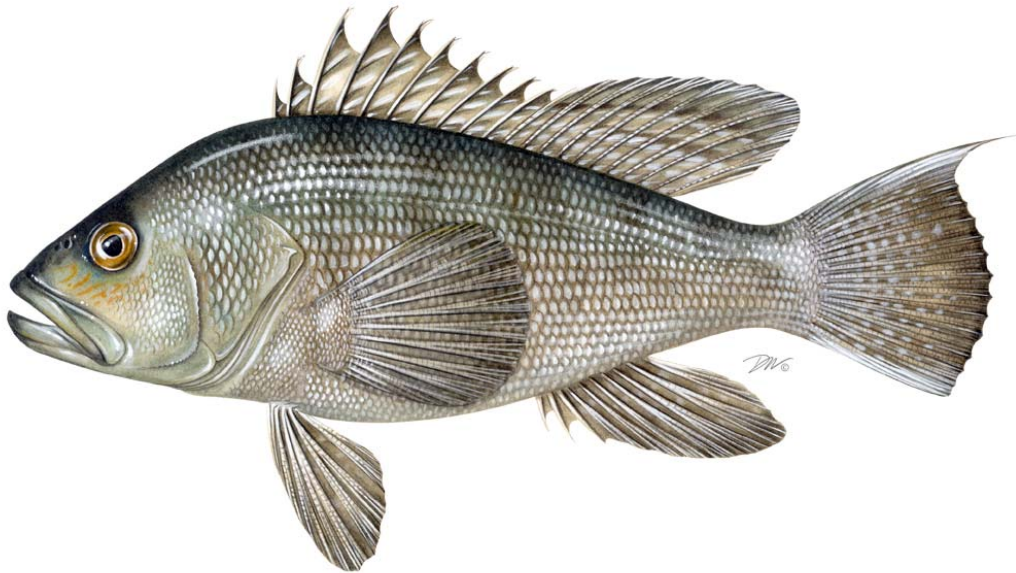


2014 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN
FOR THE 2013 BLACK SEA BASS FISHERY
Black Sea Bass (*Centropristis striata*)



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2014 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Black Sea Bass

I. Status of the Fishery Management Plan

ASMFC 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) 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. Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina have declared an interest in black sea bass. The Commission's Summer Flounder, Scup, and Black Sea Bass Management 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 assure 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 FMP currently defines overfishing as fishing in excess of $F_{MSY}=F_{40\%}$, or $F=0.42$. It defines overfished as the spawning stock biomass being below $SSB_{MSY}=SSB_{40\%}=12,537$ mt. The FMP intends to reduce fishing mortality by a coastwide commercial quota allocated by state, 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 the state regulations rather than forward a recommendation to NMFS. Addendum IV also made the states responsible for implementing the Board's decision on regulations.

Starting in 1998, the fishery was subject to lengthy closures and had some significant quota overages. 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 Management 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 quota that is managed by ASMFC using a state-by-state allocation system. The Amendment was implemented in 2003 and 2004. State-specific shares are listed in Table 1.

Amendment 13 also removed the necessity for fishermen who have both a NER BSB permit and a SER 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, continues the use of a state-by-state allocation system, managed by the ASMFC on an annual coastwide commercial quota.

Addendum XIII modifies the FMP so that, within a given year, TALs for the summer flounder, scup, and/or black sea bass can be specified for up to three years.

Addendum XIX continues the state-by-state black sea bass commercial management measures, without a sunset clause. This addendum also broadens 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.

Addendum XX sets policies to reconcile quotas overages to address minor inadvertent quota overages. It was approved in November 2009. It streamlines the quota transfers process and establishes clear policies and administrative protocols to guide the allocation of transfers from states with underages to states with overages. It also allows for quota transfers to reconcile quota overages after year's end.

The Commission initiated Addendum XXV in October of 2013. The Addendum offers the continuation of ad-hoc regional management measure options to alleviate the differences between state by state measures among the states along the coast. The Addendum XXV will be voted on at the ASMFC Winter Meeting in February 2014, with the approved measures to take effect in 2014.

II. Status of the Stock

The assessment model for black sea bass changed in 2008 from a simple index-based model to a complex statistical catch at length model incorporating a broad range of fishery and survey data. The fishery catch is modeled as a single fleet with indices of stock abundance from NEFSC winter, spring, and autumn surveys. A model averaging approach was adopted using the average of results from ten candidate models. There appears to be some consistent retrospective bias in F and SSB estimates but less so in recruitment.

Recruitment at age 1 averaged 26.4 million fish during 1968-1999 and in 2000, peaked at 56.0 million fish. The 2000 and 2002 year classes are estimated to be the largest of the time series, at 56.0 and 39.3 million age 1 fish. With greatly improved recruitment and declining fishing mortality rates since 2000, SSB has steadily increased since to about 11,158 mt in 2011. The inter-model variation bounds the biological reference point and suggests that black sea bass has reached or exceeded SSB_{MSY} .

The new reference points are $F_{MSY} = F_{40\%} = 0.44$ and $SSB_{MSY} = SSB_{40\%} = 10,886 \text{ mt} = 24 \text{ million lbs}$. The stock biomass threshold of $\frac{1}{2} SSB_{MSY} = \frac{1}{2} SSB_{40\%} = 5,443 \text{ mt} = 12 \text{ million lbs}$. The current F is 0.21 and SSB is 24.6 million lbs, therefore overfishing is not occurring and the stock is rebuilt.

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 pots, otter trawl and handline. After peaking at 218 million pounds in 1952, commercial landings markedly decreased in the '60s and have since ranged from 1.3 to 4.4 million pounds. From 1988 to 1997 landings averaged 2.86 million pounds. In 1998 a quota system was incorporated into management and state-by-state share were introduced in 2003, since 1998 landings have ranged from 2.86 to 3.53 million pounds with a decrease in landings in 2010, 2011, followed by an increases in 2012 and 2013, to 2.02 million pounds in 2013 (Table 2 and 3). Commercial discards are generally less than 441,000 pounds per year.

The recreational fishery is allocated 51% of the TAL for black sea bass. After peaking in 1985 at 12.35 million pounds, recreational harvest averaged 3.75 million pounds annually from 1988 to 1997. Recreational harvest limits were put in place in 1998 and harvest ranged from 1.1 to 3.24 million pounds from 1998 to 2013 (Table 4). In 2013 the recreational harvest was 2.33 million pounds. Recreational discard are somewhat higher than commercial ranging from 220,500 to 1,764,000 pounds per year.

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 sea sampling program are used to estimate discards. The NEFSC weigh-out program provides commercial age and length information. Recreational landings and discards were estimated through the Marine Recreational Fisheries Statistics Survey until 2008, with the Marine Recreational Information Program (MRIP) replacing it for all data collected 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. Data from the tagging program will be used to develop an analytical, age-based model. Recruitment and stock abundance data are provided by the NEFSC spring, autumn, and winter trawl surveys.

V. Status of Assessment Advice

The new reference points and stock status determinations should be used with caution due to the uncertainty in the natural mortality estimate, the model input parameters, residuals patterns in model fit, and significant uncertainty associated with managing a protogynous species (i.e. individuals change sex from female to male)

The next benchmark stock assessment is scheduled for 2016.

VI. Status of Management Measures and Developing Issues

Currently there are no developing black sea bass FMPs.

VII. Black Sea Bass Compliance Criteria

2012 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

Mesh Threshold: 500 lbs for January-March and 100 lbs for April-December

Maximum roller rig trawl roller diameter: 18"

Pot and trap escape vents: 2 1/2" 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: 1.71 million pounds

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.

2013 Recreational Fishery Requirements

See Table 6.

Recreational harvest limit: 2.26 million pounds

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.

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. Compliance

States and jurisdictions required to comply with the provisions of the Black Sea Bass FMP are: 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 2012.

Black Sea Bass FMP Compliance Schedule

Commercial

9" Size Limit	1/1/97
10" Size Limit	1/1/98
11" Size Limit	1/1/02
Minimum mesh 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

Recreational

Size Limit	1/1/97
Harvest Limit	1/1/98
Ability to implement possession limits and seasonal closures	1/1/98

General

Annual compliance report	Annually, 7/1
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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 (2004-2013) in thousands of pounds.

Source: National Marine Fisheries Service Commercial Landings Data (July 2014)

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ME										
NH	336									
MA	382,389	510,162	596,480	442,136	316,722	148,470	260,181	287,666	248,463	282,100
RI	435,733	293,976	273,161	356,542	226,925	128,053	241,892	185,709	187,806	237,951
CT	24,867	17,522	10,445	10,123	15,554	17,854	21,422	20,485	17,677	22,735
NY	240,517	244,074	295,078	265,940	201,222	123,287	200,463	177,997	153,347	155,788
NJ	697,085	543,733	494,352	480,112	424,667	204,213	305,294	293,609	310,427	420,766
DE	83,728	72,931	87,381	63,431	60,700	50,259	76,913	82,436	82,351	104,898
MD	283,605	336,662	350,385	170,909	159,453	125,643	203,088	182,711	140,861	219,321
VA	393,269	443,644	305,871	189,875	211,500	164,524	263,563	274,446	391,384	493,155
NC*	881,261	690,043	777,659	472,931	484,507	614,734	400,879	272,189	61,187	88,242
Coastwide	3,422,790	3,152,747	3,190,812	2,451,999	2,101,250	1,577,037	1,973,695	1,777,248	1,593,503	2,024,956

Table 3. 2014 Black Sea Bass Commercial State by State Quotas (pounds)*

State	2013 Quota	2013 transfers as of 11/13	2013 Quota after transfer	2014 ASMFC Quota*
ME	10,850			10,850
NH	10,850			10,850
MA	282,100			282,100
RI	238,700	96	238,796	238,700
CT	21,700			21,700
NY	151,900			151,900
NJ	434,000	721	434,721	434,000
DE	108,500			108,500
MD	238,700			238,700
VA	434,000	155,662	589,662	434,000
NC	238,700	-156,479	82,221	238,700
Total	2,170,000			2,170,000

*2014 allocations are adjusted with 3% from the TAL deducted for the RSA program. 2013 Harvest estimates are from the NOAA Fisheries Quota Monitoring Report and are not final numbers, 2014 shares may be adjusted for overages after NMFS published the final landings in the summer of 2014:

http://www.nero.noaa.gov/ro/fso/reports/reports_frame.htm

Table 4. Black Sea Bass Recreational Landings by State (2004-2013) in pounds.

Source: National Marine Fisheries Service MRIP (2004-present)

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
NH									4,587	18,060
MA	224,338	365,186	149,993	153,869	365,108	626,082	999,914	318,379	1,049,251	675,563
RI	49,694	164,960	67,076	59,566	82,072	50,290	238,039	85,912	226,130	148,417
CT	37,897	119	4,684	41,941	99,848	1,025	23,029	13,758	261,163	252,602
NY	194,743	230,832	455,213	563,199	528,613	844,746	965,767	399,030	542,688	682,867
NJ	42,593	80,214	140,931	136,564	26,378	36,190	28,357	46,609	993,093	30,273
DE	1,311,011	904,999	690,651	1,086,652	827,511	763,593	779,105	181,695	49,967	471,442
MD	19,571	93,475	136,064	49,002	32,603	40,681	41,386	51,714	42,173	9,928
VA	58,889	49,312	105,134	64,954	51,974	112,339	28,987	26,753	2,599	31,339
NC	274,340	229,893	151,075	196,134	90,977	145,208	138,961	95,004	7,082	17,970
Coastwide	2,213,076	2,118,990	1,900,821	2,351,881	2,105,084	2,620,154	3,243,545	1,218,854	3,178,733	2,338,461

Table 5. 2013 Recreational Management Measures for Black Sea Bass by State.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts (Private and For-hire)	14	4 fish	May 11- October 31
Massachusetts (For-hire with Letter of Authorization from MA DMF)	14	10 fish	May 11- June 14
		20 fish	July 1- August 11
			September 1- October 10
Rhode Island	13	3 fish	June 15- August 31
		7 fish	September 1- December 31
Connecticut (Private and Shore) For-hire*	13	3 fish	June 15- August 31
		8 fish	September 1- October 29
		8 fish	June 15-November 30
New York	13	8 fish	July 10- December 31
New Jersey	12.5	20 fish	May 19- August 8; September 27- October 14; November 1- December 31
Delaware	12.5	15 fish	January 1- February 28
		20 fish	May 19 - October 14 and November 1 - December 31
Maryland	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
PRFC	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
Virginia	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
North Carolina (North of Cape Hatterass 35° 15'N Latitude)	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31

*Party/Charter Vessels enrolled In Monitoring Program

Table 6. 2014 recreational management measures for black sea bass by state.

State	Minimum Size (inches)	Possession Limit	Open Season
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	14	8 fish	May 17-September 15
Massachusetts For-Hire vessels with MA DMF Letter of Authorization)	14	8 fish	May 17-May 31
		20 fish	September 1-September 30
Rhode Island	13	3 fish	June 29- August 31
		7 fish	September 1-December 31
Connecticut (Private & Shore)	13	3 fish	June 21-August 31
		8 fish	September 1-December 31
Connecticut (Authorized party/charter monitoring program vessels)	13	8 fish	June 21-December 31
New York	13	8 fish	July 15-December 31
New Jersey	12.5	3 fish	July 1-August 31
		15 fish	May 19-June 30; September 1- 6;
			October 18-December 31
Delaware	12.5	15 fish	May 19-September 18; October 18-December 31
Maryland	12.5	15 fish	May 19-September 18; October 18-December 31
Virginia	12.5	15 fish	May 19-September 18;
			October 18-December 31
North Carolina, North of Cape Hatteras (N of 35°	12.5	15 fish	May 19-September 18;
			October 18-December 31