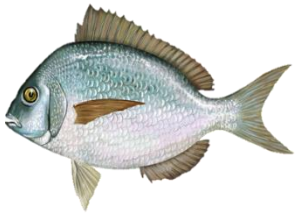
Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment

Scoping and Public Information Document

January 2020


What is scoping?

Scoping is the process of identifying issues, potential impacts, and a reasonable range of alternatives associated with new fisheries management actions. **Scoping provides the first and best opportunity for the public to make suggestions and raise concerns about new actions.** Your comments early in the development of this action will help the Mid-Atlantic Fishery Management Council (Council or MAFMC) and the Atlantic States Marine Fisheries Commission (Commission or ASFMC) identify issues of concern and determine which types of management alternatives should be further developed.

The potential management changes outlined in this document are not a list of preferred alternatives, nor will they necessarily be included in this action. The Commission and Council have not yet analyzed any management measures for their effectiveness or impacts. At this early stage, all reasonable options will be considered.

Please comment on which options may or may not be useful or practical for meeting the goal of this action (including measures not described in this document) and explain your reasoning. Please also comment on any other relevant issues the Council and Commission should consider as part of this action.

Contents

List of acronyms and abbreviations

ACCSP	Atlantic Coastal Cooperative Statistics Program
ASMFC or Commission	Atlantic States Marine Fisheries Commission
FMP	Fishery Management Plan
MAFMC or Council	Mid-Atlantic Fishery Management Council
MRIP	Marine Recreational Information Program
NMFS	National Marine Fisheries Service
RHL	Recreational Harvest Limit

1) Introduction

The Atlantic States Marine Fisheries Commission (Commission or ASFMC) and the Mid-Atlantic Fishery Management Council (Council or MAFMC) jointly manage commercial and recreational summer flounder, scup, and black sea bass fisheries from Maine through North Carolina.[1] The Council develops regulations for federal waters while the Commission and member states develop regulations for state waters. The National Marine Fisheries Service (NMFS) serves as the federal implementation and enforcement agency.

As described in more detail below, the Council and Commission are seeking public input on a management action to consider potential modifications to the allocations of catch or landings between the commercial and recreational sectors for summer flounder, scup, and black sea bass.

[1] The Council and Commission manage summer flounder throughout all of North Carolina. They manage scup and black sea bass through Cape Hatteras, North Carolina.

2) What are the current allocations between the commercial and recreational sectors for summer flounder, scup and black sea bass?

For summer flounder, 60% of the annual total allowable landings is allocated to the commercial fishery and 40% to the recreational fishery based on 1980-1989 landings data. These allocations were implemented in 1993 through Amendment 2 to the Fishery Management Plan (FMP).

For scup, 78% of the annual total allowable catch (landings plus dead discards) is allocated to the commercial fishery and 22% to the recreational fishery based on catch data from 1988-1992. These allocations were implemented through Amendment 8 to the FMP, which was approved in 1996.

For black sea bass, 49% of the annual total allowable landings is allocated to the commercial fishery and 51% to the recreational fishery based on landings data from 1983-1992. These allocations were implemented through Amendment 9 to the FMP, which was approved in 1996.

3) Why are the Commission and Council considering changes to these allocations?

The commercial and recreational allocations for all three species are currently based on historical proportions of landings (for summer flounder and black sea bass) or catch (for scup) from each sector. The current allocations were set in the mid-1990s and have not been revised since that time. Recreational catch and harvest data are provided by the Marine Recreational Information Program (MRIP). In July 2018, MRIP released revisions to their time series of catch and harvest estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology (namely, a transition from a telephone-based effort survey to a mail-based effort survey). These revisions resulted in much higher recreational catch estimates compared to previous estimates, affecting the entire time series of data going back to 1981. Some changes have also been made to commercial catch data since the allocations were established. For example, the commercial scup discard estimates were revised through the 2015 scup stock assessment. These commercial and recreational data revisions have management implications due to the fixed commercial/recreational allocation percentages defined in the FMP for all three species. These allocation percentages do not reflect the current understanding of the recent and historic proportions of catch and landings from the two sectors. Because these allocation percentages are defined in the Council and Commission FMPs, they cannot be modified without an FMP amendment. This amendment will consider whether the allocations are still appropriate and meeting the objectives of the FMP. Additionally, stakeholders have requested consideration of how to improve systems of catch and landings accountability, particularly in the recreational sector. All these issues may be considered through this amendment.

Amendment Objective

- Consider modifications to the current allocations between the commercial and recreational sectors for summer flounder, scup, and black sea bass.

4) Issues for consideration

The Commission and Council are soliciting public input on all aspects of this action. Specific management alternatives have not yet been identified. After reviewing public comments received through the scoping process, the Council and Commission will determine the issues to be addressed and the scope of the amendment. A range of management options will be developed, potentially including, but not limited to the following approaches:

- No action/status quo;
- Updating the current allocation percentages using the existing base years but with current recreational and commercial data;
- Using alternative base years to derive new allocation percentages with current recreational and commercial data;
- Using different allocation approaches which do not rely on base years;
- Allocations based on catch (including discards), or based on landings;
- Using socioeconomic data, analysis, or other considerations to modify the allocations based on optimization of economic efficiency and socioeconomic benefits from each fishery;
- Separate allocations to for-hire vs. private boat and shore-based fisheries, including considering limited access in the for-hire fisheries;
- Allowing the transfer of allocation from one sector to another through specifications or a framework action (shorter and more efficient actions than amendments);
- Using allocation set-asides to adapt to unforeseen circumstances and the changing needs of the fisheries from year to year;
- Catch limits defined in pounds and/or numbers of fish, or using other methods;
- Static vs. dynamic allocations;
- The option to make future allocation changes through a framework/addendum (a shorter and more efficient action than an amendment);
- Improving catch accounting and estimation methods in the recreational sector;
- Improving accountability in the recreational sector;
- Other approaches to be determined.

Please comment on the suitability of any of the options listed here, as well as other options that may be appropriate, and describe your reasoning.

The Commission and Council will develop a range of alternatives for further consideration after reviewing public comments.

5) How to get involved

The Council and Commission are in the early stages of developing this amendment. You will have additional opportunities to provide comments; however, now is the best time to provide input and raise concerns about the general scope of the amendment.

Attend a scoping hearing

Public scoping hearings will be held at the following dates and locations. Scoping hearings provide an opportunity to learn more about the amendment, ask questions, and provide verbal and/or written comments. Note that some hearings will be held in conjunction with (immediately before or after) supplemental scoping hearings for an ongoing Bluefish Allocation Amendment. A schedule for the bluefish hearings can be found at: http://www.mafmc.org/actions/bluefish-allocation-amendment.

Date and Time	Location
Thursday, February 13 6:00-7:30 PM	**Massachusetts Maritime Academy, Admiral's Hall** 101 Academy Drive, Buzzards Bay, Massachusetts 02532
Wednesday, February 19 6:00-7:00 PM	**Delaware Dept. of Natural Resources & Environmental Control** DNREC Auditorium, Richards & Robbins Building 89 Kings Highway, Dover, Delaware 19901
Monday, February 24 6:00-8:00 PM	**Belmar Municipal Court Room** 601 Main Street, Belmar, New Jersey 07719
Tuesday, February 25 3:30-4:45 PM	**Berlin Library** 13 Harrison Avenue, Berlin, Maryland 21811
Tuesday, February 25 6:00-8:00 PM	**Galloway Township Branch Library** 306 East Jimmie Leeds Road, Galloway, New Jersey 08205
Tuesday, February 25 6:00-8:00 PM	**North Carolina Division of Marine Fisheries, Pamlico District Office** 943 Washington Square Mall, US Highway 17 Washington, North Carolina 27889
Wednesday, February 26 6:00-7:30 PM	**University of Rhode Island Bay Campus, Corless Auditorium** South Ferry Road, Narragansett, Rhode Island 02882
Wednesday, February 26 7:00-8:00 PM	**Connecticut Dept. of Energy and Environmental Protection Marine Headquarters Boating Education Center** (Rear Building) 333 Ferry Road, Old Lyme, Connecticut 06371
Thursday, February 27 6:00-7:30 PM	**Stony Brook University, School of Marine and Atmospheric Sciences** Room 120 Endeavor Hall, Stony Brook, New York 11794
Monday, March 2 5:00-6:00 PM	**Virginia Marine Resources Commission** 380 Fenwick Road, Building 96, Fort Monroe, Virginia 23651
Tuesday, March 3 6:00-7:30 PM	**Internet Webinar** http://mafmc.adobeconnect.com/sfsbsb_com_rec_allocation_scoping/ *Audio: 1-800-832-0736 and enter room number 5068871.*

Submit written comments

You may submit written comments at a public scoping hearing, or through one of the following methods:

1) **Online** at: http://www.mafmc.org/comments/sfsbsb-allocation-amendment
2) **Email** to: jbeaty@mafmc.org
3) **Mail or Fax** to:

Dr. Chris Moore, Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901
Fax: 302-674-5399

Written comments must be received by 11:59 pm Eastern Daylight Time on Tuesday, March 17, 2020.

Please include "Fluke/Scup/Sea Bass Allocation Amendment" in the subject line if using email or fax, or on the outside of the envelope if submitting written comments.

All comments, regardless of submission method, will be shared with the Commission and Council and will be made publicly available on their respective websites. It is not necessary to submit the same comments to both the Council and Commission or through multiple channels.

Stay informed

For additional information and updates on development of this amendment, please visit: http://www.mafmc.org/actions/sfsbsb-allocation-amendment.

The Council and Commission will publish announcements about future opportunities for public comment in the Federal Register and at www.mafmc.org and www.asmfc.org.

If you have any questions, please contact:

- Julia Beaty, Mid-Atlantic Fishery Management Council, at jbeaty@mafmc.org or 302-526-5250, or
- Dustin Colson Leaning, Atlantic States Marine Fisheries Commission, at dleaning@asmfc.org or 703-842-0740.

6) Next steps

Scoping is the initial phase of information gathering and public comment, after which the Commission and Council will develop and evaluate potential management alternatives. There will be several additional opportunities for public input on development of these alternatives. Table 1 describes the major expected next steps in development of this amendment. Announcements of relevant public meetings will be posted to the Council and Commission websites (www.mafmc.org and www.asmfc.org).

After development and consideration of management alternatives and analysis of their impacts, the Council and Commission will choose preferred management measures. The Council will submit their recommendations to the National Marine Fisheries Service for review and

consideration for approval. Approved management measures will be implemented through publication of proposed and final rules in the Federal Register, which will include additional public comment periods. Commission decisions are final and not subject to an additional rulemaking process.

While there will be many additional opportunities for public comment on this amendment, the scoping period is particularly important for assisting the Council and Commission in establishing the overall focus and direction of the amendment.

Table 1: Expected timeline for amendment next steps. This timeline is subject to change. For example, depending on the level of analysis required under the National Environmental Policy Act, the timeline could be extended beyond that shown here.

February/March 2020	Scoping hearings and comment period
March/April 2020	Scoping comments summarized
May 2020	Council and Board review scoping comments and identify potential categories of alternatives to consider
May-July 2020	Initial development of draft management alternatives
August 2020	Council and Board approve a range of alternatives for inclusion in a public hearing document
December 2020	Council and Board approve public hearing document
Early 2021	Public hearings
Spring 2021	Final action
Summer 2021	Federal rulemaking and comment periods
Late 2021/Early 2022	Effective date of management changes

7) Stock status

According to the 2018 benchmark stock assessment, the summer flounder stock was not overfished, and overfishing was not occurring in 2017. Spawning stock biomass in 2017 was estimated to be about 22% below the target level, but 56% above the threshold which defines an overfished condition. Fishing mortality in 2017 was estimated to be about 25% below the threshold level that defines overfishing. Summer flounder recruitment, measured as the number of age 0 fish, has been below the 1982-2017 average since 2011.

According to the 2019 operational stock assessment, the scup stock was not overfished, and overfishing was not occurring in 2018. Spawning stock biomass in 2018 was estimated to be about 2.0 times the target level and fishing mortality was about 27% below the threshold level that defines overfishing. The 2015 year class (i.e., those scup spawned in 2015) was the largest scup year class since at least 1984, while the 2016-2018 year classes were below average.

According to the 2019 operational stock assessment, the black sea bass stock was not overfished, and overfishing was not occurring in 2018. Spawning stock biomass in 2018 was estimated to be about 2.4 times the target level and fishing mortality was about 9% below the threshold level that defines overfishing. The 2011 year class was the largest black sea bass year class since at least 1989. The 2015 year class was also well above average; however, the 2017 year class is 72% below the 1989-2017 average.

8) Commercial and recreational landings and discard trends

Summer flounder

Using the base years of 1980 to 1989 (Table 2), the FMP currently allocates 60% of the summer flounder total allowable landings to the commercial fishery and 40% to the recreational fishery. These allocations were implemented through Amendment 2 to the FMP in 1993.

Commercial landings peaked in 1984 at 37.77 million pounds before declining throughout the 1980s to 9.26 million pounds in 1990. In 1993, a coastwide (i.e., Maine through North Carolina) commercial quota was implemented for the first time. Since then, commercial landings have been limited by the quota and ranged from a low of 5.83 million pounds in 2017 to a high of 17.37 million pounds in 2004. Commercial landings declined over the past 5 years, in large part due to reductions in the commercial quota, which dropped from 11.07 million pounds in 2015 to 5.66 million pounds in 2018. Commercial dead discard estimates since 1989 varied from a low of 0.48 million pounds in 1991 to a high of 4.74 million pounds in 1992. Commercial dead discards averaged 8% of total catch from 2009 to 2018.

Recreational harvest (under revised MRIP data) peaked in 1983 at an estimated 36.74 million pounds. Similar to commercial landings, recreational harvest dropped in the 1980s to a low of 5.66 million pounds in 1989, corresponding with a decline in overall stock biomass over the same time frame. Starting in 1993, coastwide recreational harvest limits (RHLs) were implemented for the recreational fishery. Recreational harvest generally increased throughout the 1990s, and then began to decline after about 2000, in part due to decreases in the RHL. In 2018, recreational anglers harvested 7.60 million pounds of summer flounder. From 2009-2018, an average of 88% of the harvest (in pounds) originated from private/rental boats, while party/charter boats and shore-based anglers accounted for an average of 5% and 7% of the harvest, respectively. Recreational dead discard estimates ranged from a low of 0.19 million pounds in 1989 to a high of 5.98 million pounds in 2011. Recreational dead discards averaged 14% of total catch from 2009 to 2018 (Figure 1).

Table 2: Comparison of Amendment 2 data and current data for commercial and recreational summer flounder landings in millions of pounds and percentages for 1980-1989. These years were used to calculate the sector allocations implemented in Amendment 2.

Summer Flounder								
	Amendment 2 (1993)				Current Data (2018 Benchmark Assessment)			
Year	**Com. landings[a]**	**Rec. landings[a]**	**% Com.**	**% Rec.**	**Com. landings**	**Rec. landings[b]**	**% Com.**	**% Rec.**
1980	31.22	25.84	55%	45%	31.22	N/A	N/A	N/A
1981	21.06	11.30	66%	35%	21.06	15.85	57%	43%
1982	22.93	18.90	55%	45%	22.93	23.72	49%	51%
1983	29.55	35.65	45%	55%	29.55	36.74	45%	55%
1984	37.77	28.88	57%	43%	37.77	28.23	57%	43%
1985	32.35	17.09	65%	35%	32.35	25.14	56%	44%
1986	26.87	17.57	60%	40%	26.87	26.47	50%	50%
1987	27.05	13.13	67%	33%	27.05	23.45	54%	46%
1988	32.38	18.42	64%	36%	32.38	20.79	61%	39%
1989	17.91	3.19	85%	15%	17.91	5.66	76%	24%
Avg	27.91	19.00	**59%[d]**	**41%[d]**	27.54[c]	22.89[c]	**55%[d]**	**45%[d]**

[a] The source of commercial landings used in Amendment 2 was "NMFS General Canvas Data," while the source of recreational data used in Amendment 2 was "unpublished NMFS Marine Recreational Fisheries Statistics Survey (MRFSS) Data." MRFSS was a precursor to MRIP.

[b] Recreational harvest data in the 2018 assessment are provided back to 1982. The value for 1981 is from a query of MRIP data. Current recreational data for 1980 are not available as the MRIP estimates only go back to 1981.

[c] Average for recent data includes only 1981-1989, given that revised MRIP data for 1980 are not available for.

[d] These averages are derived by calculating the percent split of the total landings over the time period (1981-1989 for new data or 1980-1989 for the Amendment 2 data). In Amendment 2, this table lists the averages percentages by sector as 62% commercial and 38% recreational, which is calculated by taking the average of the annual sector percent values. The Amendment 2 document states that "the commercial share averaged about 60% of the combined total landings of summer flounder from 1980-1989," and references a "distribution (60/40) of landings between the commercial and recreational fisheries." Explicit information on the exact methods and rationale for the 60/40 split is largely lacking in the amendment documents.

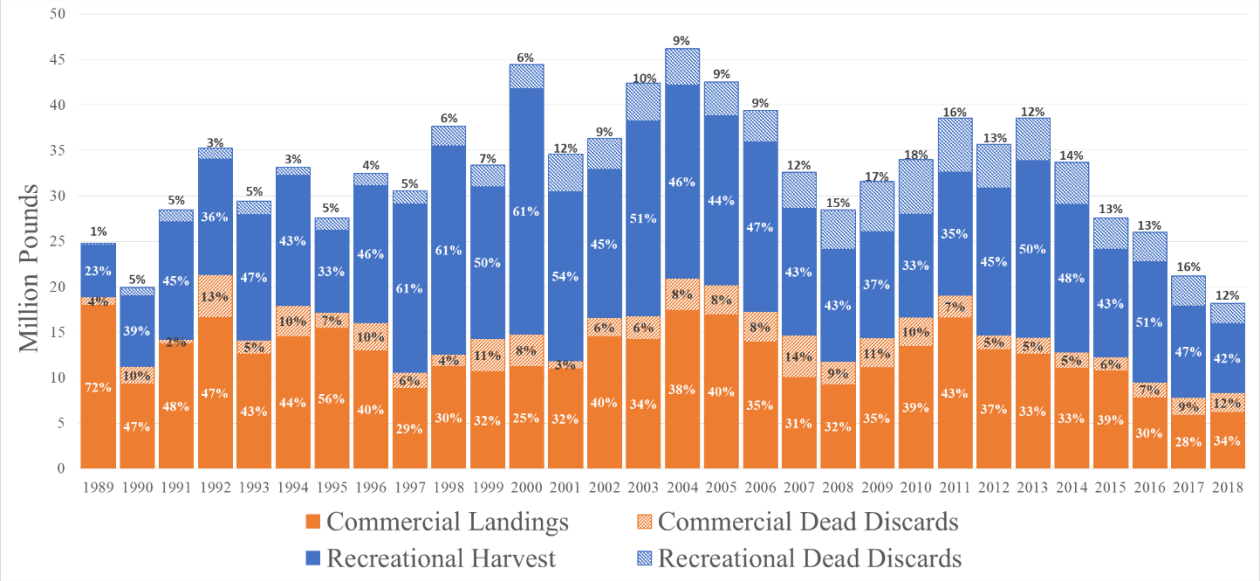


Figure 1: Commercial and recreational summer flounder landings and dead discards, 1982-2018. Data retrieved from the Northeast Fisheries Science Center 2019 data update. Commercial discard estimates prior to 1989 are not available.

Scup

Amendment 8 (1996) specified that the annual total allowable catch for scup would be allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catch (landings and dead discards) during 1988-1992 (Table 3). Based on these data, 22% of the total allowable catch is allocated to the recreational fishery and 78% is allocated to the commercial fishery. At the time, the Council and Commission determined that allocating based on catch instead of landings was fair and equitable to both the commercial and recreational fisheries given that each sector would receive the full effect of a change in the rate of discards (e.g., the commercial quota could be higher under lower levels of commercial discards).

Commercial scup landings peaked in 1981 at 21.73 million pounds and reached a low of 2.66 million pounds in 2000 (Figure 2). In 2018, commercial fishermen landed 13.37 million pounds of scup. A coastwide (i.e., Maine through Cape Hatteras, North Carolina) commercial scup quota was first implemented in 1997; however, unlike summer flounder and black sea bass, in recent years the commercial fishery appears to be more limited by market factors than by the quota. The commercial fishery has not harvested their full quota since 2007.

From 1989 to 2018, commercial scup discards fluctuated widely. They increased from 2014-2017, peaking at about 10.42 million pounds in 2017. This was the highest amount of commercial scup discards since at least 1981 and was likely driven in large part by a record high 2015 year class (i.e., those scup spawned in 2015). In 2017, these scup were very abundant, but mostly too small to be landed in the commercial fishery due to the commercial minimum fish size of 9 inches total length.

Based on the revised MRIP data, recreational scup harvest from 1981-2018 fluctuated from a high of 14.18 million pounds in 1986 to a low of 1.82 million pounds in 1998. In 2018, recreational

harvest was about 12.98 million pounds (Figure 2). Recreational dead discards ranged from a low of 0.07 million pounds in 1999 to a high of 2.38 million pounds in 2017. Recreational dead discards averaged 5% of total catch from 2009 to 2018. Over the past ten years (2009-2018), the proportion of recreational harvest by mode averaged 12% from the party/charter boat mode, 67% from the private/rental boat mode, and 21% from the shore mode. Like the commercial quota, the coastwide scup RHL was first implemented in 1997.

Table 3: Comparison of commercial and recreational scup catch in million pounds and percentages for 1988-1992 based on the 2019 operational assessment and the analysis conducted for Amendment 8. These years were used to calculate the sector allocations implemented in Amendment 8.

	Scup							
	Amendment 8 (1996)[a]				**Current Data (2019 Operational Assessment)**			
Year	**Com. Catch**	**Rec. Catch**	**% Com. Catch**	**% Rec Catch**	**Com. Catch**	**Rec. Catch**	**% Com. Catch**	**% Rec. Catch**
1988	16.29	4.69	78%	22%	19.08	7.12	73%	27%
1989	12.98	5.79	69%	31%	11.60	10.66	52%	48%
1990	18.07	4.30	81%	19%	15.51	7.30	68%	32%
1991	22.93	8.29	73%	27%	23.08	13.08	64%	36%
1992	25.86	4.58	85%	15%	17.95	9.59	65%	35%
Avg	19.23	5.53	**78%**	**22%**	17.44	9.55	**65%**	**35%**

[a] Data sources used in Amendment 8 include NMFS commercial fish dealer weighout, MRFSS (a precursor to MRIP), and Northeast Fisheries Science Center data.

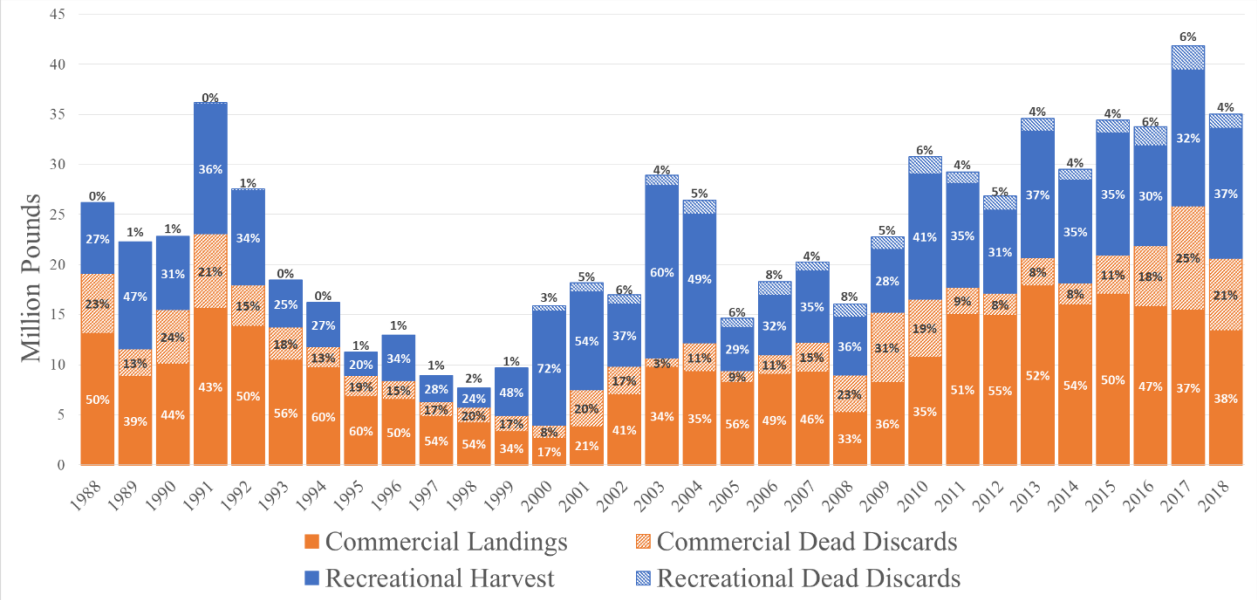


Figure 2: Commercial and recreational scup landings and dead discards, 1981-2018. Data retrieved from the 2019 Northeast Fisheries Science Center Scup Operational Assessment.

Black sea bass

Amendment 9 (1996) specified that the annual total allowable landings for black sea bass would be allocated 49% to the commercial fishery and 51% to the recreational fishery based on the proportions of commercial and recreational landings during 1983-1992 (Table 4). Like summer flounder, this is a landings-based allocation, rather than a catch-based allocation.

Since 1981, commercial landings ranged from a low of 1.18 million pounds in 2009 to a high of 3.99 million pounds in 2017. In 2018, commercial landings totaled 3.42 million pounds. Commercial landings have been constrained by a coastwide (i.e., Maine through Cape Hatteras, North Carolina) commercial quota since 1998. State-specific commercial allocations were introduced in 2003. According to the 2019 operational stock assessment, commercial dead discards in 2018 totaled 1.59 million pounds. On average, commercial discards were greater during 2014-2018 compared to earlier years, likely influenced by high availability coupled with quota and minimum fish size limitations. Over the past 10 years (2009-2018), commercial dead discards averaged 7% of total catch.

Based on the revised MRIP data, between 1981 and 2018, recreational black sea bass catch from Maine through Cape Hatteras, NC was highest in 2016 at 12.05 million pounds and lowest in 1981 at 1.53 million pounds. Recreational harvest in 2018 was estimated at 7.91 million pounds. A coastwide RHL was first implemented in 1998. Over the past ten years (2009-2018), about 87% of recreational black sea bass harvest came from private/rental boats, 12% from party/charter boats, and 1% from shore, according to MRIP estimates.

Recreational dead discards averaged about 460,800 pounds during 1989-1997, prior to implementation of joint Council and Commission management. Recreational dead discards have generally increased since 1998. For example, they averaged 2.42 million pounds during 2012-2018 and totaled 2.28 million pounds in 2018. As with commercial discards, these trends were likely at least partially driven by increasing availability, recreational possession limits, and recreational minimum fish sizes. Over the past 10 years (2009-2018), recreational dead discards averaged 15% of total catch.

Table 4: Comparison of commercial and recreational black sea bass landings, in millions of pounds, and percentages for 1983-1992 based on the analysis conducted for Amendment 9, and current data. These years were used to calculate the sector allocations implemented in Amendment 9.

	Black Sea Bass							
	Amendment 9[a]				Current Data[b]			
Year	Com. landings	Rec. landings	% Com.	% Rec.	Com. landings	Rec. landings	% Com.	% Rec.
1983	3.34	4.08	45%	55%	3.34	4.86	41%	59%
1984	4.33	1.45	75%	25%	4.33	1.91	69%	31%
1985	3.42	2.10	62%	38%	3.42	3.66	48%	52%
1986	4.19	12.39	25%	75%	4.19	11.02	28%	72%
1987	4.17	1.92	68%	32%	4.17	1.83	70%	31%
1988	4.14	2.87	59%	41%	4.14	3.58	54%	46%
1989	2.92	3.29	47%	53%	2.92	5.3	36%	64%
1990	3.50	2.76	56%	44%	3.50	3.91	47%	53%
1991	2.81	4.19	40%	60%	2.81	4.84	37%	63%
1992	3.01	2.71	53%	47%	3.01	3.77	44%	56%
Avg	**3.58**	**3.78**	**49%**	**51%**	**3.58**	**4.47**	**45%**	**55%**

[a] The data sources identified in Amendment 9 include MRFSS and NMFS general canvass data.

[b] Current commercial data are based on data from the Atlantic Coast Cooperative Statistics Program, which should be considered preliminary as they have not been validated by all states. Current recreational data are based on MRIP data accessed in August 2019. The data shown here are not derived from the most recent stock assessment (i.e., the 2019 operational assessment) because the black sea bass stock assessment does not incorporate data prior to 1989.

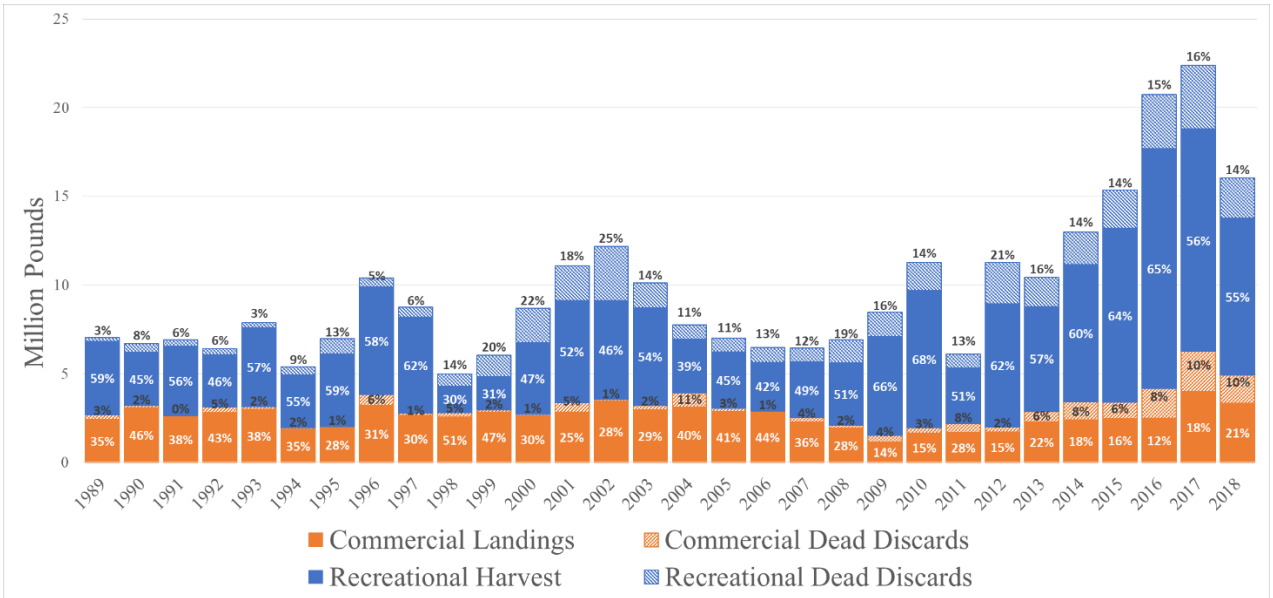


Figure 3: Commercial and recreational black sea bass landings and discards, 1989-2018. Data retrieved from the 2019 Northeast Fisheries Science Center Black Sea Bass Operational Assessment.

9) Additional resources

- Fishery information documents for all three species, describing trends in the fisheries, including information by gear type, area, and mode (e.g., for-hire vs. private recreational fishing), as well as and a brief overview of management measures, can be found at: http://www.mafmc.org/sf-s-bsb.
- The Council Fishery Management Plan and subsequent amendments and framework action documents are available at: http://www.mafmc.org/sf-s-bsb.
- The Commission Fishery Management Plan and subsequent amendment and addendum documents are available at the following links:
    - Summer flounder: http://www.asmfc.org/species/summer-flounder
    - Scup: http://www.asmfc.org/species/scup
    - Black sea bass: http://www.asmfc.org/species/black-sea-bass
- The most recent stock assessment information can be found at:
    - 2018 benchmark stock assessment for summer flounder: https://www.nefsc.noaa.gov/publications/crd/crd1908/
    - 2019 operational stock assessments for scup and black sea bass (prepublication copy): http://www.mafmc.org/s/Operational-Assessments-for-Black-Sea-Bass_Scup_Bluefish.pdf
- Information on how MRIP estimates of recreational catch and harvest are generated and how the estimation methodology has changed in recent years is available at: https://www.fisheries.noaa.gov/recreational-fishing-data/how-marine-recreational-information-program-has-improved