

**FISHERY MANAGEMENT PLAN UPDATE  
SNAPPER GROUPE COMPLEX  
AUGUST 2020**

**STATUS OF THE FISHERY MANAGEMENT PLAN**

**Fishery Management Plan History**

Original FMP Adoption: August 1983 (SAFMC 1983a, b; 48 FR 39463)

Amendments:

- Regulatory Amendment 1 - March 1987
- Regulatory Amendment 2 - March 1989
- Amendment 1 - January 1989
- Regulatory Amendment 3 - November 1990
- Amendment 2 - December 1990
- Amendment 3 - January 1991
- Amendment 4 - January 1992
- Amendment 5 - April 1992
- Regulatory Amendment 4 - July 1993
- Regulatory Amendment 5 - July 1993
- Amendment 6 - July 1994
- Amendment 7 - January 1995
- Regulatory Amendment 6 - May 1995
- Amendment 8 - December 1998
- Regulatory Amendment 7 - January 1999
- Amendment 9 - February 1999/October 2000
- Amendment 10 - July 2000
- Amendment 11 - December 1999
- Regulatory Amendment 8 - November 2000
- Amendment 12 - September 2000
- Amendment 13a - April 2004
- Amendment 13c - October 2006
- Amendment 14 - February 2009
- Amendment 15a - March 2008
- Amendment 15b - February 2010
- Amendment 16 - July 2009
- Amendment 19 - July 2010
- Amendment 17a - March 2011
- Amendment 17b - January 2011
- Regulatory Amendment 10 - May 2011
- Regulatory Amendment 9 - July 2011
- Regulatory Amendment 11 - May 2012
- Amendment 25 - April 2012
- Amendment 24 - July 2012
- Amendment 23 - January 2012

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Amendments (continued):  
Amendment 18a - July 2012/January 2013  
Amendment 20a - October 2012  
Regulatory Amendment 12 - October 2012  
Amendment 18b - May 2013  
Regulatory Amendment 13 - July 2013  
Regulatory Amendment 14 - December 2014  
Regulatory Amendment 15 - September 2013  
Amendment 27 - January 2014  
Amendment 31 - January 2014  
Amendment 28 - August 2013  
Regulatory Amendment 18 - September 2013  
Regulatory Amendment 19 - October 2013  
Regulatory Amendment 21 - November 2014  
Amendment 32 - March 2015  
Amendment 29 - July 2015  
Regulatory Amendment 22 - August/September 2015  
Regulatory Amendment 20 - August 2015  
Amendment 33 - January 2016  
Amendment 34 - February 2016  
Amendment 35 - June 2016  
Regulatory Amendment 25 - August 2016  
Regulatory Amendment 16 - December 2016/March 2017  
Amendment 36 - July 2017  
Amendment 37 - August 2017  
Amendment 43 - July 2018  
Amendment 41 - February 2018  
Regulatory Amendment 28 - January 2019  
Abbreviated Framework Amendment 1 - August 2018  
Abbreviated Framework Amendment 2 - May 2019  
Amendment 42 – January 2020  
Regulatory Amendment 27 – February 2020  
Regulatory Amendment 30 – March 2020  
Regulatory Amendment 26 – March 2020  
Regulatory Amendment 29 – July 2020

Revisions: N/A

Supplements: N/A

Information Updates: N/A

Schedule Changes: N/A

Next Benchmark Review: N/A

Of the 75-species managed by the South Atlantic Fishery Management Council (SAFMC), 55 of these are included in the Snapper Grouper management complex. Because of its mixed species nature, this fishery offers the greatest challenge for SAFMC to manage. Initially, Fishery Management Plan (FMP) regulations consisted of minimum sizes, gear restrictions, and a provision for the designation of Special Management Zones (SMZs). Early attempts to develop more effective management measures were thwarted by lack of data on both the resource and the fishery. The condition of many of the species within the snapper grouper complex is unknown. Improved data collection (in terms of quantity and quality) during the 1980s and 90s has provided more management information on some of the more commercially and recreationally valuable species, but lack of basic management data on many of the species remains the major obstacle to successful management.

Management of the snapper grouper fishery is also difficult because many of these species are slow growing, late maturing, hermaphroditic, and long lived; thus, rebuilding efforts for some species will take years to full recovery. Strict management measures, including prohibition of harvest in some cases, have been implemented to rebuild overfished species in the snapper grouper complex. Such harvest restrictions are beneficial, not only in rebuilding species, but also in helping to prevent species from undergoing overfishing in the future.

Regulatory Amendment 1 (48 FR 9864) prohibited fishing in SMZs, except with hand-held hook-and-line and spearfishing gear; prohibited harvest of goliath grouper in SMZs; and implemented SMZs off South Carolina and Georgia.

Regulatory Amendment 2 (54 FR 8342) established two artificial reefs off Fort Pierce, Florida as SMZs.

Amendment 1 (SAFMC 1988; 54 FR 1720) prohibited use of trawl gear to harvest fish in the snapper grouper fishery south of Cape Hatteras, North Carolina and north of Cape Canaveral, Florida; defined directed snapper grouper fishery as a vessel with trawl gear and greater than or equal to 200-pounds of snapper grouper species onboard; and established the rebuttable assumption that vessels with snapper grouper species onboard harvested these fish in the U.S. Exclusive Economic Zone (EEZ).

Regulatory Amendment 3 (55 FR 40394) established an artificial reef at Key Biscayne, Florida as an SMZ in Dade County, Florida; prohibited fish trapping, bottom longlining, spearfishing and harvesting of Goliath grouper in SMZs.

Amendment 2 (SAFMC 1990a; 55 FR 46213) prohibited harvest or possession of Goliath grouper in or from the EEZ in the South Atlantic and defined overfishing for snapper grouper species according to NMFS 602 guidelines.

Amendment 3 (SAFMC 1990b; 56 FR 2443) established a management program for the wreckfish fishery which: added wreckfish to the snapper grouper management unit; defined Optimum Yield (OY) and overfishing; required an annual permit to fish for, land or sell wreckfish; established a control date of March 28, 1990 for the area bounded by 33° and 30° N latitude; established a fishing year beginning April 16; established a process whereby annual

quotas would be specified; implemented a 10,000 pound trip limit and a January 15 – April 15 spawning season closure.

Amendment 4 (SAFMC 1991a; 56 FR 56016) prohibited the use of various gear, including fish traps, the use of bottom longlines for wreckfish, and powerheads in SMZ off South Carolina; established bag limits and minimum size limits for several species; established income requirements to qualify for permits; and required that all snapper grouper species possessed in South Atlantic federal waters must have heads and fins intact through landing.

Amendment 5 (SAFMC 1991b; 57 FR 7886) established an Individual Transferable Quota (ITQ) management program for the wreckfish fishery.

Regulatory Amendment 4 (SAFMC 1992a; 58 FR 36155) modified the definition of black sea bass pots; allowed for multi-gear trips and the retention of incidentally caught fish.

Regulatory Amendment 5 (SAFMC 1992b; 58 FR 35895) established eight additional SMZs off the coast of South Carolina.

Amendment 6 (SAFMC 1993; 59 FR 27242) established commercial quotas for snowy grouper, golden tilefish; established commercial trip limits for snowy grouper, golden tilefish, speckled hind, and Warsaw grouper; included golden tilefish in grouper recreational aggregate bag limits; prohibited sale of Warsaw grouper and speckled hind; created the Oculina Experimental Closed Area; and specified data collection needs for evaluation of possible future Individual Fishing Quota (IFQ) system.

Amendment 7 (SAFMC 1994a; 59 FR 66270) established size limits and bag limits for hogfish and mutton snapper; specified allowable gear; prohibited the use of explosive charges, including powerheads, off South Carolina; and required dealer, charter, and headboat federal permits.

Regulatory Amendment 6 (SAFMC 1994b; 60 FR 19683) includes provisions to rebuild and protect hogfish by implementing a recreational bag limit of five fish per person off Florida; protect cubera snapper by implementing a recreational bag limit of two per person for fish 30-inches total length or larger off Florida; and protect gray triggerfish by implementing a minimum size limit of 12-inches total length (TL) off Florida.

Amendment 8 (SAFMC 1997; 63 FR 38298) established a limited entry system for the snapper grouper fishery.

Regulatory Amendment 7 (63 FR 71793) established ten SMZs at artificial reefs off South Carolina.

Amendment 9 (SAFMC 1998a; 64 FR 3624; 65 FR 55203) increased the minimum size limits on red pogy, black sea bass, vermillion snapper (recreational only), gag, and black grouper; changed bag limits for red pogy, black sea bass, greater amberjack, gag, and black grouper; established an aggregate recreational bag limit of 20 fish per person per day inclusive of all snapper grouper species currently not under a bag limit, excluding tomtate and blue runners; and

specified that vessels with bottom longline gear aboard may only possess snowy grouper, Warsaw grouper, yellowedge grouper, misty grouper, golden tilefish, blueline tilefish, and sand tilefish.

Amendment 10 (SAFMC 1998b; 65 FR 37292) identified Essential Fish Habitat (EFH) and EFH - Habitat Areas of Particular Concern (HAPCs) for species in the snapper grouper management unit.

Amendment 11 (SAFMC 1998c; 64 FR 59126) amended the FMP as required to make definitions of Maximum Sustainable Yield (MSY), OY, overfishing and overfished consistent with "National Standard Guidelines"; identified and defined fishing communities; and addressed bycatch management measures.

Regulatory Amendment 8 (65 FR 61114) established 12 SMZs at artificial reefs off Georgia; revised boundaries of seven existing SMZs off Georgia to meet Coast Guard permit specifications; restricted fishing in new and revised SMZs.

Amendment 12 (SAFMC 2000; 65 FR 51248) set regulatory limits for red porgy including a recreational bag limit, a commercial incidental catch limit, and a recreational and commercial size limit. It also permitted the transfer of the 225-pound trip limited commercial permit to another vessel (not another person) regardless of vessel size.

Amendment 13A (SAFMC 2003; 69 FR 15731) extended regulations within the Oculina Experimental Closed Area off the east coast of Florida that prohibit fishing for and retention of snapper grouper species for an indefinite period with a 10-year re-evaluation by the Council. The Council will review the configuration and size of the area within three years of publication of the Final Rule (March 26, 2004).

Amendment 13C (SAFMC 2006; 71 FR 55096) addressed overfishing for snowy grouper, golden tilefish, black sea bass and vermilion snapper. The amendment also allowed for a moderate increase in the harvest of red porgy as stock continues to rebuild.

Amendment 14 (SAFMC 2007a; 74 FR 1621) established a series of deepwater marine protected areas in the South Atlantic EEZ.

Amendment 15A (SAFMC 2008a; 73 FR 14942) updated management reference points for snowy grouper, black sea bass, and red porgy; modified rebuilding schedules for snowy grouper and black sea bass; defined rebuilding strategies for snowy grouper, black sea bass, and red porgy; and redefined the minimum stock size threshold for the snowy grouper stock.

Amendment 15B (SAFMC 2008b; 74 FR 58902) prohibited sale the sale of bag-limit caught snapper grouper species; reduced the effects of incidental hooking on sea turtles and smalltooth sawfish; changed the commercial permit renewal period and transferability requirements; implemented a plan to monitor and address bycatch; and established management reference points for golden tilefish. Amendment 15B also established allocations between recreational and commercial fishermen for snowy grouper and red porgy.

Amendment 16 (SAFMC 2009a; 74 FR 30964) included measures to end overfishing for gag grouper and vermilion snapper; established commercial and recreational allocations for both species; established a January through April spawning season closure for gag, black grouper, red grouper, scamp, red hind, rock hind, yellowmouth grouper, tiger grouper, yellowfin grouper, graysby, and coney; reduced the aggregate grouper bag limit from five fish to three fish, and within that, reduced the gag bag limit from two fish to one gag or black grouper, combined; reduced the vermilion snapper bag limit from 10 fish to five fish; established a recreational closed season for vermilion snapper of November through March; excluded captain and crew on for-hire vessels from retaining a bag limit of groupers; and required the use of dehooking tools to reduce bycatch mortality.

Amendment 19 (SAFMC 2009b; 75 FR 35330) was included under the Comprehensive Ecosystem-Based Amendment 1 (CE-BA 1) and included measures to provide presentation of spatial information for EFH and EFH-HAPC designations under the Snapper Grouper FMP; and designation of deepwater coral HAPCs.

Amendment 17A (SAFMC 2010a; 75 FR 76874) addressed management measures to end overfishing of red snapper and rebuild the stock, including Annual Catch Limits (ACLs) and Accountability Measures (AMs). It extended the prohibition of red snapper in federal waters throughout the South Atlantic EEZ effective immediately. Amendment 17A also included a regulation requiring the use of non-stainless circle hooks north of 28 degrees N latitude effective March 3, 2011.

Amendment 17B (SAFMC 2010b; 75 FR 82280) established ACLs and AMs and addressed overfishing for nine species in the snapper grouper management complex: golden tilefish, snowy grouper, speckled hind, Warsaw grouper, black grouper, black sea bass, gag, red grouper, and vermilion snapper. Measures in Amendment 17B included a deepwater closure (240 feet seaward) for deepwater species to help protect Warsaw grouper and speckled hind. Additional measures in the amendment included a reduction in the snowy grouper bag limit; establishment of a combined ACL for gag, black grouper, and red grouper; an allocation of 97% commercial and 3% recreational for the golden tilefish fishery based on landings history; and establishment of AMs as necessary.

Regulatory Amendment 10 (SAFMC 2011a; 76 FR 23728) eliminated the large area closure in Amendment 17A for all snapper grouper species off the coasts of southern Georgia and north/central Florida. The regulatory amendment modified measures implemented in Amendment 17A to end overfishing for red snapper.

Regulatory Amendment 9 (SAFMC 2011b; 76 FR 34892) reduced the bag limit for black sea bass from 15 fish per person to five fish per person, established trip limits on vermilion snapper and gag, and increased the trip limit for greater amberjack.

Regulatory Amendment 11 (SAFMC 2011c; 77 FR 27374) eliminated a restriction on the possession or harvest of some deepwater snapper grouper species in waters greater than 240 feet deep.

Amendment 25 (Comprehensive Annual Catch Limit Amendment) (SAFMC 2011d; 77 FR 15916) met the 2011 deadline mandated by the Magnuson-Stevens Act to establish ACLs and AMs for species managed by the Council that are not undergoing overfishing.

Amendment 24 (SAFMC 2011e; 77 FR 34254) proposed measures to end overfishing and establish a rebuilding plan for red grouper. The amendment also implemented or revised parameters such as Maximum Sustainable Yield (MSY), Minimum Stock Size Threshold (MSST), ACLs, AMs, and specified allocations for the commercial and recreational sectors.

Amendment 23 (Comprehensive Ecosystem-Based Amendment 2) (SAFMC 2011f; 76 FR 82183) included measures to designate the Deepwater MPAs as EFH-HAPCs; limited harvest of snapper grouper species in South Carolina SMZs to the bag limit; and modified sea turtle release gear.

Amendment 18A (SAFMC 2012a; 77 FR 32408; 77 FR 72991) established management actions to limit participation and effort in the black sea bass fishery. Measures included establishment of an endorsement program and other modifications to the commercial black sea bass pot fishery; establishment of a commercial trip limit (all gear-types) for black sea bass; and increased minimum size limits for both commercial and recreational black sea bass fisheries.

Amendment 20A (SAFMC 2012b; 77 FR 59129) defined and reverted inactive shares within the wreckfish ITQ program; redistributed reverted shares to active shareholders; established a share cap; and implemented an appeals process.

Regulatory Amendment 12 (77 FR 61295) adjusted the ACL and OY for golden tilefish; specified a commercial Annual Catch Target (ACT); and revised recreational AMs for golden tilefish.

Amendment 18B (SAFMC 2012c; 78 FR 23858) addressed management of golden tilefish. Actions included in the amendment are: An endorsement program for the longline sector of the golden tilefish component of the snapper grouper fishery; establishment of landings criteria to determine who will receive endorsements; an appeals process for the golden tilefish endorsement program; establishment of a procedure to allow transferability of golden tilefish endorsements; allocation of 75% of the commercial ACL to the longline sector and 25% to the hook-and-line sector; and modification of the golden tilefish trip limit.

Regulatory Amendment 13 (SAFMC 2012d; 78 FR 36113) revised the acceptable biological catch estimates, ACLs (including sector ACLs), and recreational annual catch targets for 37 un-assessed snapper grouper species. The revisions incorporated updates to the recreational data for these species, as per the new Marine Recreational Information Program, as well as revisions to commercial and for-hire landings. Regulatory Amendment 13 was necessary to avoid triggering AMs for these snapper grouper species based on ACLs that were established by the Comprehensive Annual Catch Limit Amendment in April 2012, using recreational data under the Marine Recreational Fisheries Statistics Survey system.

Regulatory Amendment 14 (SAFMC 2013a; 79 FR 66316) modified the fishing year for greater amberjack; revised the minimum size limit measurement for gray triggerfish; increased the minimum size limit for hogfish; modified the commercial and recreational fishing year for black sea bass; adjusted the commercial fishing season for vermilion snapper; modified the aggregate grouper bag limit; and revised the AMs for gag and vermilion snapper.

Regulatory Amendment 15 (SAFMC 2013b; 78 FR 49183) modified the existing specification of OY and ACLs for yellowtail snapper in the South Atlantic; modified existing regulations for yellowtail snapper in the South Atlantic; and modified the existing gag commercial ACL and AM for gag that requires a closure of all other shallow water groupers (black grouper, red grouper, scamp, red hind, rock hind, graysby, coney, yellowmouth grouper, and yellowfin grouper) in the South Atlantic when the gag commercial ACL is met or projected to be met.

Amendment 27 (SAFMC 2013c; 78 FR 78770) assumed management of Nassau grouper in the Gulf of Mexico; modified the crew size restriction for dual-permitted vessels (those with a Snapper Grouper Unlimited or 225-Pound Permit and a Charter/Headboat Permit for Snapper Grouper); modified the bag limit retention restriction for captain and crew of for-hire vessels; changed the existing snapper grouper framework procedure to allow for more timely adjustments to ACLs; and removed blue runner from the fishery management unit.

Amendment 31 (Joint South Atlantic and Gulf of Mexico Generic Headboat Reporting Amendment) (SAFMC 2013d; 78 FR 78779) modified logbook reporting for headboats to require fishing records to be reported electronically for snapper grouper species on a weekly basis.

Amendment 28 (SAFMC 2013e; 78 FR 44461) established a process to determine if a red snapper fishing season will occur each year, including specification of the allowable harvest for both sectors and season length for the recreational sector; an equation to determine the ACL for red snapper for each sector; and management measures if fishing for red snapper is allowed.

Regulatory Amendment 18 (SAFMC 2013f; 78 FR 47574) adjusted the ACL (and sector ACLs) for vermilion snapper and red pogy based on the stock assessment updates for those two species and removed the annual recreational closure for vermilion snapper.

Regulatory Amendment 19 (SAFMC 2013g; 78 FR 58249) adjusted the black sea bass ACLs based on the results of the 2013 assessment. Because the increase to the ACL was substantial, there was concern that this could extend fishing with pots into the calving season for right whales and create a risk of entanglement for large migratory whales during the fall months. To minimize this risk, the amendment also established a closure to black sea bass pot gear from November 1 to April 30.

Regulatory Amendment 21 (SAFMC 2014a; 79 FR 60379) prevents snapper grouper species with low natural mortality rates (red snapper, blueline tilefish, gag, black grouper, yellowtail snapper, vermilion snapper, red pogy, and greater amberjack) from being unnecessarily classified as overfished. For these species, even small fluctuations in biomass due to natural conditions rather than fishing mortality may cause a stock to be classified as overfished.

Modifying the minimum stock size threshold definition (used in determining whether a species is overfished) prevents these species from being classified as overfished unnecessarily.

Amendment 32 (SAFMC 2014b; 80 FR 16583) addressed the determination that blueline tilefish are overfished and undergoing overfishing. The amendment removed blueline tilefish from the deep-water complex; established blueline tilefish commercial and recreational sector ACLs and AMs; revised the deep-water complex ACLs and AMs; established a blueline tilefish commercial trip limit; and revised the blueline tilefish recreational bag limit and harvest season.

Amendment 29 (SAFMC 2014c; 80 FR 30947) revised ACLs and recreational annual catch targets (ACTs) for four unassessed snapper grouper species (bar jack, Atlantic spadefish, scamp, and gray triggerfish) and three snapper grouper species complexes (snappers, grunts, and shallow water groupers) based on an update to the Acceptable Biological Catch (ABC) control rule and revised ABCs for 14 snapper grouper stocks (bar jack, margate, red hind, cubera snapper, yellowedge grouper, silk snapper, Atlantic spadefish, gray snapper, lane snapper, rock hind, tomtate, white grunt, scamp, and gray triggerfish). Additionally, this final rule revises management measures for gray triggerfish in federal waters in the South Atlantic region, including modifying minimum size limits, establishing a split commercial season, and establishing a commercial trip limit.

Regulatory Amendment 22 (SAFMC 2015a; 80 FR 48277) adjusted the ACLs and OY for gag and wreckfish. Changes to the gag recreational bag limit were proposed, but status quo was maintained.

Regulatory Amendment 20 (SAFMC 2014d; 80 FR 43033) increased the recreational and commercial ACLs for snowy grouper, increased the commercial trip limit, and modified the recreational fishing season. This amendment also adjusted the re-building strategy for snowy grouper.

Amendment 33 (SAFMC 2015b; 80 FR 80686) updated regulations that allow snapper grouper fillets to be brought into the U.S. EEZ from the Bahamas. Snapper grouper fillets from the Bahamas must have the skin intact, two fillets (regardless of size) will count as one fish towards the bag limit, and fishermen must abide by both U.S. and Bahamian bag/possession limits (whichever is more restrictive). All boats must have the proper permits, and fishermen must carry passports which are required to be stamped and dated to prove vessel passengers were in the Bahamas. All fishing gear must be appropriately stowed while in transit.

Amendment 34 (SAFMC 2015c; 81 FR 3731) revised the AMs for several snapper grouper species (black grouper, mutton snapper, yellowtail snapper, greater amberjack, red porgy, gag, golden tilefish, red grouper, snowy grouper, gray triggerfish, hogfish, scamp, Atlantic spadefish, bar jack, snappers complex, jacks complex, shallow water grouper complex, porgies complex, and wreckfish (recreational)).

Amendment 35 (SAFMC 2015d; 81 FR 32249) clarified regulations governing the use of golden tilefish longline endorsements to align them with the SAFMC's intent when the program was

originally implemented. Four species will also be removed from the FMP (black snapper, mahogany snapper, dog snapper, and schoolmaster).

Regulatory Amendment 25 (SAFMC 2016b; 81 FR 45245) revised the commercial and recreational ACLs, the commercial trip limit, and recreational bag limit for blueline tilefish. This amendment also revised the black seabass recreational bag limit and the commercial and recreational fishing years for yellowtail snapper.

Regulatory Amendment 16 (SAFMC 2016a; 81 FR 95893) revised the current seasonal prohibition on the use of black sea bass pot gear in the South Atlantic and added an additional gear marking requirement for black sea bass pot gear.

Amendment 36 (SAFMC 2016c; 82 FR 29772) establish spawning special management zones (Spawning SMZs) to enhance protection for snapper grouper species in spawning condition, including speckled hind and Warsaw grouper.

Amendment 37 (SAFMC 2016d; 82 FR 34584) modified the hogfish fishery management unit and specified fishing levels for the two South Atlantic hogfish stocks. It established/revised management measures for both hogfish stocks in the South Atlantic Region, such as size limits, recreational bag limits, and commercial trip limits. Additionally, this amendment established a rebuilding plan for the Florida Keys/East Florida stock.

Amendment 41 (SAFMC 2017n; 83 FR 1305) updated the acceptable biological catch, annual catch limit, maximum sustainable yield, minimum stock size threshold, optimum yield (OY), and revised management measures for mutton snapper.

Amendment 43 (SAFMC 2017k; 83 FR 35428) revised the commercial and recreational annual catch limits and allowed for limited harvest of red snapper in federal waters of the South Atlantic.

Abbreviated Framework Amendment 1 (SAFMC 2017i; FR 83 35435) reduced the commercial and recreational ACLs for red grouper to address overfishing.

Regulatory Amendment 28 (SAFMC 2018a; FR 83 62508) revised the commercial and recreational ACLs for golden tilefish. The purpose of this final rule is to end overfishing of golden tilefish while minimizing, to the extent practicable, adverse socio-economic effects and achieve optimum yield (OY) on a continuing basis.

Abbreviated Framework Amendment 2 (SAFMC 2018b; FR 84 14021) increased the commercial and recreational ACLs for vermilion snapper and decreased the commercial and recreational ACLs for black sea bass in response to the latest stock assessments.

Amendment 42 (SAFMC 2019a; FR 84 67236) modified the sea turtle handling and release gear requirements for the snapper grouper fishery, clarified the requirements for other release gears, and modified the FMP framework procedure to implement newly approved devices and handling requirements for sea turtles and other protected resources.

Regulatory Amendment 27 (SAFMC 2019b; FR 85 4588) modified the commercial trip limits for blueline tilefish, greater amberjack, red porgy, and vermilion snapper; established commercial split seasons for snowy grouper, greater amberjack, and red porgy; established a commercial trip limit for the “other” jacks complex; established a minimum size limit for almaco jack; and removed the minimum size limits for silk, queen , and blackfin snappers; and reduced the minimum size limit for gray triggerfish in the EEZ off the east coast of Florida.

Regulatory Amendment 30 (SAFMC 2019c; FR 85 6825) revised the rebuilding schedule for red grouper based on the most recent stock assessment and modified the spawning season closure for the commercial and recreational sectors in the EEZ off North Carolina and South Carolina, and established a commercial trip limit.

Regulatory Amendment 26 (SAFMC 2019d; FR 85 11307) removed the recreational minimum size limits for silk snapper, queen snapper, and blackfin snapper, reduced the recreational minimum size limit for gray triggerfish in the EEZ off the east coast of Florida, and modified the snapper grouper aggregate bag limit for the 20-fish aggregate.

Regulatory Amendment 29 (SAFMC 2020c; FR 85 36166) modified gear requirements for South Atlantic snapper grouper species. Actions include requirements for descending and venting devices, and modifications to requirements for circle hooks and powerheads.

There are several other amendments either in development or under secretarial review (Table 1).

To ensure compliance with interstate requirements, North Carolina also manages this species complex under the North Carolina Fishery Management Plan for Interjurisdictional Fisheries (IJ FMP). The goal of the IJ FMP is to adopt fishery management plans, consistent with N.C. law, approved by the Mid-Atlantic Fishery Management Council, SAFMC, or the Atlantic States Marine Fisheries Commission by reference and implement corresponding fishery regulations in North Carolina to provide compliance or compatibility with approved fishery management plans and amendments, now and in the future. The goal of these plans, established under the Magnuson-Stevens Fishery Conservation and Management Act (federal council plans) and the Atlantic Coastal Fisheries Cooperative Management Act (Atlantic States Marine Fisheries Commission plans) are like the goals of the Fisheries Reform Act of 1997 to “ensure long-term viability” of these fisheries (NCDMF 2015a).

### **Management Unit**

The original SAFMC plan stated the management unit of the snapper grouper fishery is the stocks within the EEZ from North Carolina/Virginia border through the east coast of Florida. In the case of black sea bass, the unit is limited to south of Cape Hatteras, North Carolina. Since the inception of the FMP, there has been the addition of four species: wreckfish, spadefish, banded rudderfish, and lesser amberjack. In recent years, 14 species have been removed; 13 in 2012 (tiger grouper, sheepshead, queen triggerfish, puddingwife, black margate, yellow jack, Crevalle jack, porkfish, grass porgy, small mouth grunt, French grunt, Spanish grunt, and blue striped grunt) and one in 2014 (blue runner). In June 2016, Amendment 35 removed four additional species from the complex (black snapper, mahogany snapper, dog snapper, and schoolmaster).

## **Objectives**

The following are the FMP objectives for the snapper grouper fishery as specified by the Council. These were last updated in Snapper Grouper FMP Amendment 8 in July 1997 (SAFMC 1997).

- Prevent overfishing.
- Collect necessary data.
- Promote orderly utilization of the resource.
- Provide for a flexible management system.
- Minimize habitat damage.
- Promote public compliance and enforcement.
- Mechanism to vest participants.
- Promote stability and facilitate long-run planning.
- Create market-driven harvest pace and increase product continuity.
- Minimize gear and area conflicts among fishermen.
- Decrease incentives for overcapitalization.
- Prevent continual dissipation of returns from fishing through open access.
- Evaluate and minimize localized depletion.

## **STATUS OF THE STOCK**

### **Life History**

Fifty-five species make up the snapper grouper complex, which is managed by the South Atlantic Fishery Management Council. Included in the complex are three sea bass species, 17 grouper species, 10 snapper species, seven porgy species, five grunt species, five jack species, three tilefish species, two triggerfish species, hogfish, spadefish and wreckfish. The majority of these species are long lived, slow growing, late maturing and hermaphroditic (can change sexes). Most of these species are considered reef fish and are associated with hard bottom (live bottom) offshore habitats, but can be found in waters 1,000 feet deep or shallower. Some are migratory, exhibiting seasonal and/or ontogenic (occurring during a certain life stage) east to west migratory

behavior (black sea bass), as well as some species making north to south migrations (gag grouper). The full list of the species in the complex is available online at [Snapper Grouper Management Complex](#).

### **Stock Status**

Of the 55 species in the South Atlantic Fishery Management Council (SAFMC) management unit, several species are either overfished or experiencing some degree of overfishing. The overfished stocks include red grouper, red porgy, red snapper, hogfish (east Florida) and snowy grouper. Stocks experiencing overfishing are red grouper, red porgy, red snapper, speckled hind, and Warsaw grouper.

### **Stock Assessment**

The status of several species within the snapper grouper complex is unknown. However, for some of the species, assessments are available through various federal entities; the snapper grouper complex is regionally (North Carolina south to eastern Florida) managed, and none of the assessments have been conducted by NCDMF (Table 2).

Since 2002, stock assessments have been conducted through the SouthEast Data, Assessment, and Review (SEDAR) which is the cooperative process by which stock assessment projects are conducted in NOAA Fisheries' Southeast Region. Currently, stock assessments are available for 16 of the complex species. An assessment for yellowtail snapper (SEDAR 64) is scheduled for completion in 2020.

Some of the other species have status updates provided by National Oceanic and Atmospheric Administration (NOAA) Fisheries. These updates are based on landings data to determine whether the stock is overfished or undergoing overfishing. This information is updated quarterly by NOAA Fisheries and available on their website (<https://www.fisheries.noaa.gov/national/population-assessments/fishery-stock-status-updates>).

## **STATUS OF THE FISHERY**

### **Current Regulations**

The following species have state and federal regulations for minimum lengths:

- Greater amberjack: 28-inch FL (recreational); 36-inch FL (commercial)
- Black and gag groupers: 24-inch TL
- Red, scamp, yellowfin, and yellowmouth groupers: 20-inch TL
- Black sea bass: 13-inch TL (recreational); 11-inch (commercial)
- Red porgy: 14-inch TL
- Vermilion, gray, cubera and yellowtail snappers: 12-inch TL
- Hogfish (not pigfish): 17-inch FL
- Mutton snapper: 18-inch TL
- Gray triggerfish: 12-inch FL
- Lane snapper: 8-inch TL

All species have sector ACLs and recreational bag limits and/or commercial trip limits. See the SAFMC (<https://safmc.net/regulations/>) or NCDMF (<http://portal.ncdenr.org/web/mf/proclamations-current>) websites for the most current information.

The fisheries are open year-round, with the exception of:

- Goliath grouper, Nassau grouper, Warsaw grouper, and speckled hind, unlawful to possess/harvest (commercial and recreational)
- Red snapper, unlawful to possess/harvest (commercial and recreational); limited season may occur based on previous years' landings and/or catch data
- January-April shallow water grouper spawning closure (commercial and recreational); Red grouper remains closed through May in North and South Carolina
- Wreckfish have commercial spawning closure January 15-April 15; recreational fishery open July 1-August 31 annually
- April commercial closure for greater amberjack
- Snowy grouper and blueline tilefish recreational fishery open May 1- August 31

Temporary closures may result for a species if the ACL is met or projected to be met. NOAA Fisheries monitors the landings for species managed by the SAFMC, and this information is available online for both the commercial and recreational sectors (<https://www.fisheries.noaa.gov/southeast/southeast-region-annual-catch-limit-acl-monitoring>). See also the SAFMC or NCDMF websites for more details, and the most current information.

### **Commercial Landings**

Commercial gear used in the snapper grouper fishery includes bandit reels, electric reels, manual hook-and-line, long lines, fish pots, spear, and trolling. Bandit reels, followed by electric rods and reels are the two most prevalent gear types used, especially south of Cape Hatteras (NCDMF 2015b). Spear fishing seems to be limited to south of Cape Hatteras, while longlines are primarily fished north of Cape Hatteras (NCDMF 2015b); their use is limited to six deepwater species and depths greater than 50 fathoms. Fish pots are used primarily to target black sea bass. Trip lengths vary dependent on the area fished and the gear used, but tended to average between two to three days in length over the past five years; trips ranged from one day to 12 days for the entire commercial snapper grouper fleet (NCDMF 2015b).

The average landings for commercially caught snapper grouper from 1994-2019 was 2,037,054 pounds with a dockside value of \$4,064,924<sup>1</sup> (Table 3). The highest landings from the past 26 years were in 2008, after which landings dropped; landings have been under two million pounds for the last nine years (Figure 1). The decline in landings over the past eight years is most likely due to the removal of species from the complex, as well as the changes to ACLs and trip limits and implementation of a seasonal spawning closure by the SAFMC.

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<sup>1</sup> These averages do not include sheepshead after 2011, as well as a number of other species, as they were removed from the complex in 2012. See Amendment 25 for list of species removed from complex.

Over the last five years, landings have been dominated by six main aggregates; sea bass, grouper, snapper, triggerfish, jacks and tilefish (though the dominant group varies by year) (Table 4). The top ten dominant species are: black sea bass, vermillion snapper, blueline tilefish, gag, triggerfish, red grouper, red porgy, amberjack, scamp, and grunts (NCDMF 2015b).

### **Recreational Landings**

Recreational fishing uses many of the same gear types as the commercial fishery, with the exception of fish pots and longlines. Recreational estimates across all years have been updated and are now based on the Marine Recreational Information Program (MRIP) new Fishing Effort Survey-based calibrated estimates. For more information on MRIP see <https://www.fisheries.noaa.gov/topic/recreational-fishing-data>.

The average recreational catch of snapper grouper species was 1,948,717<sup>2</sup> pounds for 1994-2019. Since 2008, the total amount of fish landed declined steadily until 2014 (Table 5, Figure 1). The number of fish harvested declined roughly 60% from 2017 to 2018 and harvest weight decreased 50%. As no major management changes to the recreational sector contributed to this decrease in landings, it is likely due to the impacts of Hurricane Florence on coastal North Carolina. The number of fish harvested increased roughly 20% from 2018 to 2019 and harvest weight increased 3%. Recreational landings (by weight) have dropped over 80% since a 25-year high (4,773,359 pounds) in 2008. As with the commercial fishery, this is most likely due to the removal of species from the complex, as well as the changes to ACLs and the seasonal spawning closure by the SAFMC. For the last five years, the number of releases has been around 60% of the total fish caught (driven by the 13-inch (TL) size limit for black sea bass implemented in 2013, which has resulted in an increase of sublegal fish being discarded).

For 2019, the dominant species (by pounds) landed were black sea bass, snappers, jacks, triggerfish, tilefish, and grunts (Table 6). This pattern mainly holds true for the last five years; however, other species are occasionally more dominant.

### **MONITORING PROGRAM DATA**

Most of the data (dependent and independent) collected by NCDMF is provided to NOAA Fisheries. The division received a grant, which ended in 2014, to look at the age structure and release mortality of the commercial snapper grouper fishery in general and at the south of Cape Hatteras black sea bass stock age structure specifically. Data collected for this grant is summarized in the final Marine Fisheries Initiative (MARFIN) reports (NCDMF 2015b, c).

### **Fishery-Dependent Monitoring**

Commercial fisheries are monitored by port agents (state and federal) who collect information on trips, as well as biological information. Information is collected through the Trip Information Program (TIP), seafood dealer reporting, and logbooks (SAMFC 2014e). Recreational fisheries

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<sup>2</sup> These averages do not include sheepshead after 2011, as well as a number of other species, as they were removed from the complex in 2012. See Amendment 25 for list of species removed from complex.

are monitored by creel clerks through the Southeast Region Headboat Survey program and the Marine Recreation Information Program (MRIP) (SAFMC 2014e). North Carolina contributes to this data through the collection of trip and biological information for both fisheries.

Fishery dependent length-frequency information for the commercial snapper grouper fishery in North Carolina is collected by fish house samplers, the majority of which come from NCDMF Program 438 (Offshore Live Bottom Fishery). Length-frequency information for the recreational snapper grouper fishery is collected through the NCDMF Carcass Collection Program and MRIP. In 2019, NCDMF recorded lengths from 11,850 individual fish from the snapper grouper fishery of which 664 were black sea bass south of Cape Hatteras (Table 7). In 2019, 117 black sea bass were measured from the recreational fishery with an average total length (TL) of 14 inches (Table 8, Figure 2). Total length has ranged from 4 inches to 21 inches since 1994 (Table 8, Figure 4). In 2019, 638 black sea bass south of Cape Hatteras were measured from the commercial fishery with an average TL of 13 inches (Table 7, Figure 2). Black sea bass landed in the commercial fishery have ranged from 7 to 19 inches TL since 1994 (Figure 3). Differences in the commercial and recreational length frequency distribution of black sea bass south of Cape Hatteras in 2019 can be attributed to the different size limits (13 inches TL for recreational and 11 inches TL for commercial), as well differences in the size selectivity of the gears used (Figure 2).

In order to describe the age structure of the harvest and indices, age structures are collected from various fishery-independent (scientific surveys) and dependent (fisheries) sources throughout the year. Aging structures are provided to the NOAA Beaufort Age Lab for analysis except for black sea bass caught south of Cape Hatteras, NC which are analyzed by NCDMF. In 2019, NCDMF collected 7,710 age structures from the snapper grouper fishery of which 648 came from black sea bass (not yet aged) (Table 7). Since 2004, the modal age of black sea bass collected each year is 4 with the exception of 2011 where the modal age was 3 (Table 9). The maximum age recorded for black sea bass south of Cape Hatteras is 10. The age-length relationship for black sea bass is fairly unpredictable, as there is overlap in age for a given length (Figure 5).

### **Fishery-Independent Monitoring**

The Southeast Reef Fish Survey (SERFS) maintains the fisheries independent data for the snapper grouper complex. SERFS is a collective program for gathering fisheries independent data within the South Atlantic federal waters. There are three primary programs that contribute to the data:

- Marine Resources Monitoring, Assessment, and Prediction (MARMAP) survey
- Southeast Fisheries-Independent Survey (SEFIS), and
- Southeast Area Monitoring and Assessment Program (SEAMAP) - South Atlantic (SAFMC 2015e).

North Carolina has contributed to the data collected through programs such as the gag ingress and tagging work done in partnership with SEAMAP and MARFIN.

## **MANAGEMENT STRATEGY**

The snapper grouper complex is managed under the various amendments of the SAFMC fisheries management plan. The fishery is a regional fishery, and the Council has authority within the federal 200-mile limit of the Atlantic Ocean off the coasts of North Carolina, South Carolina, Georgia, and east Florida to Key West with the exception of black sea bass north of Cape Hatteras, North Carolina. In state waters, North Carolina defers to the Council and the same regulations are followed. Thresholds and targets for the species are determined by the SAFMC and are species dependent.

## **RESEARCH NEEDS**

The reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act in 2006 directed that all regional management councils develop a prioritized research plan for annual submission to the Secretary of Commerce. The following (below) are research and management needs as determined by the council in 2007 (SAFMC 2007b). All needs are ongoing; however, the emphasis changes annually based on the SAFMC Science and Statistical Committee review of these needs. The reviewed list and priorities for the year are then approved for submission to the NOAA Fisheries Southeast Fisheries Science Center. The council has a series of research and monitoring needs for the period of 2012-2016 (SAFMC 2012e), and has developed another set of needs for 2015-2019 (SAFMC 2015f, 2017a). Research needs include:

- Continue monitoring of catches (ongoing)
- Collect otoliths and spines for ageing (ongoing)
- Estimate mortality rates (ongoing)
- Determine if stock structure exists for many of the species (ongoing)
- Note seasonal and spawning migrations (ongoing)
- Identify and map essential/critical fish habitat (ongoing)
- Determine spawning locations and seasons (ongoing)
- Continue life history studies (ongoing)
- Estimate reproductive parameters including fecundity, age and size of maturity, age and size of sexual transition, and sex ratio (ongoing)
- Determine reliability of historical landings (ongoing)
- Expand diet studies (ongoing)
- Develop juvenile and adult indexes (ongoing)

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SAFMC. 2017e. Regulatory Amendment 42 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

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SAFMC. 2017g. Regulatory Amendment 46 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

SAFMC. 2017h. Regulatory Amendment 47 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405.

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**TABLES**

Table 1. Amendments under consideration/review by the South Atlantic Fishery Management Council (SAFMC).  
 Summaries of the issues the amendment addresses are included; documentation is provided as available.

<b>Amendment</b>	<b>Issue addressed</b>	<b>Where in process</b>	<b>Documentation</b>
Regulatory Amendment 34	Special Management Zones in North Carolina & South Carolina	Approved by Council for formal secretarial review	SAFMC 2020a
Regulatory Amendment 33	Modifications to Red Snapper Seasons	Approved by Council for formal secretarial review	SAFMC 2020b
Regulatory Amendment 31	Revisions to snapper grouper recreational accountability measures	Work on hold until December 2020	SAFMC 2019e
Abbreviated Framework Amendment 3	Blueline tilefish management measures	Approved by Council for formal secretarial review	SAFMC 2020d
Amendment 46	Private recreational reporting and permitting	Amendment on hold	SAFMC 2017g

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPEL

Table 2. Stock status of the 55 species within the snapper grouper complex. Documentation is provided for the assessment associated with each species. No assessments have been conducted by North Carolina Division of Marine Fisheries due to the nature of the fishery.

Family (species aggregate)	Species	Overfishing?	Overfished?	Documentation
Serranidae (Sea basses and groupers)	Gag ( <i>Mycteroperca microlepis</i> )	No**	No	SEDAR 10 Update (SEDAR 2014); NMFS 2019
	Red grouper ( <i>Epinephelus morio</i> )	Yes	Yes	SEDAR 53 (SEDAR 2017a); NMFS 2019
	Scamp ( <i>Mycteroperca phenax</i> )	No	Unknown	NMFS 2019
	Black grouper ( <i>Mycteroperca bonaci</i> )	No	No	SEDAR 19 (SEDAR 2010); NMFS 2019
	Rock hind ( <i>Epinephelus adscensionis</i> )	Unknown	Unknown	NMFS 2019
	Red hind ( <i>Epinephelus guttatus</i> )	Unknown	Unknown	NMFS 2019
	Graysby ( <i>Cephalopholis cruentata</i> )	Unknown	Unknown	NMFS 2019
	Yellowfin grouper ( <i>Mycteroperca venenosa</i> )	Unknown	Unknown	NMFS 2019
	Coney ( <i>Cephalopholis fulva</i> )	Unknown	Unknown	NMFS 2019
	Yellowmouth grouper ( <i>Mycteroperca interstitialis</i> )	Unknown	Unknown	NMFS 2019
	Goliath grouper ( <i>Epinephelus itajara</i> )	No (Permanent closure)	Unknown	SEDAR 47 (SEDAR 2016d); NMFS 2019
	Nassau grouper ( <i>Epinephelus striatus</i> )	No (Permanent closure)	Unknown	NMFS 2019
	Snowy grouper ( <i>Epinephelus niveatus</i> )	No	Yes	SEDAR 36 (SEDAR 2013a); NMFS 2019
	Yellowedge grouper ( <i>Epinephelus flavolimbatus</i> )	Unknown	Unknown	NMFS 2019
	Warsaw grouper ( <i>Epinephelus nigritus</i> )	Yes (Permanent closure)	Unknown	SG Amendment 17b (SAFMC 2010b); NMFS 2019
	Speckled hind ( <i>Epinephelus drummondhayi</i> )	Yes (Permanent closure)	Unknown	SG Amendment 17b (SAFMC 2010b); NMFS 2019
	Misty grouper ( <i>Epinephelus mystacinus</i> )	Unknown	Unknown	NMFS 2019
	Black sea bass ( <i>Centropristis striata</i> )	No	No	SEDAR 56 (SEDAR 2018b); NMFS 2019
	Bank sea bass ( <i>Centropristis ocyurus</i> )*	N/A	N/A	

\* Indicates ecosystem component species which do not have management measures in place and are not assessed.

\*\*Based on NMFS stock assessment

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPEL

Table 2 (continued).

Family (species aggregate)	Species	Overfishing?	Overfished?	Documentation
Serranidae (Sea basses and Groupers)	Rock sea bass ( <i>Centropristis philadelphica</i> )*	N/A	N/A	
Polyprionidae (Wreckfish)	Wreckfish ( <i>Polyprion americanus</i> )	No	No	Rademeyer and Butterworth 2014; NMFS 2019
Lutjanidae (Snappers)	Queen snapper ( <i>Etelis oculatus</i> )	Unknown	Unknown	NMFS 2019
	Yellowtail snapper ( <i>Ocyurus chrysurus</i> )	No	No	SEDAR 27A (SEDAR 2012b); NMFS 2019
	Gray snapper ( <i>Lutjanus griseus</i> )	Unknown	Unknown	NMFS 2019
	Mutton snapper ( <i>Lutjanus analis</i> )	No	No	SEDAR 15A Update (SEDAR 2015); NMFS 2019
	Lane snapper ( <i>Lutjanus synagris</i> )	Unknown	Unknown	NMFS 2019
	Cubera snapper ( <i>Lutjanus cyanopterus</i> )	Unknown	Unknown	NMFS 2019
	Vermilion snapper ( <i>Rhomboplites aurorubens</i> )	No	No	SEDAR 55 (SEDAR 2018a); NMFS 2019
	Red snapper ( <i>Lutjanus campechanus</i> )	Yes	Yes	SEDAR Assessment 41 (SEDAR 2016a); NMFS 2019
	Silk snapper ( <i>Lutjanus vivanus</i> )	Unknown	Unknown	NMFS 2019
	Blackfin snapper ( <i>Lutjanus buccanella</i> )	Unknown	Unknown	NMFS 2019
Sparidae (Porgies)	Red Porgy ( <i>Pagrus pagrus</i> )	Yes	Yes	SEDAR 60 (SEDAR 2020a);
	Knobbed porgy ( <i>Calamus nodosus</i> )	Unknown	Unknown	NMFS 2019
	Jolthead porgy ( <i>Calamus bajonado</i> )	Unknown	Unknown	NMFS 2019
	Scup ( <i>Stenotomus chrysops</i> )	Unknown	Unknown	NMFS 2019
	Whitebone porgy ( <i>Calamus leucosteus</i> )	Unknown	Unknown	NMFS 2019
	Saucereye porgy ( <i>Calamus calamus</i> )	Unknown	Unknown	NMFS 2019
	Longspine porgy ( <i>Stenotomus caprinus</i> )*	N/A	N/A	
Haemulidae (Grunts)	White grunt ( <i>Haemulon plumieri</i> )	Unknown	Unknown	NMFS 2019
	Margate ( <i>Haemulon album</i> )	Unknown	Unknown	NMFS 2019
	Tomtate ( <i>Haemulon aurolineatum</i> )	Unknown	Unknown	NMFS 2019

\* Indicates ecosystem component species which do not have management measures in place and are not assessed.

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPE

Table 2 (continued).

Family (species aggregate)	Species	Overfishing?	Overfished?	Documentation
Haemulidae (Grunts)	Sailor’s choice ( <i>Haemulon parra</i> )	Unknown	Unknown	NMFS 2019
	Cottonwick ( <i>Haemulon melanurum</i> )*	N/A	N/A	
Carangidae (Jacks)	Greater Amberjack ( <i>Seriola dumerili</i> )	No	No	SEDAR 59 (SEDAR 2020b)
	Almaco jack ( <i>Seriola rivoliana</i> )	Unknown	Unknown	NMFS 2019
	Banded rudderfish ( <i>Seriola zonanta</i> )	Unknown	Unknown	NMFS 2019
	Bar jack ( <i>Caranx ruber</i> )	Unknown	Unknown	NMFS 2019
	Lesser Amberjack ( <i>Seriola fasciata</i> )	Unknown	Unknown	NMFS 2019
Malacanthidae (Tilefishes)	Golden tilefish ( <i>Lopholatilus chamaeleonticeps</i> )	No	No	SEDAR 25 Update (SEDAR 2016b); NMFS 2019
	Blueline (or gray) tilefish ( <i>Caulolatilus microps</i> )	No**	No	SEDAR 50 (SEDAR 2017b); NMFS 2019
	Sand tilefish ( <i>Malacanthus plumier</i> )	Unknown	Unknown	NMFS 2019
Balistidae (Triggerfishes)	Gray triggerfish ( <i>Balistes capriscus</i> )	No	Unknown	SEDAR Assessment 41 (SEDAR 2016c); NMFS 2019
	Ocean triggerfish ( <i>Canthidermis sufflamen</i> )*	N/A	N/A	
Labridae (Wrasses)	Hogfish ( <i>Lachnolaimus maximus</i> )	Unknown (Carolinas); No (Florida)	Unknown (Carolinas); Yes (Florida)	SEDAR 37 (SEDAR 2013b); NFMS 2019
Eppiphidae (Spadefishes)	Atlantic spadefish ( <i>Chaetodipterus faber</i> )	Unknown	Unknown	NMFS 2019

\* Indicates ecosystem component species which do not have management measures in place and are not assessed.

\*\*Based on NMFS stock assessment

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPERS

Table 3. Landings of all snapper grouper species for the commercial fishery for 1994-2019. Sheepshead were removed from the fishery in 2012 and therefore not included past 2011.

Year	Weight of harvested fish (pounds)	Value of Landings (U.S. dollars)
1994	2,594,171	\$ 3,675,667
1995	2,563,749	\$ 3,532,089
1996	2,538,933	\$ 3,503,494
1997	2,764,268	\$ 4,025,116
1998	2,544,950	\$ 3,930,485
1999	2,397,539	\$ 3,982,175
2000	2,191,171	\$ 3,784,209
2001	2,214,402	\$ 3,673,444
2002	2,382,050	\$ 3,940,147
2003	1,996,322	\$ 3,413,736
2004	2,056,872	\$ 3,563,717
2005	1,903,696	\$ 3,575,553
2006	2,161,813	\$ 4,348,180
2007	2,345,187	\$ 5,264,378
2008	2,771,654	\$ 6,007,571
2009	2,647,375	\$ 5,282,933
2010	2,301,458	\$ 4,888,969
2011	1,621,683	\$ 3,918,505
2012	1,679,146	\$ 4,191,692
2013	1,469,893	\$ 3,932,158
2014	1,454,218	\$ 3,876,062
2015	1,185,217	\$ 3,355,299
2016	1,274,337	\$ 3,751,864
2017	1,285,126	\$ 3,861,215
2018	1,278,393	\$ 3,923,773
2019	1,339,779	\$ 4,485,601
Average	2,037,054	\$ 4,064,924

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPE

Table 4. Landings (in pounds) of snapper grouper, by aggregate groups, for the commercial fishery from 1994-2019. Aggregate groups are those used by the South Atlantic Fishery Management Council and are done by family (as in Table 2). Sheepshead were removed from the fishery in 2012 and therefore not included past 2011; these are included in the porgy aggregate. Only black sea bass from south of Cape Hatteras are included, as the northern populations are managed by the Atlantic States Marine Fisheries Commission and the Mid-Atlantic Fisheries Management Council. Wreckfish landings are confidential and are excluded.

<b>Year</b>	<b>Black sea bass</b>	<b>Grouper</b>	<b>Snapper</b>	<b>Porgies</b>	<b>Grunts</b>	<b>Jacks</b>	<b>Tilefish</b>	<b>Triggerfish</b>	<b>Hogfish</b>	<b>Spadefish</b>	<b>Unclassified</b>
1994	814	775,413	450,121	342,299	181,727	161,646	231,584	271,503	19,133	23,347	136,584
1995	5,774	772,773	403,499	354,629	163,392	181,020	160,860	304,540	33,445	40,873	142,944
1996	310,921	651,090	350,204	333,365	97,221	148,091	158,586	277,741	13,841	55,890	141,983
1997	419,945	719,550	366,482	263,939	130,361	191,572	149,402	342,134	14,010	57,384	109,489
1998	493,304	745,665	352,020	268,925	108,059	105,716	67,770	274,641	12,037	38,994	77,819
1999	484,002	758,068	441,783	178,433	94,756	134,499	76,697	150,387	12,405	34,320	32,190
2000	414,250	636,942	510,897	143,213	81,207	132,596	85,467	88,277	7,727	46,235	44,361
2001	477,116	558,626	523,741	148,512	94,422	125,286	106,674	87,628	8,203	41,994	42,200
2002	431,313	699,579	490,591	145,393	102,158	132,297	220,331	90,934	10,637	38,400	20,419
2003	476,493	651,949	269,230	108,923	65,379	138,443	87,102	117,396	9,135	28,519	43,754
2004	506,352	584,916	339,453	127,507	81,075	109,728	78,126	136,211	8,902	44,521	40,081
2005	321,858	579,271	432,823	101,123	90,364	124,456	44,014	145,639	7,877	35,445	20,826
2006	443,549	708,863	345,071	129,722	118,234	103,981	138,090	126,354	7,296	19,623	21,030
2007	277,451	827,766	550,608	175,092	118,545	135,695	58,218	155,261	7,112	19,567	19,874
2008	275,754	785,555	602,838	204,183	91,292	164,259	404,295	198,724	13,035	11,694	20,025

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Table 4 (continued).

<b>Year</b>	<b>Black sea bass</b>	<b>Grouper</b>	<b>Snapper</b>	<b>Porgies</b>	<b>Grunts</b>	<b>Jacks</b>	<b>Tilefish</b>	<b>Triggerfish</b>	<b>Hogfish</b>	<b>Spadefish</b>	<b>Unclassified</b>
2009	437,951	637,447	374,081	231,161	74,054	157,990	469,293	215,759	10,839	20,636	18,165
2010	292,879	561,926	320,260	242,412	47,219	131,050	430,394	225,682	13,046	18,827	17,763
2011	173,681	408,507	326,371	211,768	33,443	73,865	133,824	220,204	10,793	21,535	7,692
2012	194,778	382,085	279,367	83,918	49,734	140,525	361,094	143,114	8,256	24,238	12,038
2013	241,363	308,891	276,533	72,664	44,702	104,670	217,079	160,861	7,847	20,369	14,914
2014	316,420	300,002	251,062	82,779	39,312	202,207	91,074	116,782	9,767	22,761	22,052
2015	226,337	261,124	232,030	54,386	32,684	154,191	45,354	131,536	8,238	15,997	23,341
2016	198,595	258,173	280,043	47,319	39,843	148,775	111,788	135,545	9,195	15,231	29,830
2017	243,186	223,593	286,861	54,515	42,192	133,389	88,754	152,955	15,776	18,834	25,070
2018	180,623	239,181	323,241	58,995	36,820	151,866	68,509	174,075	13,755	9,838	21,489
2019	106,249	302,842	422,970	48,991	44,752	112,730	90,118	165,126	14,486	12,262	19,254

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Table 5. Landings of all snapper grouper species for the recreational fishery for 1994-2019. Sheepshead were removed from the fishery in 2012 and therefore not included past 2011.

Year	Number Harvested	Weight Harvested (pounds)	Number Released	Percent Released
1994	1,122,704	1,536,118	2,085,119	40
1995	760,710	1,272,346	1,017,649	37
1996	520,600	1,035,700	516,966	44
1997	758,210	1,275,604	982,893	43
1998	462,922	638,255	1,180,941	41
1999	512,259	1,115,025	1,279,859	43
2000	814,533	1,875,322	2,070,305	43
2001	885,512	1,951,012	1,793,595	39
2002	763,191	2,119,881	1,385,078	36
2003	1,120,047	2,335,324	1,327,321	33
2004	1,153,460	2,731,095	2,578,785	37
2005	1,157,612	2,736,693	2,562,520	39
2006	885,567	3,378,064	3,380,922	38
2007	1,230,325	4,245,321	3,463,009	54
2008	1,328,295	4,773,359	2,778,672	54
2009	1,179,139	3,986,022	2,519,259	45
2010	933,735	2,803,945	2,763,289	53
2011	611,220	1,361,512	3,132,003	56
2012	592,316	1,375,815	4,942,686	46
2013	383,259	1,004,917	3,413,860	48
2014	527,044	1,119,307	5,665,011	62
2015	585,640	1,236,957	5,585,899	48
2016	629,119	1,354,061	7,792,792	64
2017	851,774	1,659,890	6,795,091	53
2018	342,750	859,989	2,485,376	49
2019	434,400	885,120	3,346,307	69

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Table 6. Recreational landings (in pounds), by aggregate groups, for 1994-2019. Aggregate groups are those used by the South Atlantic Fishery Management Council and are done by family (as in Table 2). Sheepshead were removed from the fishery in 2012 and therefore not included past 2011; these are included in the porgy aggregate. Only black sea bass from south of Cape Hatteras are included, as the northern population is managed by Atlantic States Marine Fisheries Council and Mid-Atlantic Fishery Management Council.

<b>Year</b>	<b>Black sea bass</b>	<b>Groupers</b>	<b>Snappers</b>	<b>Porgies</b>	<b>Grunts</b>	<b>Jacks</b>	<b>Tilefish</b>	<b>Triggerfish</b>	<b>Hogfish</b>	<b>Spadefish</b>	<b>Wreckfish</b>
1994	255,936	192,300	86,864	348,920	405,116	142,011	-	96,569	256	8,146	-
1995	192,882	120,308	55,390	484,602	112,911	147,991	27,907	25,071	83,710	21,574	-
1996	222,898	44,050	31,717	289,437	77,503	276,636	540	77,012	-	15,907	-
1997	225,333	175,595	48,080	396,527	77,153	186,042	71,038	72,236	1,146	22,454	-
1998	154,986	60,962	9,577	250,646	37,113	89,045	-	25,188	-	10,738	-
1999	59,202	83,222	14,977	773,977	31,670	71,471	2,332	26,159	-	52,015	-
2000	373,028	52,463	23,294	820,377	9,520	548,623	3,724	26,184	-	18,109	-
2001	401,777	193,874	53,284	722,015	162,741	242,933	22,253	81,602	-	70,533	-
2002	183,634	348,809	143,786	865,924	337,495	159,670	7,290	54,879	11,499	6,895	-
2003	300,241	309,336	54,508	1,055,668	237,379	220,407	20,207	62,147	1,719	73,712	-
2004	507,359	1,022,259	170,615	558,545	266,540	94,406	29,313	64,317	1,300	16,441	-
2005	447,869	883,330	213,954	431,621	345,702	119,282	132,444	56,314	19,319	86,858	-
2006	175,048	1,671,117	54,160	476,295	235,456	316,341	330,140	64,556	19,365	35,586	-
2007	246,920	1,348,151	37,518	1,542,134	277,955	194,892	361,745	127,338	-	108,668	-
2008	104,582	1,946,062	114,550	1,139,132	302,233	468,560	404,734	269,507	1,813	22,186	-
2009	158,882	1,435,703	125,579	678,816	182,410	699,654	161,626	450,795	5,043	87,514	-

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Table 6 (continued).

<b>Year</b>	<b>Black sea bass</b>	<b>Groupers</b>	<b>Snappers</b>	<b>Porgies</b>	<b>Grunts</b>	<b>Jacks</b>	<b>Tilefish</b>	<b>Triggerfish</b>	<b>Hogfish</b>	<b>Spadefish</b>	<b>Wreckfish</b>
2010	206,765	325,422	50,327	1,016,739	84,349	567,382	51,649	257,445	8,658	235,209	-
2011	151,366	190,108	21,234	541,299	67,802	237,212	31,528	107,820	2,431	10,712	-
2012	219,859	215,213	78,050	42,963	171,618	262,534	65,879	221,703	24,243	73,281	472
2013	101,797	98,178	17,303	29,682	44,549	470,545	42,557	146,636	7,116	46,554	-
2014	562,393	28,173	25,717	21,247	86,365	154,373	45,541	102,145	-	93,353	-
2015	448,876	102,038	60,137	26,547	76,945	402,160	8,128	76,733	-	35,393	-
2016	301,334	79,379	46,391	19,455	86,926	356,481	282,035	165,279	466	16,315	-
2017	506,489	55,465	42,040	52,667	60,245	234,338	125,497	397,002	45,064	141,083	-
2018	107,331	9,227	29,406	8,012	16,762	357,661	116,891	178,928	383	35,388	-
2019	208,739	109,848	50,678	11,947	91,273	136,613	121,689	134,476	433	19,424	-

## ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPE

Table 7. Number of lengths and aging structures collected by NCDMF Program 438 (Offshore Live Bottom Fishery dependent sampling) for all species landed by the commercial and recreational sectors of the snapper grouper fishery in 2019. Many species included in this table are not part of the South Atlantic Snapper Grouper Management Complex but are landed as incidental catch during the prosecution of the fishery.

Species	Commercial		Recreational	
	Lengths	Aging Structures	Lengths	Aging Structures
African Pompano	8	1	25	18
Almaco Jack	1,469	5	3	3
Atlantic Bearded Brotula	1	0	0	0
Atlantic Bonito	132	0	0	0
Atlantic Tripletail	2	0	0	0
Banded Rudderfish	25	0	1	1
Bank Sea Bass	23	0	0	0
Bigeye	24	0	0	0
Black Grouper	2	1	1	1
Black Sea Bass	638	622	26	26
Blackbar Drum	6	0	0	0
Blackbelly Rosefish	77	2	0	0
Blackfin Snapper	187	187	0	0
Blackfin Tuna	8	0	0	0
Blackline Tilefish	10	10	0	0
Blue Runner	1	0	0	0
Bluefish	4	0	0	0
Blueline Tilefish	151	142	0	0
Bulleye	15	0	0	0
Carribean Spiny Lobster	0	0	1	0
Cobia	12	0	5	3
Coney	1	1	0	0
Cottonwick	23	0	0	0
Creole-fish	40	40	0	0
Crimson Rover	1	0	0	0
Cubera Snapper	2	2	1	1
Dolphinfish	101	0	0	0
Frigate Mackerel	1	0	0	0
Gag	288	279	47	46
Goldface Tilefish	11	11	0	0
Gray Snapper	23	22	2	2
Gray Triggerfish	991	950	22	22
Graysby	64	56	0	0
Great Barracuda	11	0	1	0
Greater Amberjack	123	4	1	1
Greater Soapfish	1	0	0	0

## ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPEL

Table 7. (continued).

Species	Commercial		Recreational	
	Lengths	Aging Structures	Lengths	Aging Structures
Gulf Flounder	4	0	2	1
Hogfish	152	42	32	19
King Mackerel	248	0	8	8
Knobbed Porgy	114	0	3	3
Lesser Amberjack	45	1	0	0
Little Tunny	135	0	2	1
Longtail Bass	1	0	0	0
Marbled Grouper	9	9	0	0
Mutton Snapper	16	16	1	1
Oyster Toadfish	1	0	0	0
Painted Wrasse	2	0	0	0
Permit	0	0	1	0
Pigfish	63	0	0	0
Queen Triggerfish	17	11	0	0
Rainbow Runner	0	0	3	1
Red Grouper	94	94	4	4
Red Hake	2	0	0	0
Red Hind	19	19	0	0
Red Lionfish	20	0	12	0
Red Porgy	434	426	16	9
Red Snapper	120	120	62	62
Remora	4	0	0	0
Reticulate Moray	1	0	0	0
Rock Hind	42	33	0	0
Saddle Bass	1	0	0	0
Sand Perch	15	0	0	0
Sand Tilefish	215	0	0	0
Scamp	253	241	19	18
Scup	58	0	0	0
Sheepshead	0	0	8	6
Short Bigeye	59	0	0	0
Silk Snapper	767	766	0	0
Slipper Lobsters	0	0	1	0
Smooth Puffer	1	0	0	0
Snowy Grouper	520	500	0	0
Southern Flounder	0	0	7	6
Spanish Mackerel	0	0	4	4
Spinycheek Scorpionfish	3	0	0	0

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Table 7. (continued).

Species	Commercial		Recreational	
	Lengths	Aging Structures	Lengths	Aging Structures
Spotfin Hogfish	2	0	0	0
Spottail Pinfish	275	0	6	0
Spotted Moray	8	0	0	0
Squirrelfish	215	0	0	0
Tilefish	16	15	0	0
Tomtate	198	0	0	0
Vermilion Snapper	2,416	2,379	43	38
Wahoo	9	0	0	0
White Grunt	334	316	23	23
Whitebone Porgy	7	0	2	2
Whitespotted Soapfish	2	0	0	0
Yellow Jack	3	0	0	0
Yellowedge Grouper	23	23	0	0
Yellowfin Grouper	3	1	0	0
Yellowmouth Grouper	26	26	0	0
Yellowtail Snapper	6	6	1	1
<b>Grand Total</b>	<b>11,454</b>	<b>7,379</b>	<b>396</b>	<b>331</b>

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Table 8. Black sea bass south of Cape Hatteras length (total length, inches) data from Marine Recreational Information Program recreational samples, 1994-2019.

Year	Mean Total Length	Minimum Total Length	Maximum Total Length	Total Number Measured
1994	10	4	21	211
1995	11	6	20	173
1996	11	7	19	177
1997	11	6	18	175
1998	10	6	21	173
1999	10	7	19	139
2000	11	8	15	102
2001	12	8	19	219
2002	12	9	20	46
2003	12	9	18	75
2004	12	9	18	125
2005	13	9	18	90
2006	12	10	19	85
2007	14	11	20	51
2008	14	9	18	72
2009	13	11	20	172
2010	13	6	19	297
2011	14	8	21	206
2012	14	9	19	217
2013	13	7	19	244
2014	13	5	17	135
2015	14	11	20	111
2016	15	12	18	115
2017	15	10	19	139
2018	14	10	17	152
2019	14	12	18	117

ASMFC AND FEDERALLY-MANAGED SPECIES WITHOUT N.C. INDICES – SNAPPER GROUPER

Table 9. Summary of black sea bass south of Cape Hatteras age samples collected from both dependent (commercial and recreational fisheries) and independent (surveys) sources from 2004-2019.

Year	Modal Age	Minimum Age	Maximum Age	Total Number Aged
2004	4	2	8	316
2005	4	2	9	767
2006	4	2	8	699
2007	4	1	10	1,837
2008	4	2	10	1,452
2009	4	2	8	1,473
2010	4	1	8	900
2011	3	1	8	798
2012	4	2	10	1,116
2013	4	1	7	1,251
2014	4	1	8	1,546
2015	4	2	9	1039
2016	4	1	8	708
2017*	4	2	8	578
2018**				1,073
2019**				648

\* Preliminary ages, pending second read.

\*\* Age samples not read.

FIGURES

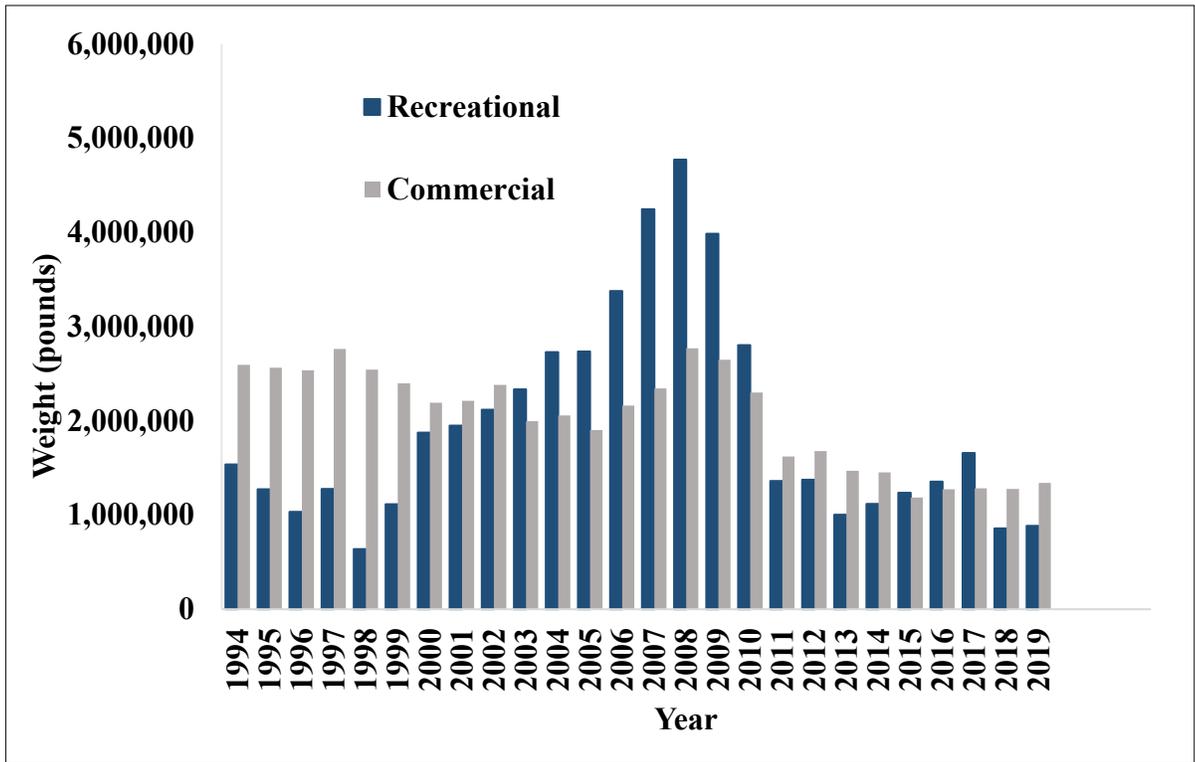


Figure 1. Annual commercial and recreational landings in pounds for snapper grouper species in North Carolina from 1994 to 2019.

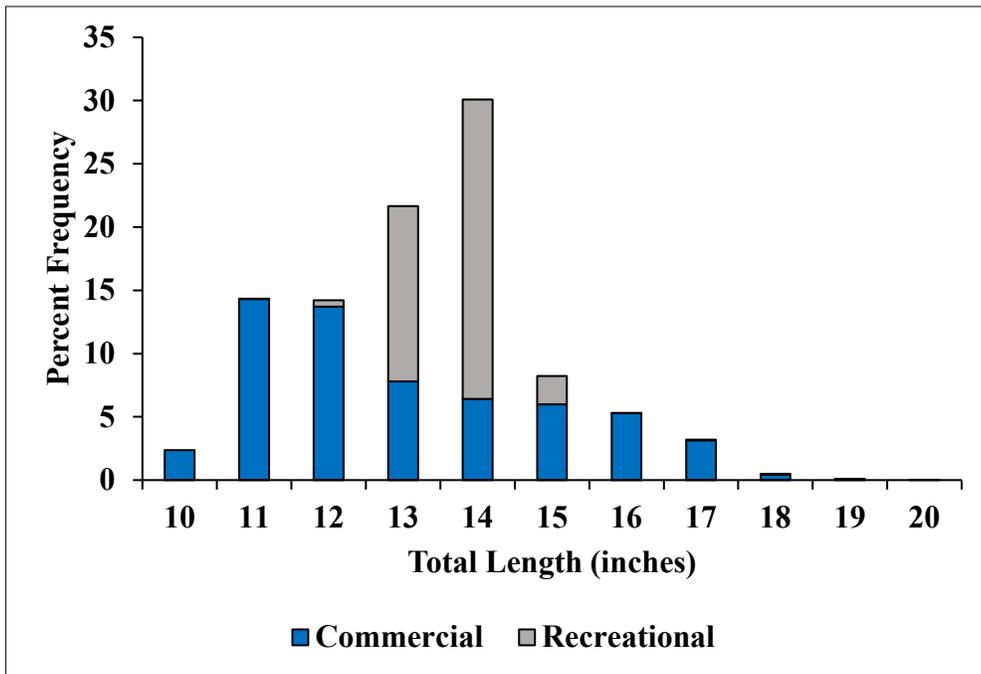


Figure 2. Commercial and recreational length frequency distribution from black sea bass south of Cape Hatteras harvested in 2019.

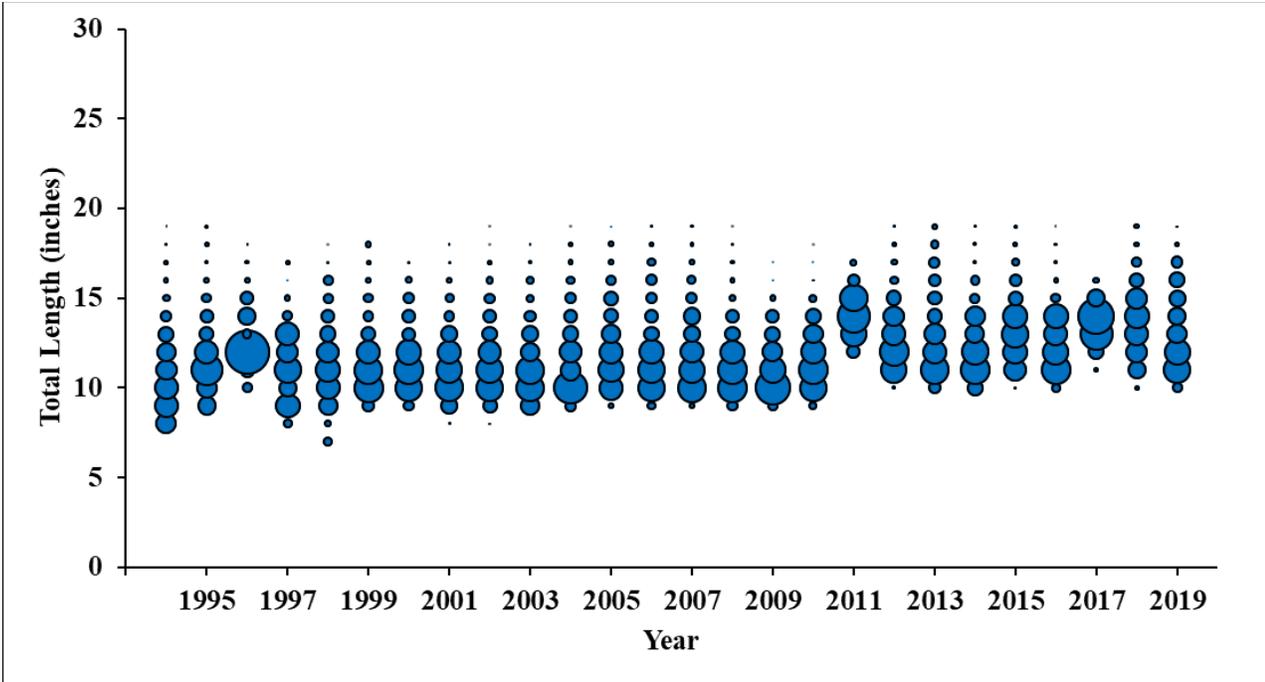


Figure 3. Commercial length frequency (total length, inches) of black sea bass south of Cape Hatteras harvested from 1994 to 2019. Bubbles represent fish harvested at length and the size of the bubble is equal to the proportion of fish at that length.

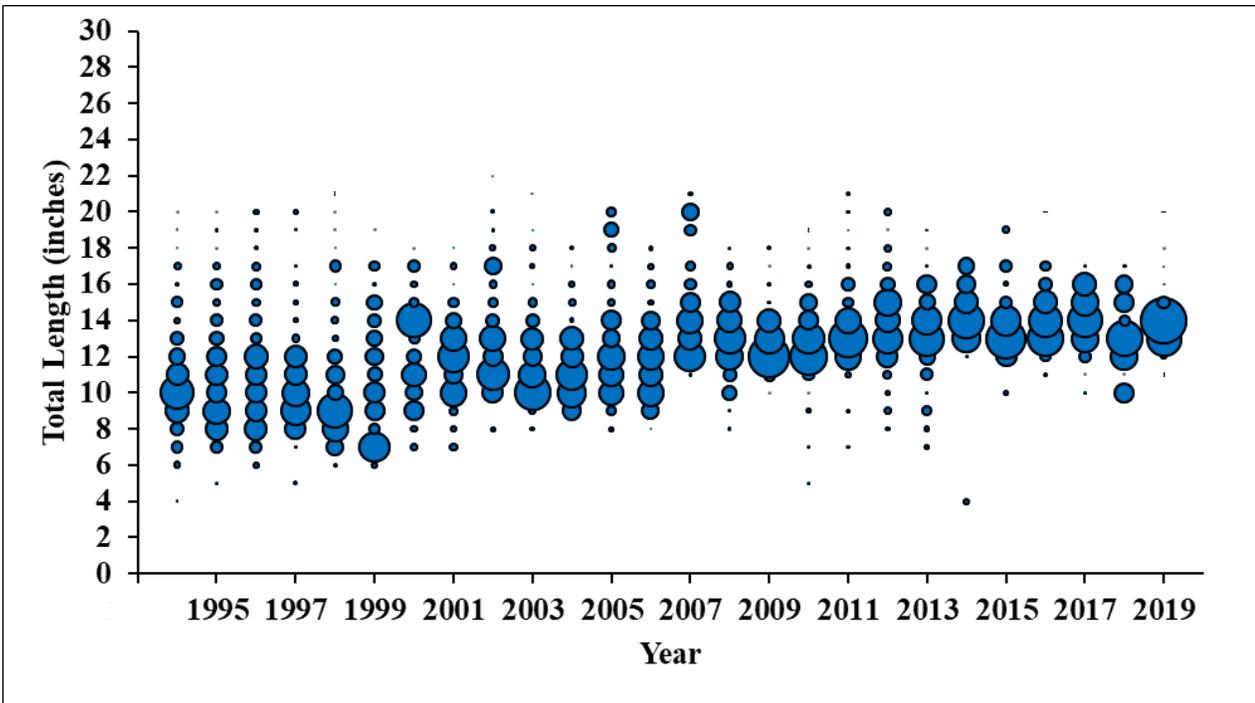


Figure 4. Recreational length frequency (total length, inches) of black sea bass south of Cape Hatteras harvested from 1994 to 2019. Bubbles represent fish harvested at length and the size of the bubble is equal to the proportion of fish at that length.

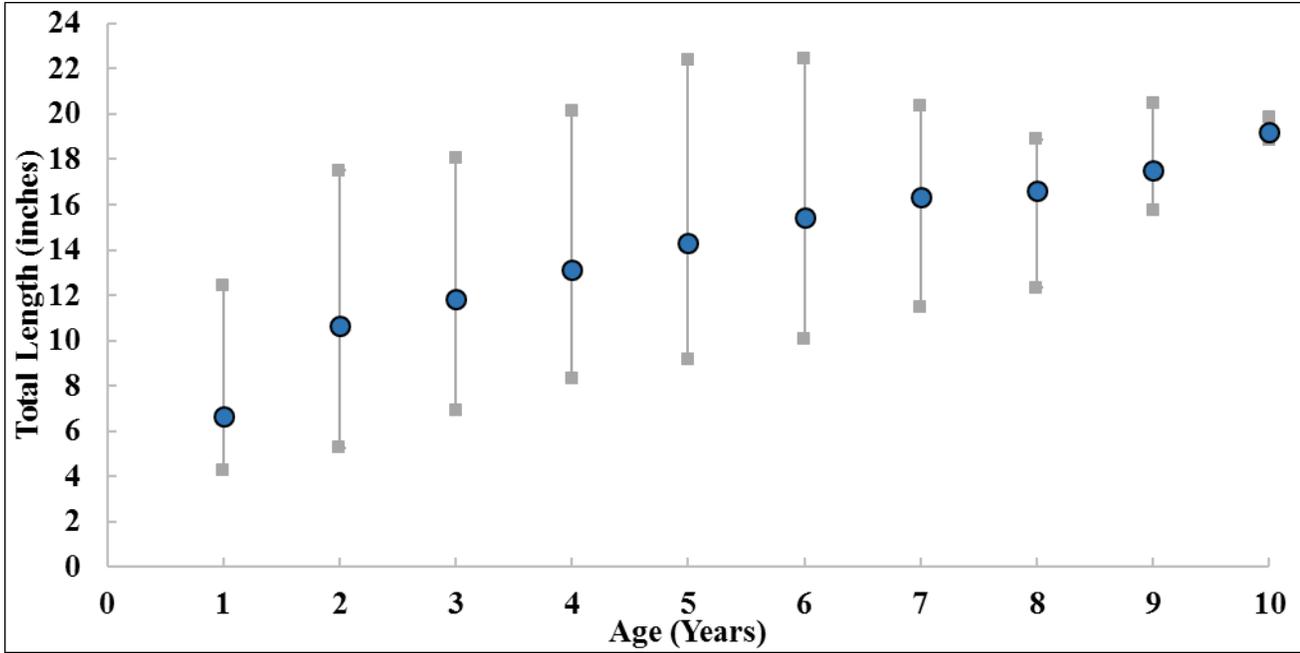


Figure 5. Black sea bass south of Cape Hatteras length at age based on all age samples collected from 2004 to 2017 (age samples collected in 2018 and 2019 have not been read). Blue circles represent the mean size at a given age while the grey squares represent the minimum and maximum observed size for each age.