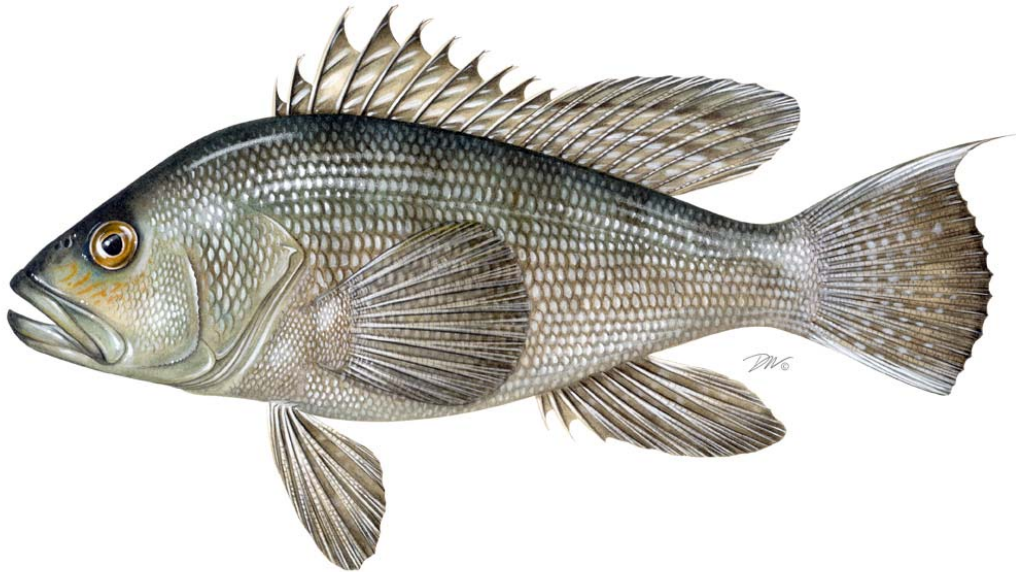


**2017 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR THE 2016 BLACK SEA BASS FISHERY
Black Sea Bass (*Centropristis striata*)**



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2017 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Black Sea Bass

I. Status of the Fishery Management Plan

Atlantic States Marine Fisheries Commission (ASMFC or Commission) management of black sea bass was initiated as one component of a multi-species fishery management plan (FMP) addressing summer flounder, scup, and black sea bass. In 1990, summer flounder was singled out for immediate action under a joint ASMFC and Mid-Atlantic Fishery Management Council (MAFMC or Council) plan. Further action on the scup and black sea bass plan was delayed until 1992 to expedite the summer flounder FMP and subsequent amendments. The joint Black Sea Bass FMP was completed and approved in 1996. The MAFMC approved regulations for black sea bass as Amendment 9 to the Summer Flounder FMP in May 1996.

The management unit of the Black Sea Bass FMP includes all black sea bass in U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina north to the Canadian border. Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina have declared an interest in black sea bass; Maine and New Hampshire declared interest most recently, in 2014. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (or Board) and the MAFMC Demersal Species Committee guide development of the FMP. Technical issues are addressed through the Summer Flounder, Scup, and Black Sea Bass Technical Committee and the Black Sea Bass Monitoring Committee. The Black Sea Bass Plan Review Team conducts annual reviews and monitors compliance and the Scup and Black Sea Bass Advisory Panel provide industry input and advice.

The objectives of the FMP are to reduce fishing mortality to ensure overfishing does not occur, reduce fishing mortality on immature black sea bass to increase spawning stock biomass, improve yield from the fishery, promote compatible regulations among states and between federal and state jurisdictions, promote uniform and effective enforcement, and to minimize regulations necessary to achieve the stated objectives. The initial black sea bass FMP was designated to reduce fishing mortality by a coastwide commercial quota allocated into quarterly periods beginning in 1999, and a recreational harvest limit constrained through the use of minimum size, possession limit, and seasonal closures.

Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP was approved by the Commission in October 1998 and established revised overfishing definitions, identification and description of essential fish habitat, and defined the framework adjustment process.

Addendum IV, approved on January 29, 2001, provides that upon the recommendation of the relevant monitoring committee and joint consideration with the Council, the Board will decide state regulations rather than forward a recommendation to NMFS. Addendum IV also made the states responsible for implementing the Board's decisions on regulations.

Starting in 1998, the fishery was subject to lengthy closures and had some significant quota overages in the commercial sector. Fishery closures occurring as a result of exceeded quotas resulted in increased discards of legal sized black sea bass in mixed fisheries for the remainder of the closed period. A significant financial hardship for the fishing industry resulted from a decrease in market demand caused by a fluctuating supply. To address these issues, the Board enacted a series of Emergency Rules in 2001 that established initial possession limits, triggers, and adjusted possession limits. These measures helped reduce the length of fishery closures, but the rapidly changing regulations confused fishermen and added significant administrative burden to the states. To simplify the process for all parties, the Board approved Addendum VI to provide a mechanism for initial possession limits, triggers, and adjusted possession limits to be set during the annual specification setting process without the need for further Emergency Rules.

Amendment 13, approved by ASMFC in May 2002, implemented a federal, coastwide annual commercial quota that is managed by ASMFC using a state-by-state allocation system. The Amendment was implemented in 2003 and 2004. State-specific commercial shares are listed in Table 1.

Amendment 13 also removed the necessity for fishermen who have both a Northeast Region (NER) Black Sea Bass permit and a Southeast Region (SER) Snapper Grouper (S/G) permit to relinquish their permits for a six-month period prior to fishing south of Cape Hatteras during a northern closure.

Addendum XII, approved in 2004, continued the use of a state-by-state allocation system, managed by the ASMFC on an annual coastwide commercial quota.

Addendum XIII approved in 2004, modified the FMP so that Total Allowable Landings (TALs) for the summer flounder, scup, and/or black sea bass can be specified for up to three years.

Addendum XIX continued the state-by-state black sea bass commercial management measures, without a sunset clause. This addendum also broadened the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow for greater flexibility in those definitions, while maintaining objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the FMP are overfished. It establishes acceptable categories of peer-review for stock status determination criteria. When these specific peer-review metrics are met and new or updated information is available, the new or revised stock status determination criteria may be incorporated by the Commission directly into the annual management measures for each species, rather than requiring a modification to the FMP.

Addendum XX, approved in November 2009, set policies to reconcile commercial quota overages to address minor inadvertent quota overages. It streamlined the quota transfers process and established clear policies and administrative protocols to guide the allocation of

transfers from states with underages to states with overages. It also allowed for commercial quota transfers to reconcile quota overages after year's end.

Addendum XXV continued the use of ad-hoc regional recreational management measure options—originally allowed by Addendum XXI in 2011—to alleviate the differences in state measures for adjacent states along the coast. It was approved in February 2014 and was in place for 2014 and 2015. A northern and southern region were defined, Massachusetts through New Jersey and Delaware through North Carolina (North of Cape Hatteras), respectively. The addendum allowed northern states to adjust management measures annually to best meet the needs of their state while constraining harvest to the overall coastwide recreational harvest limit (RHL). In years of overages, the northern states- which harvest the largest percentage- adjust their management measures to account for harvest reductions in subsequent years. The southern region states set their management measures consistent with the federal measures. In recent years these measures have also been adjusted as federal open season dates have been modified.

Addendum XXVII was approved in February 2016. The addendum continued to allow ad-hoc regional management measures for the 2016 black sea bass recreational fishery and the option to continue this management approach in 2017. All states are to agree to the regulations implemented within the region, but those regulations do not need to be consistent across the region. Based on performance in 2015, the northern region was required to reduce harvest through state regulations in order to achieve the required coastwide harvest reduction of 23%.

II. Status of the Stock

The most recent benchmark stock assessment for black sea bass was completed in January 2017 (SAW-62). The assessment found black sea bass was not overfished nor experiencing overfishing in 2015, the terminal year of the assessment. The assessment used an age-structured assessment model (ASAP) that partitioned the resource into north and south spatial sub-units separated at approximately Hudson Canyon; this approach was accepted as the best scientific information available for determining stock status for black sea bass.

With improved recruitment and declining fishing mortality rates since 2007, spawning stock biomass (SSB) has steadily increased. SSB in 2015 was estimated at 48.9 million lbs (22,176 mt), 2.3 times the SSB target of 21.3 million lbs, and fishing mortality (F) was estimated at 0.27, well below the F target ($F_{40\%}$) of 0.36. To account for the fact that black sea bass are protogynous hermaphrodites, changing sex from female to male, the assessment defined SSB as the combined male and female mature biomass. Recruitment at age 1 averaged 24.3 million fish from 1989 to 2015, with peaks in 2000 (1999 cohort) at 37.3 million and at 68.9 million in 2012 (2011 cohort). The large 2011 cohort, which is currently moving through the fishery, was dominant in the northern area and less so in the south. Since 2012, recruitment has been average with a 2014 cohort estimated at 24.9 million fish. The 2017 data update indicates that the 2015 cohort is above average for both the north and south spatial sub-units, but a final

recruitment estimate has not yet been generated. The distribution of black sea bass continues to expand northward into the Gulf of Maine.

III. Status of the Fishery

The commercial fishery is allocated 49% of the total allowable landings (TAL) for black sea bass. The principle gears used in the fishery are fish pots (or traps), otter trawls and handline. After peaking at 21.8 million lbs in 1952, commercial landings markedly decreased in the '60s and have since ranged from 1.17 to 3.6 million lbs since 1981. In 1998 a commercial quota system was incorporated into management and state-by-state shares were introduced in 2003. From 2005-2016 commercial landings have remained stable, with a range from 2.87 million lbs in 2005 to 1.17 million lbs in 2009 (Table 2 and 3). In 2016 commercial landings were approximately 2.49 million lbs, under the coastwide quota of 2.71 million lbs by approximately 8% (Tables 2 and 3). Prior to the start of the 2018 fishing year, NOAA will review final 2016 catch estimates and determine if any overages occurred. NOAA will publish a notice with final 2018 specifications prior to the start of the fishing year that would account for any overages, if applicable, after considering the best scientific information available provided by the recent assessment. Commercial discards are generally less than 441,000 lbs per year, equal to 16% of the 2016 landings.

The recreational fishery is allocated 51% of the TAL for black sea bass. After peaking in 1985 at 12.35 million lbs, recreational harvest averaged 3.75 million lbs annually from 1988 to 1997. Recreational harvest limits were put in place in 1998 and harvest ranged from 1.1 to 3.88 million lbs from 1998 to 2014 (Table 4). From 2012-2015, the recreational harvest limit has been exceeded annually- by 142%, 9%, 59%, and 67% respectively. In 2016 the recreational harvest was 5.19 million lbs, exceeding the harvest limit by 84%. Recreational live discards are significantly higher than commercial, ranging from 3 to 10 million fish per year (1.2 million to 12.4 million lbs, respectively). Assuming 15% hook and release mortality, estimated mortality from recreational discards was projected to be 105,000 lbs, equal to 2% of recreational harvest in 2016.

IV. Status of Research and Monitoring

Commercial landings information is collected by the Vessel Trip Reporting system and dealer reports. States are also required to collect and report landings data. Sea sampling data from the NEFSC observer sampling program are used to estimate discards for the trawl and gill net fisheries, and VTR data is used to estimate discards from pots and hand lines. The NEFSC weigh-out program provides commercial age and length information. Recreational landings and discards were estimated through the Marine Recreational Fisheries Statistics Survey (MRFSS) until it was replaced by the Marine Recreational Information Program (MRIP), which has provided recreational landings and discards from 2008 to present.

Fishery-independent surveys are conducted in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland, Virginia, and North Carolina. The Virginia Game Fish Tagging Program has targeted black sea bass since 1997. Recruitment and stock abundance data are also provided by the NEFSC spring, autumn, and winter trawl surveys.

V. Status of Assessment Advice

The next benchmark stock assessment has not been scheduled, but an operational benchmark stock assessment or assessment update may be completed in 2018.

VI. Status of Management Measures and Developing Issues

Draft Addendum XXX was initiated by the Board and Council in May 2017. Draft Addendum XXX will be considered by the Board for public comment at the 2017 ASMFC Annual Meeting.

VII. Black Sea Bass Compliance Criteria

2016 Commercial Fishery Requirements

Minimum size of possession: 11"

Minimum mesh: larger nets are required to possess a minimum of 75 meshes of 4.5" diamond mesh in the codend or the entire net must have a minimum mesh size of 4.5" throughout; smaller nets must have 4.5" mesh or larger throughout

Threshold to trigger minimum mesh requirements: 500 lbs for January-March and 100 lbs for April-December

Maximum roller rig trawl roller diameter: 18"

Pot and trap escape vents: 2 ½" for circular, 2" for square, and 1-3/8 x 5-3/4" for rectangular. Must be 2 vents in the parlor portion of the trap

Pot and trap degradable fastener provisions: a) untreated hemp, jute, or cotton string 3/16" (4.8 mm) or smaller; b) magnesium alloy timed float releases or fasteners; c) ungalvanized, uncoated iron wire of 0.094" (2.4mm) or smaller. The opening covered by a panel affixed with degradable fasteners would be required to be at least 3" x 6".

Commercial quota: 2.71 million lbs

Pot and trap definition: A black sea bass pot or trap is defined as any pot or trap used by a fisherman to catch and retain black sea bass.

2016 Recreational Fishery Requirements

See Table 6.

Recreational harvest limit: 2.82 million lbs

Other Measures

Reporting: States are required to submit an annual compliance report to the Chair of the Black Sea Bass Plan Review Team by June 1st. The report must detail the state's management

program for the current year and establish proof of compliance with all mandatory management measures. It should include landings information from the previous year, and the results of any monitoring or research programs.

Black Sea Bass FMP Compliance Schedule

<u>Commercial</u>	
11" Size Limit	1/1/02
4.5" diamond minimum mesh throughout codend and threshold provisions	1/1/02
Pot and trap escape vents and degradable fasteners	1/1/97
Roller diameter restriction	1/1/97
States must report to NMFS all landings from state waters	1/1/98
<u>Recreational</u>	
Size Limit	1/1/97
Harvest Limit	1/1/98
Ability to implement possession limits and seasonal closures	1/1/98
<u>General</u>	
Annual compliance report	Annually, 7/1

This summary of compliance criteria is intended to serve as a quick reference guide. It in no way alters or supersedes compliance criteria as contained in the Black Sea Bass FMP and any Amendments thereto. Also please note that the management measures may change annually.

VII. PRT Review

States and jurisdictions required to comply with the provisions of the Black Sea Bass FMP are: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Potomac River Fisheries Commission, Virginia, and North Carolina. All states implemented regulations in compliance with the requirements approved by the Board.

All states appear in compliance with the FMP provisions for fishing year 2016, however, the PRT made the following recommendations:

- *State compliance reports should explicitly list all required regulations and whether they are in compliance with the FMP.*
- *New Jersey should separate pots/traps from other types of gear in the commercial harvest by gear table.*

Table 1. State by state allocation for annual quota.

State	% Allocation
Maine	0.50%
New Hampshire	0.50%
Massachusetts	13%
Rhode Island	11%
Connecticut	1%
New York	7%
New Jersey	20%
Delaware	5%
Maryland	11%
Virginia	20%
North Carolina	11%

Table 2. Black Sea Bass Commercial Landings by State (2006-2016) in pounds.

Source: State Compliance Reports (October 2017) & ACCSP. 2015-2016. Commercial Landings Summaries (Dealer Reports)-Confidential; generated by C.Starks; using ACCSP Data Warehouse, Arlington, VA.

State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016**
ME											
MA	596,480	442,136	316,722	148,470	260,181	287,666	248,463	329,223	277,276	347,820	353,864
RI	273,161	356,542	226,925	128,053	241,892	185,709	187,806	237,951	245,268	238,647	294,618
CT	10,445	10,123	15,554	17,854	21,422	20,485	17,677	22,735	27,036	24,591	28,854
NY	295,078	265,940	201,222	123,287	200,463	177,997	153,347	180,947	188,436	151,311	186,870
NJ	494,352	480,112	424,667	204,213	305,294	293,609	310,427	494,075	486,073	468,248	523,118
DE	87,381	63,431	60,700	50,259	76,913	82,436	82,351	104,937	102,279	111,508	96,794
MD	350,385	170,909	159,453	125,643	203,088	182,711	140,861	219,321	235,689	234,707	271,809
VA	305,871	189,875	211,500	164,524	263,563	274,446	391,384	493,153	410,162	422,333	511,608
NC*	777,659	472,931	484,507	614,734	400,879	272,189	61,187	88,242	210,989	241,538	224,372
Coastwide	3,190,812	2,451,999	2,101,250	1,577,037	1,973,695	1,777,248	1,593,503	2,170,584	2,183,208	2,240,703	2,491,906

* Landings are statewide from 2006-2011, and from north of Cape Hatteras from 2012 forward

**2016 Landings are still preliminary

Table 3. 2015 Landings and 2016 Black Sea Bass Commercial State by State Quotas (pounds)

State	% Allocation	Final 2015 Landings	2016 ASMFC Initial Quota
Maine	0.005	0	13,559
New Hampshire	0.005	0	13,559
Massachusetts	0.13	347,820	352,525
Rhode Island	0.11	238,647	297,598
Connecticut	0.01	24,591	26,520
New York	0.07	151,311	187,986
New Jersey	0.2	468,248	536,558
Delaware	0.05	111,508	135,591
Maryland	0.11	234,707	298,289
Virginia	0.2	422,333	542,375
North Carolina	0.11	241,538	298,305
Coastwide Total	100%	2,240,703	2,702,867
2015 Coastwide Quota		2,212,923	
Overage		27,780	

* Landings from North Carolina are from North of Cape Hatteras

Table 5. Black Sea Bass Recreational Landings by State (2006-2016) in pounds.

Source: "Personal Communication with National Marine Fisheries Service September 2017"

State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
NH							4,587	18,060			
MA	149,993	153,869	365,108	626,082	999,914	318,379	1,049,251	675,563	1,087,847	718,101	891,440
RI	67,076	59,566	82,072	50,290	238,039	85,912	226,130	148,417	370,531	444,337	564,370
CT	4,684	41,941	99,848	1,025	23,029	13,758	261,163	252,602	586,113	495,675	914,014
NY	455,213	563,199	528,613	844,746	965,767	399,030	542,688	682,867	847,181	1,531,493	2,211,292
NJ	140,931	136,564	26,378	36,190	28,357	46,609	993,093	30,273	631,457	428,319	398,481
DE	690,651	1,086,652	827,511	763,593	779,105	181,695	49,967	471,442	30,962	26,893	31,939
MD	136,064	49,002	32,603	40,681	41,386	51,714	42,173	9,928	87,086	78,052	103,995
VA	105,134	64,954	51,974	112,339	28,987	26,753	2,599	31,339	24,433	63,694	70,187
NC*	28,352	21,863	11,489	7,043	16,265	47,310	7,153	9,992	1,180	3,887	1,249
Coastwide	1,778,098	2,177,610	2,025,596	2,481,989	3,120,849	1,171,160	3,178,804	2,330,483	3,666,790	3,886,710	5,186,967

*Landings are from north of Hatteras from 2006 to 2016.

Table 6. 2016 recreational management measures for black sea bass by state

State	Minimum Size (inches)	Possession Limit	Open Season
Maine	13	10 fish	May 19-September 21; October 18- December 31
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	15	5 fish	May 21-August 31
Rhode Island	15	3 fish	June 24- August 31
		7 fish	September 1-December 31
Connecticut (Private & Shore)	15	5 fish	May 1-December 31
CT (Authorized party/charter monitoring program vessels)		8 fish	
New York	15	3 fish	June 27-August 31
		8 fish	September 1-October 31
		10 fish	November 1-December 31
New Jersey	12.5	10 fish	May 23-June 19
	13	2 fish	July 1-August 31
	13	15 fish	October 22-December 31
Delaware	12.5	15 fish	May 15-September 21; October 22-December 31
Maryland	12.5	15 fish	May 15-September 21; October 22-December 31
Virginia	12.5	15 fish	May 15-September 21; October 22-December 31
North Carolina, North of Cape Hatteras (N of 35° 15'N)	12.5	15 fish	May 15-September 21; October 22-December 31
Minimum Federal Measures	12.5	15 fish	May 15-September 21; October 22-December 31

Table 7. 2017 recreational management measures for black sea bass by state

State	Minimum Size (inches)	Possession Limit	Open Season
Maine	13	10 fish	May 19-September 21; October 18-December 31
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	15	5 fish	May 21-August 31
Rhode Island	15	3 fish	May 25-August 31
		7 fish	October 22-December 31
Connecticut (Private & Shore)	15	5 fish	May 1-December 31
CT Authorized Party/Charter Monitoring Program Vessels		8 fish	May 1-December 31
New York	15	3 fish	June 27- August 31
		8 fish	September 1-December 31
		10	November 1-December 31
New Jersey	12.5	10 fish	May 26-June 18
		2 fish	July 1-August 31
		15 fish	October 22-December 31
Delaware	12.5	15 fish	May 15-September 21; October 22-December 31
Maryland	12.5	15 fish	May 15-September 21; October 22-December 31
Virginia	12.5	15 fish	May 15-September 21; October 22-December 31
North Carolina, North of Cape Hatteras (N of 35° 15'N)	12.5	15 fish	May 15-September 21; October 22-December 31
Minimum Federal Measures	12.5	15 fish	May 15-September 21; October 22-December 31