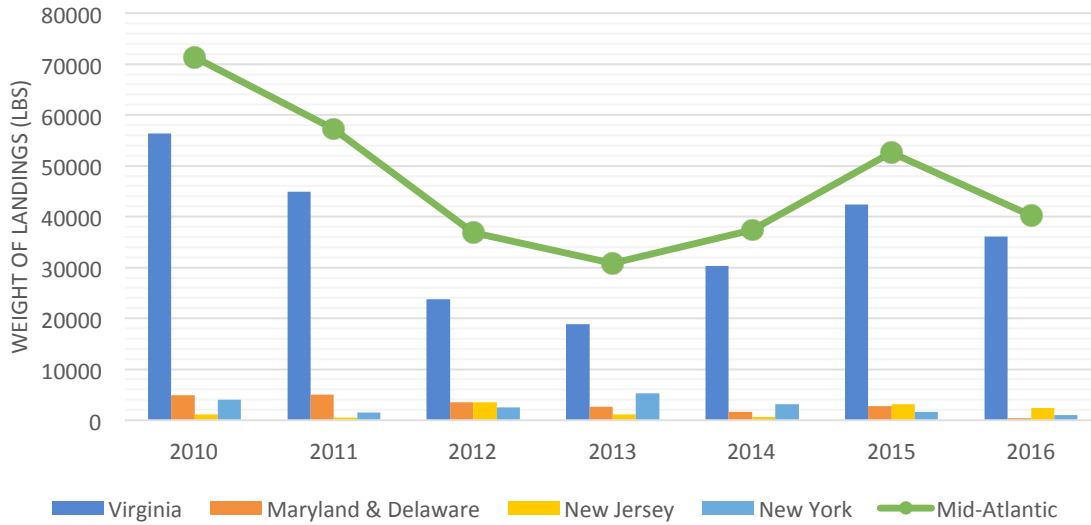


Figure 2. Total commercial landings (lbs ww) of coastal migratory pelagics by state in the Mid-Atlantic Region, 2010-2016. Source: ACCSP.

Recreational

Recreational landings of CMP species in the Mid-Atlantic region from 2003 through 2009 were dominated by Atlantic Spanish mackerel (69%), followed by Atlantic cobia (28%), and finally Atlantic king mackerel (2%). This corresponds to an annual average of 33,739 Atlantic Spanish mackerel, 10,957 Atlantic cobia, and 995 Atlantic king mackerel. Recreational landings were similar from 2010 through 2016 with Atlantic Spanish mackerel dominating (78%), followed by Atlantic cobia (22%), and finally Atlantic king mackerel (0.05%) (**Figure 3**). This corresponds to an annual average of 40,281 Atlantic Spanish mackerel, 11,448 Atlantic cobia and 33 Atlantic king mackerel.

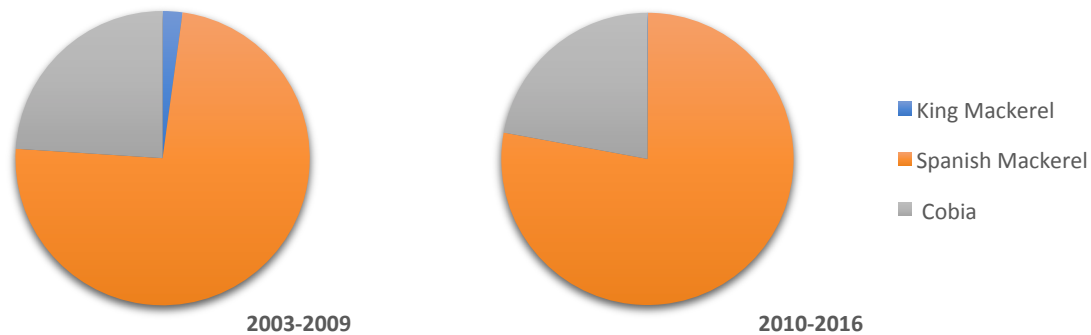


Figure 3. Species composition of recreational landings of coastal migratory pelagics in the Mid-Atlantic region, 2003-2016. Source: MRIP.

Overall, Virginia has the highest recreational landings of CMP species from 2010 through 2016, with an annual average of 44,263 fish. Following was Maryland with an annual average of 7,200 fish. Delaware and New Jersey both had an annual average of less than 500 fish (**Figure 4**). New York has had no recreational landings of CMP species since 2002. Landings from 2003-

2009 were similar with Virginia also seeing the highest recreational landings with an annual average of 33,316 fish. Spanish mackerel was the primary species landed recreationally in all the Mid-Atlantic states. In Virginia, Atlantic cobia also comprised a substantial portion of recreational landings.

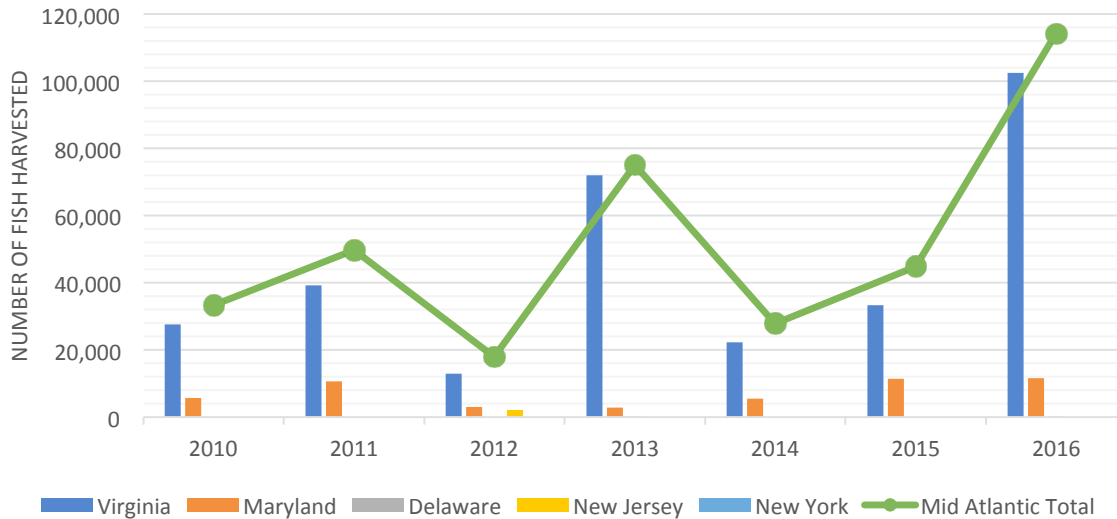


Figure 4. Total recreational landings (# of fish) of coastal migratory pelagics by state in the Mid-Atlantic region, 2010-2016. Source: MRIP.

Landings of Coastal Migratory Pelagics species in New England

There is no management of any CMP species in federal waters in the New England region. Atlantic Spanish mackerel is managed by the Commission in state waters. In April 2018, the Commission will begin managing Atlantic cobia in state waters.

Data from the Atlantic Coastal Cooperative Statistics Program (ACCSP) were queried to obtain commercial landings of CMP species. Recreational landings were examined using data from the Marine Recreational Information Program (MRIP). Commercial landings are reported in pounds whole weight, recreational landings are reported in number of fish. Due to sporadic landings and confidentiality concerns, New England recreational landings were examined over a twenty-year period from 1996 through 2016. During that time the average commercial landings of CMP species in New England was 3,424 pounds per year¹, average recreational landings were 620 fish per year.

Commercial

Commercial landings of CMP species in the New England region from 2003 through 2009 were dominated by Atlantic Spanish mackerel (63%) followed by Atlantic king mackerel (26%) and Atlantic cobia (11%). From 2010 through 2016 Atlantic Spanish mackerel continued to

¹ Landings of Atlantic king mackerel in Massachusetts in 2007 were anomalous, to avoid skewed data an average of commercial Atlantic king mackerel landings reported in the state the previous five years was used to represent 2007 landings for Massachusetts.

comprise a majority of the landings (80%), followed by Atlantic cobia (18%). Atlantic king mackerel comprised a smaller portion of the landings (2%) (**Figure 5**).

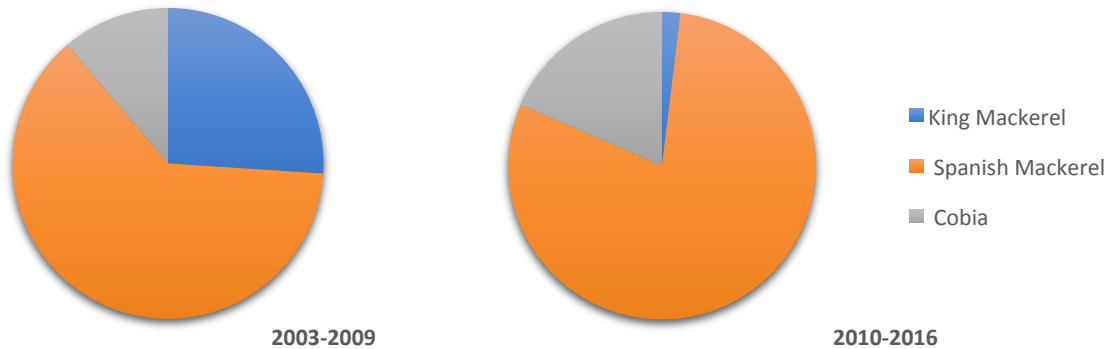


Figure 5. Species composition of commercial landings of coastal migratory pelagics in the New England region, 1996-2016. Source: ACCSP.

Due to confidentiality issues, commercial landings by New England state are not presented for individual years. **Figure 6** illustrates the proportion of landings that can be attributed to each state from 2003-2009 and 2010-2016. From 2003 through 2009, Rhode Island was the primary state landings CMP species (74%), followed by Massachusetts (26%). From 2010 through 2016, Rhode Island continued to be the primary state landing CMP species (86%). Unlike the previous years, Connecticut was shown to have landings (11%), followed by Massachusetts (3%).

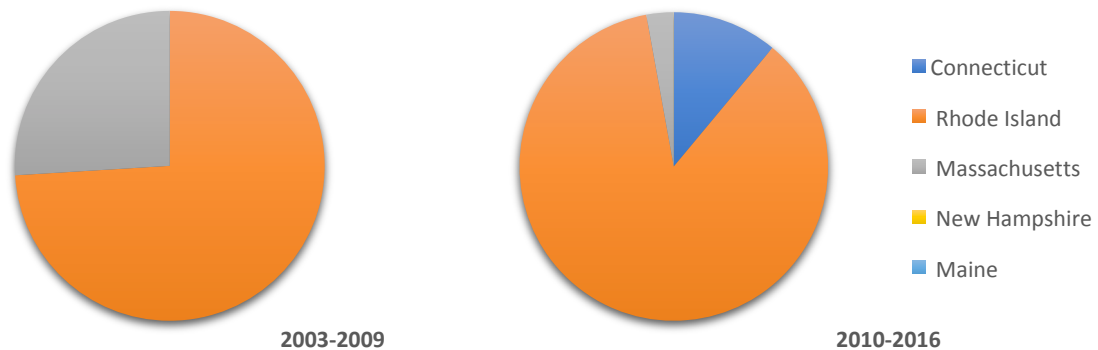


Figure 6. Commercial landings of coastal migratory pelagics in the New England region by state, 2003-2016. Source: ACCSP.

In the New England region, commercial landings of CMP species remain relatively low, with sporadic increases, usually lasting a few years. Total commercial landings of CMP species in the New England region from 2010 through 2016 vary between 184 pounds (2015) and 2,353 pounds (2012) (**Figure 7**). This is similar to 2003-2009 that saw landings between 411 pounds (2009) and 6,625 (2004).

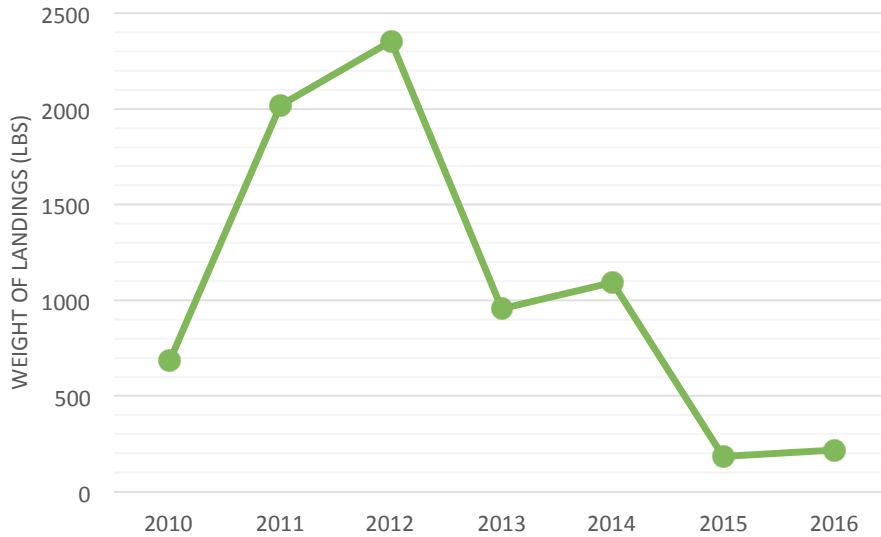


Figure 7. Total commercial landings (lbs ww) of coastal migratory pelagics in the New England region, 2010-2016. Source: ACCSP.

Recreational

Recreational landings of CMP species in the New England region from 1996 through 2016 were dominated by Atlantic Spanish mackerel (82%), followed by Atlantic king mackerel (18%). There have been no recorded recreational landings of Atlantic cobia in the New England region (**Figure 8**).

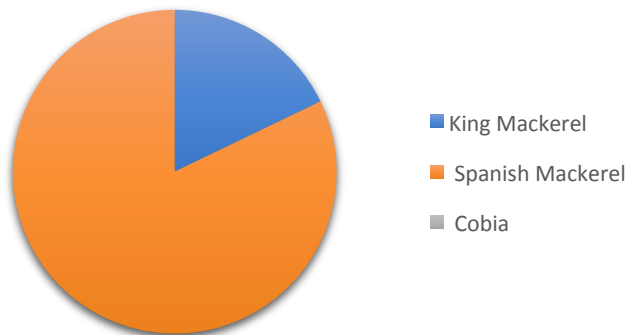


Figure 8. Species composition of recreational landings of coastal migratory pelagics in the New England Region, 1996-2016. Source: MRIP.

Recreational landings in the New England region are sporadic with some years seeing 2,000+ fish landed, followed by years with no recorded landings. From 1996 through 2016, seven years saw recreational landings of CMP species. Over those seven years, recreational landings ranged from 145 fish to 3,404 (**Figure 9**).

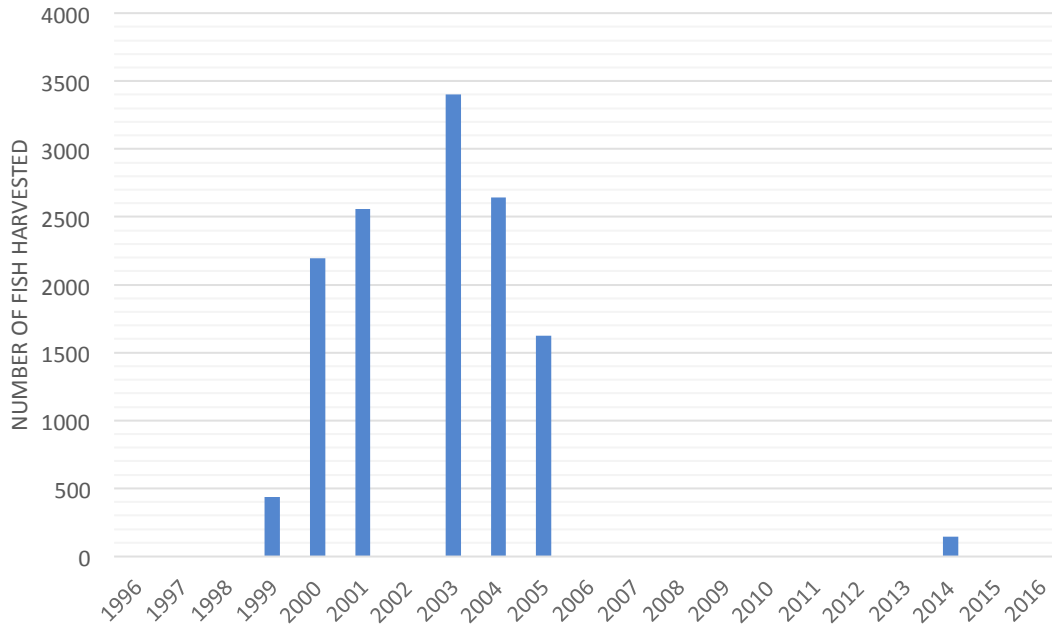


Figure 9. Total recreational landings (# of fish) of coastal migratory pelagics in the New England Region, 1996-2016. Source: MRIP.

Current Management of Coastal Migratory Pelagics

Atlantic king mackerel

Commercial landings in the Mid-Atlantic and New England regions from 2010 through 2016 totaled 2,252 pounds with Virginia and Rhode Island experiencing the highest landings. Recreational landings during the same time period totaled 233 fish with Virginia experiencing the highest landings, and no landings from the New England region.

Atlantic king mackerel is currently managed in federal waters by the South Atlantic Council, in consultations with the Mid-Atlantic Council, through the Mid-Atlantic Council's jurisdiction, but it is not included in a federal fishery management plan for the New England region. The commercial annual catch limit (ACL) is 5,900,000 pounds and the recreational ACL is 6,580,000 pounds. Commercial Atlantic king mackerel is managed through a Northern and Southern zone. The Northern Zone area extends from the North Carolina/South Carolina line through New York. The Northern Zone commercial trip limit is 3,500 pounds. The recreational trip limit is 3-fish per person from Georgia through New York. The minimum size limit is 24" fork length (FL) for both commercial and recreational harvest. Currently, regulations in state waters are only established in Virginia, New York, and New Jersey (**Table 1**).

Anecdotal information from fishing reports and magazine articles indicates that Atlantic king mackerel are becoming more common in Mid-Atlantic and New England waters. In New England, juvenile Atlantic king mackerel have been reported showing up off Cape Cod (Fee 2017, Williams 2017). In Virginia, the once sporadic Atlantic king mackerel catch is reportedly becoming more consistent (Lancaster 2007, Tolliver 2015).

Atlantic Spanish mackerel

Commercial landings in the Mid-Atlantic and New England regions from 2010 through 2016 totaled 185,516 pounds with Virginia and Rhode Island experiencing the highest landings. Recreational landings during the same time period totaled 282,112 fish with Virginia and Massachusetts experiencing the highest landings.

Atlantic Spanish mackerel is currently managed in federal waters by the South Atlantic Council, in consultation with the Mid-Atlantic Council, through the Mid-Atlantic Council's jurisdiction, but is not included in a federal fishery management plan in New England. The commercial ACL is 3,330,000 pounds and the recreational ACL is 2,727,000 pounds. Commercial Atlantic Spanish mackerel is managed through a Northern and Southern zone. The Northern Zone area extends from the North Carolina/South Carolina line through New York. The Northern Zone commercial trip limit is 3,500 pounds. The recreational bag limit is 15-fish per person per day and cannot be combined with any state bag limit. The minimum size limit for commercial and recreational fisheries is 12" FL.

The Commission has had an FMP for Atlantic Spanish mackerel since 1990. Currently, state regulations must meet the following requirements: 12" FL minimum size, 3,500 lbs commercial trip limit (Georgia to New York), and 15-fish per person recreational bag limit. If the ACL is exceeded, and the stock is overfished, the commercial and recreational quota will be decreased the following year. Currently, all Mid-Atlantic region states have the above regulations implemented (**Table 1**). The Commission recommends that states not in the defined management unit implement complementary regulations; however, no New England states have implemented regulations for Atlantic Spanish mackerel. There is an addendum to the Commission's Spanish mackerel FMP that would allow states to reduce the minimum size limit to 11.5" FL for the commercial pound net fishery. However, no states north of North Carolina have asked to implement this addendum.

Anecdotal information indicates that Atlantic Spanish mackerel have become relatively common in the Mid-Atlantic and increasingly common in New England. Magazine articles indicated that during warm years Atlantic Spanish mackerel can be found as far north as New Jersey and will likely become common in Chesapeake Bay over the next decade (D'Angelo 2014, Murray 2015, Watterson 2014). In New England, warmer waters over the last few years have brought Atlantic Spanish mackerel to Long Island Sound and the Massachusetts coast in early Fall (Conery 2016, Madison 2016).

Atlantic cobia

Commercial landings in the Mid-Atlantic and New England regions from 2010 through 2016 totaled 125,273 pounds with Virginia and Rhode Island experiencing the highest landings. Recreational landings during the same time period totaled 80,134 fish with Virginia experiencing the highest landings, and no landings in the New England region.

Atlantic cobia is currently managed by the South Atlantic Council from Georgia through the Mid-Atlantic Council's jurisdiction. Recently, overharvest of Atlantic cobia has become a

substantial management problem. The ACL was exceeded in 2015 resulting in a shortened recreational season in federal waters for 2016. Federal waters closed to recreational harvest on June 20, 2016; however, Virginia and North Carolina kept their state waters open through August and September, respectively. Again, Atlantic cobia landings exceeded the ACL and the 2017 season was shortened, with recreational harvest in federal waters closing on January 24, 2017.

During this time, the South Atlantic Council, through CMP Framework Amendment 4, implemented management measures aimed at reducing the rate of harvest to avoid exceeding the ACL in the future. Commercial harvest is now limited to 2-fish per person per day or 6-fish per vessel per day, whichever is more restrictive, with a minimum size limit of 33" FL. Recreational harvest is limited to 1-fish per person per day or 6-fish per vessel, whichever is more restrictive, with a minimum size of 36" FL. Currently, Virginia, New Jersey, and New York are the only states north of North Carolina with regulations for Atlantic cobia in state waters. New Jersey and New York both have recreational trip limits of 2-fish per person per day with a minimum length of 37" TL. Virginia has a recreational trip limit of 1-fish per person per day or 3-fish per vessel per day with a minimum size limit of 40" TL. Additionally, in Virginia a recreational vessel may only have one fish greater than 50" TL, and the recreational season runs from June 1 – September 15.

In addition to Framework Amendment 4, the South Atlantic Council requested that the Commission consider complementary management of Atlantic cobia through their interstate FMP process. In May 2017, the Commission's South Atlantic/Federal Fisheries Management Board approved a motion to request that the South Atlantic Council remove Atlantic cobia from the federal CMP FMP and transfer sole management to the Commission. To address this request, the Council is currently considering Amendment 31 to the CMP FMP. This amendment would take action to revise management for Atlantic cobia by either removing Atlantic cobia from the CMP FMP or collaboratively managing Atlantic cobia with the Commission. The South Atlantic Council is tentatively scheduled to take final action on the amendment in June of 2018.

In October 2017, the South Atlantic/Federal Fisheries Management Board approved their interstate FMP for Atlantic cobia in state waters. The plan establishes state by state quotas based on the federal ACL for Georgia, South Carolina, North Carolina, and Virginia, as well as 1% reserved for de minimis states. Commercial and recreational size and trip limits for the four primary states follow those that were established in Framework Amendment 4. De minimis states have a recreational bag limit of 1 fish per vessel with a minimum size limit of 29" FL. The Commission's FMP is scheduled to be implemented in April 2018.

Anecdotal information indicates that Atlantic cobia are being caught in increasing numbers north of Virginia and into New England. Atlantic cobia are now commonly caught along the Delmarva Peninsula and some articles argue that the center of the Atlantic cobia population has moved north to the Virginia/North Carolina border (Clark 2017, Fee 2014). In New England, mild winters have caused the once rare catch of cobia to become more common (Carini 2016, Goldfarb 2017). Over the last six years cobia have been caught off Long Island, Brenton Reef, and Buzzard's Bay (Fee 2011, 2012, Monti 2014).

Summary of Recreational and Commercial Regulations for Coastal Migratory Pelagics in Mid-Atlantic and New England Coastal States

October 2017

Table 1. Summary of commercial and recreational regulations for Coastal Migratory Pelagics in the Mid-Atlantic and New England regions by state.

State	Species	Current Regulations	
		Recreational	Commercial
ME through CT	King Mackerel	None	None
	Spanish Mackerel	None	None
	Cobia	None	None
NY	King Mackerel	23" TL minimum 3 per person per day	23" TL minimum 3,500lbs per vessel
	Spanish Mackerel	14" TL minimum 15 per person per day	14" TL minimum 3,500 lbs per vessel
	Cobia	37" TL minimum 2 per person per day	37" TL minimum 2 per vessel per day
NJ	King Mackerel	23" TL minimum 3 per person per day	23" TL minimum
	Spanish Mackerel	14" TL minimum 10 per person per day	14" TL minimum 3,500 lbs per vessel
	Cobia	37" TL minimum 2 per person per day	37" TL minimum
DE	King Mackerel	None	None
	Spanish Mackerel	14" TL minimum 15 per person per day	14" TL minimum 3,500 lbs per vessel
	Cobia	None	None
MD	King Mackerel	None	None
	Spanish Mackerel	14" TL minimum 15 per person per day	14" TL minimum 3,500 lbs per vessel
	Cobia	None	None
VA	King Mackerel	27" TL minimum 2 per person per day	27" TL minimum (pound net exception).
	Spanish Mackerel	14" TL minimum 15 per person per day	14" TL minimum 3,500 lbs per vessel
	Cobia	40" TL minimum (only one >50" TL per vessel) 1 per person per day or 3 per vessel per day No gaffing June 1 – September 15, 2017	37" TL minimum 2 per person per day or 6 per vessel per day January 1 – September 30, 2017

References

- Carini, F. 2016. There's something fishy about climate change. EcoRI, Providence, Rhode Island. <https://www.ecori.org/climate-change-series/2015/12/18/something-fishy-about-climate-change> (accessed October 2017).
- Chen, I.C., J.K. Hill, R. Ohlemüller, D.B. Roy, and C.D. Thomas. 2011. Rapid range shifts of species associated with high levels of climate warming. *Science* 333: 1024-1026.
- Cheung, W.W., V.W. Lam, J.L. Sarmiento, K. Kearney, R.E.G. Watson, D. Zeller, and D. Pauly. 2010. Large-scale redistribution of maximum fisheries catch potential in the global ocean under climate change. *Global Change Biology* 16: 24-35.
- Clark, J. 2017. Warming oceans: fish on the move. Delaware State News, Dover, Delaware. <http://delawarestatenews.net/outdoors/warming-oceans-fish-move/> (accessed October 2017).
- Conery, R. 2016. Fishing around: funny fish, especially albies, a rollicking good time. Cape Cod Times, Hyannis, Massachusetts. <http://www.capecodtimes.com/sports/20160810/fishing-around-funny-fish-especially-albies-rollicking-good-time> (accessed October 2017).
- D'Angelo, P. 2014. Climate change & the Chesapeake Bay. WVTF, Roanoke, Virginia. <http://wvtf.org/post/climate-change-chesapeake-bay> (accessed October 2017).
- Fee, J. 2011. Weird local fish – cobia edition. On the Water, East Falmouth, Massachusetts. <http://www.onthewater.com/weird-local-fish-cobia-edition/> (accessed October 2017).
- Fee, J. 2012. Buzzard Bay cobia! On the Water, East Falmouth, Massachusetts. <http://www.onthewater.com/buzzards-bay-cobia/> (accessed October 2017).
- Fee, J. 2014. Are “lost” southern species a new angling opportunity. On the Water, East Falmouth, Massachusetts. <http://www.onthewater.com/lost-southern-species/> (accessed October 2017).
- Fee, J. 2017. King mackerel on the Cape? On the Water, East Falmouth, Massachusetts. <http://www.onthewater.com/king-mackerel-cape/> (accessed October 2017).
- Goldfarb, B. 2017. Feeling the heat: How fish are migrating from warming waters. Yale Environment 360, New Haven, Connecticut. <https://e360.yale.edu/features/feeling-the-heat-warming-oceans-drive-fish-into-cooler-waters> (accessed October 2017).
- Hare, J.A., W.E. Morrison, M.W. Nelson, M.M. Stachura, E.J. Teeters, R.B. Griffis, M.A. Alexander, J.D. Scott, L. Alade, R.J. Bell, A.S. Chute, K.L. Curti, T.H. Curtis, D. Kircheis, J.F. Kocik, S.M. Lucey, C.T. McCandless, L.M. Milke, D.E. Richardson, E. Robillard, H.J. Walsh, M.C. McManus, K.E. Marancik, and C.A. Griswold. 2016. A vulnerability assessment of fish and invertebrates to climate change on the northeast U.S. continental shelf. *PLOS One* 11.

Hollowed, A.B., M. Barange, R.J. Beamish, K. Brander, K. Cochrane, K. Drinkwater, M.G.G. Foreman, J.A. Hare, J. Holt, S. Kim, J.R. King, H. Loeng, B.R. MacKenzie, F.J. Mueter, T.A. Okey, M.A. Peck, V.I. Radchenko, J.C. Rice, M.J., Schirripa, A. Yatsu, and Y. Yamanaka. 2013. Projected impacts of climate change on marine fish and fisheries. *ICES Journal of Marine Science* 70: 1023-1037.

Lancaster, D. 2007. Fishing: reports from around the area. Daily Press, Newport News, Virginia. http://articles.dailypress.com/2007-10-26/sports/0710260011_1_bay-anglers-big-fish-gray-trout (accessed October 2017).

Monti, D. 2014. Fishing report: Rare cobia expected to be new state record. Providence Journal, Providence, Rhode Island. <http://www.providencejournal.com/sports/content/20140820-fishing-report-rare-cobia-expected-to-be-new-state-record.ece> (accessed October 2017).

Morgan, C. 2016. It's a great time to explore Long Island Sound. Zip06, Madison, Connecticut. <https://www.zip06.com/sports/20160714/itx2019s-a-great-time-to-explore-long-island-sound> (accessed October 2017).

Murray, M. 2015. Climate change forces new great migration. Delaware Online, Wilmington, Delaware. <http://www.delawareonline.com/story/news/local/2015/09/05/iconic-fish-species-move-north-ocean-warms/71785270/> (accessed October 2017).

Najjar, R.G., C.R. Pyke, M.B. Adams, D. Breitburg, C. Hershner, M. Kemp, R. Howarth, M.R. Mullholland, M. Paolisso, D. Secor, K. Sellner, D. Wardrop, R. Wood. 2010. Potential climate change impacts on the Chesapeake Bay. *Estuarine, Coastal, and Shelf Science* 86: 1-20.

Parmesan, C., and G. Yohe. 2003. A globally coherent fingerprint of climate change impacts across natural systems. *Nature* 421: 37-42.

Perry, A.L., P.J. Low, J.R. Ellis, and J.D. Reynolds. 2005. Climate change and distribution shifts in marine fishes. *Science* 308: 1912-1915.

Roessig, J.M., C.M. Woodley, J.J. Cech, and L.J. Hansen. 2004. Effects of global climate change on marine and estuarine fishes and fisheries. *Reviews in Fish Biology and Fisheries* 14: 251-275.

Tolliver, L. 2015. Fishing forecast: Anglers seeing more king mackerel than usual for this time of year. The Virginian Pilot, Norfolk, Virginia. https://pilotonline.com/sports/outdoors/fishing-forecast-anglers-seeing-more-king-mackerel-than-usual-for/article_4031e52d-d438-561c-8875-f6e7112cdc9b.html (accessed October 2017).

Virginia Beach Fishing Center (VBFC). 2015. King mackerel and billfish! <http://virginiafishing.com/nearly-every-boat-is-fishing/> (accessed October 2017).

Watterson, M. 2014. Spanish mackerel now biting in Va. Shore. Delmarva Now, Norfolk, Virginia. <http://www.delmarvanow.com/story/news/local/virginia/2014/08/22/spanish-mackerel-now-biting/14455067/> (accessed October 2017).

Williams, T. 2017. Fish speak up on climate change: major transformations in Atlantic fisheries latest evidence of mounting implications of warming planet. Hatch Magazine.
<https://www.hatchmag.com/articles/fish-speak-climate-change/7714446> (accessed October 2017).

Explanation of 2017 Atlantic Cobia (Georgia – New York) Forecasting

Southeast Fisheries Science Center

09/20/2017

Commercial harvest of Atlantic group cobia (Georgia to New York) closed in federal waters at 12:01 a.m. (local time) September 5, 2017. The 2017 commercial annual catch limit (ACL) is 50,000 pounds round or gutted weight. NMFS projected that the cobia annual catch limit for the commercial sector has been reached. This projection includes landings that are expected to be reported by dealers that do not have a federal dealer permit as well and fisher reports expected from Virginia. Commercial harvest will reopen at 12:01 a.m. (local time) on January 1, 2018.

Data sources

Federal dealers: electronic reports are required from federal dealers by the following Tuesday at midnight for the previous reporting week (Sunday-Saturday).

Non-federal dealers: non-federal dealers may report electronically or on paper, but in general, the reports are due 10 days after the end of the previous month to the state. Paper reports will also have to be key punched, so an additional 2 weeks to 1 month may be required before that information is available to states and additional processing time may be required before that information is available in ACCSP and useable by federal analysts.

Fisherman reporting: some states, such as Virginia, require reporting by fishers instead of dealers. In these cases, the SEFSC may not have the information for a final tally of species landings until that information is incorporated at ACCSP. Often, these final landings aren't available to analysts until May of the following year.

Methods used to forecast

When building a forecast, we use landed pounds, estimated unreported pounds from federal dealers that have not submitted reports, and estimated unreported pounds from non-federal dealers not reporting electronically.

We use previous complete reports from federal dealers to estimate those landings; however, we may not have reports available in the current year from fishermen, so we must use the information available from the previous year until that information is available. These estimates of unreported landings are not currently built into our automated ACL reporting which displays landings online, but are incorporated into forecasts we pass to the SERO to inform them when an ACL may be reached.

Reporting of ACL landings

In 2015, landings not reported electronically were equivalent to 39% of the ACL, while in 2016 those unreported landings were equivalent to 58% of the ACL. Because we currently can't automate the estimation of state under-reported landings for ACLs we are not displaying those additional landings in the reported landings on the ACL website. In the case of Atlantic group cobia, this leads to closure bulletins when only around 50% of the ACL is reported as landed.

As an example, currently in 2017, 25,516 pounds of cobia were reported prior to September 5th, the closure date. During the period from January 1- September 5th last season, there were 26,183 pounds landed that were not reported until May of 2017. If we assume unreported landings in 2017 are at least equivalent to unreported landings in 2016, then simple addition would put us at 51,699 pounds landed, which is 103% of the 50,000 pound ACL. Similarly, if we take the ratio of final landed weight as of September 5th last season vs. the available weight reported to SEFSC at that time and apply that ratio to the reported weight in the current season as of September 5th, total landings are estimated to be 51,866 pounds, or 104% of the current ACL.

Because a preponderance of the unreported landings come from Virginia due the required reporting for fishers only, the SEFSC will work with CVMRC and ACCSP to determine if there is a process that can be introduced to speed up the availability of these landings to the SEFSC.