

ATLANTIC STATES MARINE FISHERIES COMMISSION

REVIEW OF THE INTERSTATE FISHERY MANAGEMENT PLAN

FOR BLACK SEA BASS
(Centropristis striata)

2004 FISHING YEAR



Prepared by the Plan Review Team

Approved by ASMFC Summer Flounder, Scup & Black Sea Bass Board
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2004 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Black Sea Bass

I. Status of the Fishery Management Plan

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) Plan. Further action on the scup and black sea bass plan was delayed until 1992 to expedite the summer flounder FMP and the series of amendments that followed. Work continued on the joint ASMFC/MAFMC Black Sea Bass FMP in 1996. The ASMFC approved the FMP for Black Sea Bass in October 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 joint ASMFC/MAFMC Black Sea Bass FMP includes all black sea bass in U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward 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 Plan. Technical issues are addressed through the Summer Flounder, Scup, and Black Sea Bass Technical Committee, annual reviews and monitoring is addressed by the Black Sea Bass Plan Review Team, and industry input and advice is provided by the Scup and Black Sea Bass Advisory Panel.

The objectives of the plan 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. Overfishing was defined as fishing in excess of F_{max} , which is equal to $F=0.29$. This represents an annual exploitation rate of 23%. The plan intends to reduce fishing mortality over an 8 year period through the use of 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, with F_{max} serving as a proxy for F_{msy} , is 0.32 under current stock conditions.

Addendum IV was approved on January 29, 2001 and provides that, upon the recommendation of the relevant monitoring committee and joint consideration with the Council, the Board will make a decision concerning what state regulations will be rather than forward a recommendation to NMFS. The states will then be responsible for implementing the Board's decision.

The fishery had been subjected to lengthy closures and some significant quota overages starting in 1998. Fishery closures occurring as a result of filled/exceeded quotas resulted in increased discards of legal sized black sea

bass in mixed fisheries for the remainder of the closed period. Significant financial hardship on the part of the fishing industry also resulted due to 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 establishing initial possession limits, triggers, and adjusted possession limits. While these measures helped reduce the length of fishery closures, the rapidly changing regulations were confusing for 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 the Commission in May 2002, implemented a federal coastwide, annual quota that is managed by the Commission using a state-by-state allocation system. This amendment was implemented in 2003 and 2004, and will be followed by a review of its effectiveness and possible re-implementation or revision. State-specific shares are as follows: Maine and New Hampshire .5%, Connecticut 1%, Delaware 5%, New York 7%, Rhode Island, North Carolina and Maryland 11%, Massachusetts 13%, New Jersey and Virginia 20%. The amendment 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 6 month period prior to fishing south of Cape Hatteras during a northern closure.

II. Status of the Stocks

Black sea bass were last assessed at the 39th Stock Assessment Workshop (39th SAW) in June 2004. The Stock Assessment Review Committee (SARC) found that the stock is no longer overfished and overfishing is not occurring. Recent recreational landings have been equivalent to the averages since 1981 while commercial landings are limited by quota. Survey biomass indices declined in 2003 and 2004 from the high in 2002. The average exploitable biomass in 2002-2004 (1.43 kg/tow) exceeded the biomass threshold of 0.98 kg/tow (1077-1979 avg) or 55% above the threshold. Survey indices were log transformed due to their sensitivity to extremely small or large number for a single tow. The transformed series indicates a general increase in the exploitable biomass since 1996. For 2002 the index of 0.799 is the highest value in the time series since 1968.

Recruitment is also determined from the spring survey. Good year classes were produced in 1988, 1990-1992 and 1995, while the survey indicates poor recruitment in 1993, 1994, 1996-1998. The 2000 survey indicates the strongest year class in the survey of 0.661, as well as 2002 as good year class. A below average year class is forecasted from preliminary work.

The recruitment index, age 1, in 2004 was below the time series average but both 2000 and 2002 had the highest estimates in the series. The average exploitation rate from 9/2002 to 9/2003 was less than 17% ($F=0.21$), based on tag recaptures; from 5/2003-4/2004 exploitation rate was less than 21% $F=0.26$ based on tag recaptures. The working group indicate that "uncertainty remains in the tag reporting rates and may result in under estimated exploitation rates. Also discard losses in the commercial fisheries were not estimates and remain an uncertain component of the fishery".

*Information from the status of the fishery is reported from C. Moore's memo to the black sea bass monitoring committee (7/21/2004).

III. Status of the Fishery

The commercial fishery receives 49 percent of the total allowable landings 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. A coastwide quota has restricted landings since from 1998 to 2002 averaging around 2.7 million pounds. The 2003 landings of 3.0 million pounds were a 15% decrease relative to the 2002 landings of 3.5 million pounds. Most commercial landings are taken in otter trawls, fish pots, and traps. New Jersey landings were the highest each year from 1993 to 1997, then again in 2001. Virginia had the highest landings from 1998 through 2000. Black sea bass landings in Massachusetts had increased dramatically, almost doubling from 1998 to 1999 and increasing again in 2002 to 962 thousand pounds, even with a 12" TL. In 2001, Rhode Island and New York landings increased significantly relative to 2000. With the implementation of a state-by-state quota system in 2003, the landings are restricted by the state share.

The recreational fishery receives 51 percent of the TAL for black sea bass. Black sea bass are an important recreational species along the mid-Atlantic. In 1998 and 1999 recreational landings decreased substantially relative to the levels of the early to mid 1990's. 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/). Landings started to increase in 2000 and have averaged 4 million pounds from 2000 to 2004. Landings were estimated at 4.3 million pounds in 2003 or about .35million pounds above the average for 1981-2003.

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 is used to estimate discards. Commercial age and length information is provided by the NEFSC weighout program. 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. Recruitment and stock abundance data are provided by the NEFSC spring, autumn, and winter trawl surveys.

As indicated above, a tagging study is currently under way to allow development of an analytical, age based assessment.

V. Status of Assessment Advice

Assessment advice will be reviewed and prioritized by the summer flounder, scup, and black sea bass technical committee later this year.

VI. Status of Management Measures and Developing Issues

The management strategy for black sea bass calls for a reduction in fishing mortality to the target exploitation of F_{max} , currently 0.32, over an 8 year time frame. In years 1 and 2 (1996 and 1997) minimum fish sizes and commercial gear restrictions are 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 can be regulated through size limits, possession limits, and seasonal closures. In years 6 and 7 (2001-2002) the target exploitation rate dropped to 37%. In year 8 (2003) and beyond, the target exploitation rate is F_{max} . The FMP also requires federal dealer and vessel permitting and reporting. Amendment 13 to the Summer Flounder, Scup and Black Sea Bass FMP was implemented in 2003. States establish management measures that restrict landings to meet their share of the commercial quota.

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%

Black Sea Bass Compliance Criteria

COMMERCIAL FISHERY

Management measures have changed over time. The 2003 requirements are indicated below:

Minimum size of possession: 11"

Minimum mesh: larger nets – 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 - 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 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: 3.012 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.

RECREATIONAL

The following measures may change annually.

2004 Recreational measures:

Minimum size of possession: 12"

Possession limit: 25 fish

Seasonal closure: September 8-September 22 and December 1- December 31
Recreational harvest limit: 4.01 million pounds

OTHER MEASURES

Reporting: States are required to submit an annual compliance report to the Chairman of the Black Sea Bass Plan Review Team by June 1. This 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 that 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.

The regulations implemented in the Commonwealth of Massachusetts, Connecticut, and New York for the Black Sea Bass recreational fisheries were not consistent with those that were approved by the Board. The Board approved the following measures for state Black Sea Bass recreational fisheries at the December joint Board and council meeting in Baltimore, MD: a 12-inch TL minimum fish size, a 25 fish possession limit, and an open season from January 1-September 7 and September 23-November 30. These management measures would apply to fishing in both state and federal waters. All three states were found out-of-compliance by the Board at the May 2004 meeting. Since this finding, all three states have come back into compliance by implementing the proper coastwide measures.

1997 - 2002 Black Sea Bass FMP Compliance Schedule

COMMERCIAL

Size limit (9")	1/1/97
Size limit (10")	1/1/98
Size Limit (11")	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
Quota Measures	
States must report to NMFS all landings from state waters	1/1/98

RECREATIONAL (See Table 3)

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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VIII. Recommendations

To be completed by the summer flounder scup and black sea bass technical committee.

Table 1. Black Sea Bass commercial landings, 1989-2003, by state in thousands of pounds.

State	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MA	351	436	244	43	39	21	42	40	91	281	574	626	570	962	2,490
RI	208	198	74	141	222	87	89	157	178	135	176	101	376	342	2,190
CT	11	14	9	5	5	4	9	17	12	9	15	15	20	554	99
NY	77	72	92	112	125	122	193	260	270	136	209	139	249	291	1,365
NJ	841	990	1034	1245	1381	957	797	1,222	705	579	501	587	647	618	4,008
DE		150	189	194	86	70	166	166	152	126	168	94	25	12	585
MD	296	343	481	468	362	334	303	546	513	315	486	305	147	242	1,877
VA	648	886	499	580	744	387	349	790	486	827	740	648	607	771	3,043
NC*	778	1031	707	791	713	704	491	778	767	732	588	556	645	128	2,418
Total	3210	4120	3329	3579	3677	2686	2439	3,976	3174	3140	3457	3,072	3,288	3,369	18,120

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

Table 2. Black Sea Bass recreational landings by state, 1987-2003, in thousands of pounds. Data from MRFSS online query.

State	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
ME	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NH	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.9	0.0	0.0
MA	66.2	214.5	47.7	36.4	46.6	8.7	13.5	10.6	6.7	22.4	21.0	10.0	22.3	79.5	69.7	365	461
RI	70.9	10.7	24.5	9.3	12.9	15.9	28.5	26.2	53.7	55.1	44.9	25.0	38.7	352.5	177.7	132	379
CT	4.0	19.7	25.6	0.8	2.6	5.5	7.0	0.0	3.8	7.8	1.3	3.6	2.5	23.7	19.7	29	21
NY	608.6	241.6	756.4	307.9	141.6	220.0	312.1	107.1	48.7	78.6	153.1	10.6	126.1	309.6	312.9	588	170
NJ	444.4	572.3	1,460.7	1,037.9	1,645.8	1,218.6	3,344.3	1,627.4	3,409.9	4,479.1	2,893.6	291.5	522.5	2,052.2	2,152.0	1,877	619
DE	18.5	91.5	153.5	71.5	235.4	102.1	151.8	36.0	156.0	57.5	77.1	60.7	36.7	174.3	198.8	636	95
MD	203.6	766.4	312.9	318.8	423.9	469.5	481.0	215.9	1,811.7	376.8	370.9	309.3	152.7	455.7	134.9	485	310
VA	501.7	937.8	498.7	968.6	1,623.8	559.8	486.7	903.2	672.8	820.4	683.1	410.2	699.9	529.9	338.2	212	489
NC*	473.6	1,090.3	340.8	295.8	182.9	314.2	159.7	127.3	141.3	141.6	150.4	168.7	95.1	144.0	188.8	118	372
Total	2,391.6	3,944.8	3,620.7	3,047.0	4,316.0	2,914.1	4,984.7	3,053.6	6,304.6	6,039.3	4,395.4	1289.6	1696.5	4,121.8	3,595.5	4,442	2,926

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

Table 3. 2004 recreational management measures for black sea bass by state.

STATE	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	12	20 fish	Jan 1-Sept 7 Sept 23- Nov 30
Rhode Island	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
Connecticut	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
New York	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
New Jersey	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
Delaware	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
Maryland	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
PRFC	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
Virginia	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30
North Carolina (North of Cape Hatterass	12	25 fish	Jan 1-Sept 7 Sept 23- Nov 30