

2006 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR
Black Sea Bass (*Centropristis striata*)

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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. 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 defines overfishing as fishing in excess of F_{max} , or $F=0.29$, which represents an annual exploitation rate of 23%. The FMP intends to reduce fishing mortality over an eight-year period by a coastwide commercial quota allocated

on a quarterly basis, 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. The updated overfishing definition defines $F=0.32$ with F_{\max} serving as a proxy for F_{msy} .

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.

II. Status of the Stock

The most recent assessment on black sea bass was complete in June 2006 and peer reviewed in the 43rd SAW/SARC. The SARC panelists have called into question the validity of the current biological reference points; however, no recommendations for alternative reference points were provided.

The SARC found the assessment was not considered to provide an adequate basis to evaluate stock status against the biological reference points. There were inconsistencies in the tagging data analysis that undermine its validity in the estimation of the fishing mortality rate. It was also felt that the biological reference points were not established on a sound basis.

III. Status of the Fishery

The commercial fishery is allocated 49% of the total allowable landings (TAL) for black sea bass. Commercial landings have varied without trend since 1981, ranging from a low of 2.0 million pounds in 1994 to a high of 4.3 million pounds in 1984. Commercial landings in 2002 increased to 3.4 million pounds and then dropped to less than 2.9 million pounds in 2005. Commercial landings by state have varied over the years. New Jersey landings were the highest each year from 1993 to 1997 and again in 2003 and 2004. Virginia had the highest landings from 1998 to 2001. In addition, although Massachusetts has a 12" TL size limit for black sea bass, landings in that state almost doubled from 1998 to 1999 and increased again in 2002 to 962,000 pounds. In 2005, New Jersey, Virginia, and Massachusetts had the highest landings by state. Most commercial landings are taken in otter trawls, fish pots, and traps. State-by-state quotas, implemented in 2003, now restrict the state share of the total landings.

The recreational fishery is allocated 51% of the TAL for black sea bass. Recreational landings ranged from a low of 1.2 million pounds in 1998 to a high of 12.4 million pounds in 1986. Recreational landings in 2004 were about 1.8 million pounds or about 50 percent below the average for 1981-2005. The decrease in recreational landings may be partially attributed to an increase in minimum size limits (Shepherd: www.nefsc.noaa.gov/sos/spsyn/og/seabass/).

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 weighout program provides commercial age and length information. Recreational landings and discards are estimated through the Marine Recreational Fisheries Statistics Survey.

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 SARC found the assessment was not considered to provide an adequate basis to evaluate stock status against the biological reference points. There were inconsistencies in the tagging data analysis that undermine its validity in the estimation of the fishing mortality rate. It was also felt that the biological reference points were not established on a sound basis. Assessment advice will be reviewed and prioritized by the summer flounder, scup, and black sea bass technical committee.

VI. Status of Management Measures and Developing Issues

The management plan for black sea bass calls for a reduction in fishing mortality to the target exploitation of F_{max} , currently $F=0.32$, over an eight-year time period. In years 1 and 2 (1996 and 1997) minimum fish sizes and commercial gear restrictions were implemented. A commercial quota and recreational harvest limit were added in years 3 through 5 (1998-2000) to achieve the targeted 48% exploitation rate. The commercial quota was allocated coastwide into quarterly segments and included trip limits when necessary. The recreational harvest limit is regulated by size limits, possession limits, and seasonal closures. In years 6 and 7 (2001 and 2002) the target exploitation rate dropped to 37%. In year 8 (2003) and beyond, the target exploitation rate is F_{max} (Table 2).

VII. Black Sea Bass Compliance Criteria

2005 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: 2-3/8" for circular, 2" for square, and 1-3/8 x 5-3/4" for rectangular

Pot and trap degradeable 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: 3.95 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.

2005 Recreational Fishery Requirements

Minimum Size: 12 inches

Possession Limit: 25 fish

Open Season: January 1 – September 7 and September 22 – November 30.

Recreational harvest limit: 4.13 million pounds

2006 Recreational Fishery Requirements

Minimum Size: 12 inches

Possession Limit: 25 fish

Open Season: All Year.

Recreational harvest limit: 3.989 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.

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

VIII. Recommendations

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 Rebuilding Schedule

Year	FMP Year	Target
1996	1	none
1997	2	none
1998	3	48%
1999	4	48%
2000	5	48%
2001	6	37%
2002	7	37%
2003 +	8 +	23%

Table 3. Black Sea Bass Commercial Landings by State (1994-2004) in thousands of pounds.

Source: National Marine Fisheries Service Commercial Landings Data

State	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005*
MA	21	42	40	91	281	572	626	570	962	415	379	500
RI	87	89	157	178	135	176	102	376	342	368	423	294
CT	4	9	17	12	9	15	15	20	30	22	19	17
NY	122	193	259	262	135	207	139	249	287	227	222	240
NJ	957	797	1,222	705	579	501	587	647	620	668	693	539
DE	70	166	166	152	126	168	94	25	12	98	87	72
MD	221	303	546	513	315	439	305	150	280	313	293	344
VA	390	363	790	507	817	740	648	661	771	507	493	475
NC**	224	109	261	256	230	150	150	157	160	374	375	368
Total	2,096	2,071	3,458	2,676	2,627	2,968	2,666	2,855	3,464	2,992	2,984	2,849

*Preliminary data taken from State Compliance Reports and Monitoring Committee Memo

** Landings from North of Cape Hatteras only. Data for 1994-1998 provided by NCDMF. Data for 1999-2004 provided by NMFS.

Table 4. 2005 Commerical Allocation and Landings.

State	% Allocation	2005 Quota	2005 Landings*
Maine	0.5	19,822	0
New Hampshire	0.5	19,786	336
Massachusetts	13	500,983	500,100
Rhode Island	11	436,078	294,107
Connecticut	1	39,643	17,741
New York	7	277,504	239,963
New Jersey	20	792,869	538,877
Delaware	5	198,217	72,018
Maryland	11	436,078	344,344
Virginia	20	792,869	475,373
North Carolina	11	436,078	368,029
Total	100%	3,949,927	2,912,064

**Preliminary data taken from NMFS Northeast Regional Office Weekly Quota and Landings Reports and Reports from State Compliance Reports*

Table 5. Black Sea Bass Recreational Landings by State (1994-2004) in thousands of pounds.

Source: National Marine Fisheries Service MRFSS Online Query

State	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
ME	0	0	0	0	0	0	0	0	0	0	0	0
NH	0	0	0	0	0	0	0.5	2.9	0	0	0	0
MA	10.6	6.7	22.4	21	10	22.3	79.5	69.7	365	147	100	348
RI	26.2	53.7	55.1	44.9	25	38.7	352.5	177.7	132	75	80	104
CT	0	3.8	7.8	1.3	3.6	2.5	23.7	19.7	29	8	24	0.2
NY	107.1	48.7	78.6	153.1	10.6	126.1	309.6	312.9	588	376	142	328
NJ	1,627.40	3,409.90	4,479.10	2,893.60	291.5	522.5	2,052.20	2,152.00	1,877	1,726	1,001	919
DE	36	156	57.5	77.1	60.7	36.7	174.3	198.8	636	278	66	75
MD	215.9	1,811.70	376.8	370.9	309.3	152.7	455.7	134.9	485	266	184	87
VA	903.2	672.8	820.4	683.1	410.2	699.9	529.9	338.2	212	390	72	118
NC*	127.3	141.3	141.6	150.4	168.7	95.1	144	188.8	118	183	273	232
Total	3,053.60	6,304.60	6,039.30	4,395.40	1289.6	1696.5	4,121.80	3,595.50	4,442	2,926	1,942	4,216

*Includes all landings from North Carolina, both North and South of Cape Hatteras.

Table 6. 2006 recreational management measures for black sea bass by state.

STATE	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	12	20 fish	All Year
Rhode Island	12	25 fish	All Year
Connecticut	12	25 fish	All Year
New York	12	25 fish	All Year
New Jersey	12	25 fish	All Year
Delaware	12	25 fish	All Year
Maryland	12	25 fish	All Year
PRFC	12	25 fish	All Year
Virginia	12	25 fish	All Year
North Carolina (North of Cape Hatterass)	12	25 fish	All Year

