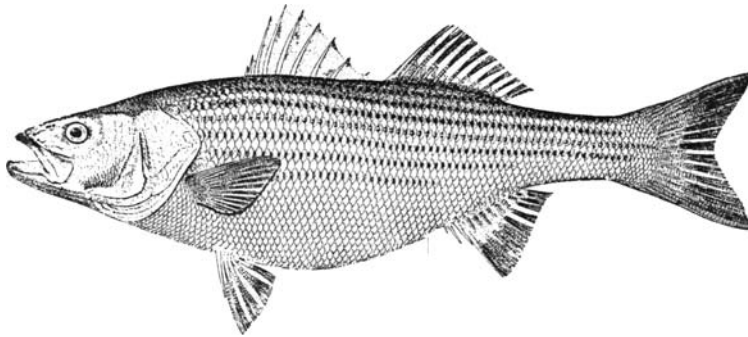


2002 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR
ATLANTIC STRIPED BASS
(Morone saxatilis)



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**2002 REVIEW OF THE ASMFC
FISHERY MANAGEMENT PLAN FOR ATLANTIC STRIPED BASS
(*Morone saxatilis*)**

I. Status of the Fishery Management Plan

<u>Date of FMP Approval:</u>	Original FMP: October, 1981 Amendment 5 (active): March, 1995
<u>Management Unit:</u>	Migratory stocks of Atlantic striped bass from Maine through North Carolina
<u>States With Declared Interest:</u>	Maine through North Carolina
<u>List Of Active Boards/Committees:</u>	Striped Bass Management Board, Advisory Panel, Technical Committee, Stock Assessment Subcommittee, Tagging Workgroup, Plan Review Team, Plan Development Team

Jurisdictions with a declared interest in striped bass are from Maine through North Carolina, including Pennsylvania, the Potomac River Fisheries Commission, and the District of Columbia. Under the Atlantic Striped Bass Conservation Act (P.L. 98-613), implementation of the FMP is mandatory. Implementation of the FMP is monitored by the Commission's Striped Bass Board (Board) and Striped Bass Plan Review Team (PRT).

Under Amendment 5 the standard minimum sizes for Atlantic striped bass are 20 inches in bays and estuaries (producer areas), and 28 inches along the coast. In coastal jurisdictions, standard recreational regulations are two fish per day and a 365-day fishing season. No annual harvest quotas or caps are mandated for the recreational fishery. Commercial fisheries are regulated through the same size limit standards as the recreational fishery, and quotas are allocated by percentage of coastwide reported commercial landings from 1972-1979.

States are granted flexibility to deviate from these standards upon review by the Striped Bass Technical Committee and Advisory Panel and approval by the Management Board. Alternative proposals must be "conservationally equivalent" to the management standards, which has resulted in a wide variety of regulations among states (see attached table).

These management measures are intended to maintain fishing mortality (F) at or below the target of $F = 0.31$. Since 1995, three addenda were approved to perpetuate the Amendment 5 standards from 1997 through 2000. Based on the 1999 stock assessment the Striped Bass Management Board developed Addendum IV to reduce fishing mortality on age 8 and older striped bass. Addendum IV detailed the changes that states would be required to make for 2000 and 2001 in order to achieve the necessary reduction. For 2000, many states implemented changes in their management programs to reduce mortality on the older striped bass by 14%. States that were already more conservative than the standards established in Amendment 5 were not required to make any reductions for 2000.

The 2000 stock assessment indicated that no additional reductions in fishing mortality are necessary on age 8 and older striped bass during 2001, and in fact the reductions achieved in 2000 may not have been

necessary. This information prompted the Management Board to initiate the development of Addendum V in 2000. Addendum V established the management standards for 2001 and 2002 and allowed states to either maintain their current striped bass fishery regulations or implement regulations comparable to those implemented in 1998 and 1999.

Planning for Amendment 6 began prior to Addendum IV. During development of the addendum, Amendment 6 was put on hold. When Addendum V was approved in November 2000, the Board immediately focused their effort on the development of Amendment 6 to the FMP to address long-term policy, management, and scientific issues. The Management Board will likely approve Amendment 6 in early 2003. The Public Hearing Draft of Amendment 6 addresses the following issues:

1. Measures to prevent the exploitation target in Amendment 5 from being exceeded;
2. Availability or abundance of large striped bass in the coastal migratory population;
3. Target and threshold biomass levels;
4. Amendment 5's differential impacts on the recreational, commercial, coastal and producer area sectors;
5. Changing the planning horizon for the management program.

Under Addendum V, the EEZ remains closed to striped bass harvest and possession by both commercial and recreational fishermen. Whether or not to continue the EEZ closure is another issue addressed in draft Amendment 6.

II. Status of the Stocks

Stock abundance of Atlantic striped bass was at the highest level in the time series (1982-2001), with estimated stock numbers of 53 million fish in 2000 and 59.6 million fish in 2001 (ages 1-12+). VPA results indicate that 2000 and 2001 year classes are very strong. Recruitment of age 1 fish in 2002 (2001 cohort) was estimated as almost 18 million fish, making it the biggest cohort in the time series, greater than the 1993 and 1996 year classes. Female spawning stock biomass has steadily grown since 1982 and reached the highest level in 2001 with an estimate of 55.3 million pounds. Under Amendment 5, the current target fishing mortality rate is 0.31 and the overfishing definition is $F_{msy} = 0.38$. Fishing mortality rates in 2001 were just below the target F rate for the fully recruited age groups ($F=0.29$ for ages 7-10).

The results of the striped bass stock assessment for 1982-2001 indicate that the overall abundance of the stock is tending upward slightly after several years of relative stability, largely due to strong recruitment. The spawning stock biomass continues to increase and the fishing mortality is below the target fishing mortality. Based on current available information, the stock is not being overfished and overfishing is not occurring. Overall, the Atlantic stocks of striped bass appear to be abundant in number, capable of producing strong incoming year classes and are being fished at levels within the bounds of the current fishery management plan.

The Roanoke River/Albemarle Sound (NC) stock of striped bass was declared recovered by the Management Board in October 1997. This finding was based on the recommendation of the Technical Committee and assessment data compiled by the state of North Carolina. These data suggest that spawning stock biomass in the Albemarle/Roanoke system has recovered to historical levels observed in the 1960's, and indicate that regulatory relaxation is permissible in certain areas. North Carolina received approval to fish at higher target mortality levels (up to 0.28 at 18 inches minimum size) in 1998. The overfishing level of F remains at 0.38. In the Albemarle/Roanoke system, the current fishing mortality on ages 3-7 is 0.13 (average), well below the Amendment 5 target (0.28), the preferred Amendment 6 target (0.25), and the preferred target for the North Carolina Striped Bass FMP (0.22).

The Delaware River stock of striped bass has also been declared recovered relative to historical levels of spawning biomass. Addendum III formalizes the declaration of the recovery by the Management Board. The Delaware River stock, which is known to mix extensively with the Chesapeake Bay stock, within state waters of Delaware, Pennsylvania, and New Jersey have been permitted to use the same target mortality rate established for the rest of the migratory stocks ($F=0.31$) since the adoption of Amendment 5. Based on recent analyses of tagging data, there is growing concern over the fishing mortality rates on the Delaware River stock. After further review, the technical committee will report with advice to the Management Board.

III. Status of the Fishery

Total coastwide harvest and discard losses from recreational and commercial fisheries was estimated at 4,343,798 striped bass in 2001 and represents a 14% decrease in number from 2000. Estimates of discard losses equaled 31.9% of the total catch in 2001, compared to 36.14% in 2000. Total 2001 landings included 941,733 fish (6.2 million pounds) from the commercial fishery and 2.01 million fish (19.6 million pounds) from recreational fisheries. Recreational landings (in numbers of fish) increased by more than 4.4% and commercial landings decreased by 10.4% between 2000 and 2001. For 2001, recreational discard mortality (1.08 million fish) decreased compared to the 2000 levels while commercial discard mortality levels decreased from 0.67 million fish in 2000 to 0.31 million fish in 2001.

IV. Status of Research and Monitoring

All jurisdictions with commercial fisheries (Massachusetts, Rhode Island, New York, Delaware, Maryland, Virginia, PRFC and North Carolina) are required to define the catch composition (age, length, sex) of these fisheries. Jurisdictions with significant commercial fisheries (Massachusetts, New York, Maryland, Virginia, and PRFC) are required to collect catch/effort data. Jurisdictions with significant recreational fisheries (Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland, Virginia and PRFC) are required to follow specific guidelines for supplementing MRFSS collection of catch composition data and catch/effort information from these fisheries.

Amendment 5 also required fishery independent monitoring programs in some states. Juvenile abundance indices are determined by Maine, New York, New Jersey, Maryland, Virginia, and North Carolina. Spawning stock sampling is performed by New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina. Tagging is conducted by state and federal agencies to determine survivorship and migration patterns in the coastal migratory stock. The tagging is done by personnel in NMFS, USFWS and marine fisheries agencies in Massachusetts, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina.

V. Status of Management Measures

In 1997 through present, Amendment 5 mandated a target mortality rate of 0.31. In order to achieve this target, the plan calls for a minimum size of 20 inches in bays and estuaries and 28 inches in ocean waters. Standard creel limits are generally 2 fish per day and a 365-day season in coastal waters. Current state regulations either comply with the management measures in Amendment 5 (reinforced through Addendum 5) or the more conservative management measures implemented through Addendum 4, which reduced fishing mortality on age 8 and older fish. The Chesapeake Bay, Delaware Bay, and Hudson River jurisdictions have slightly different recreational standards. States could vary their regulations yearly as long as the Technical Committee and Management Board accepted that a state's proposal was conservationally equivalent to the Amendment 5 guidelines.

The National Marine Fisheries Service (NMFS) maintains a ban on striped bass fishing activity and possession of striped bass in the Exclusive Economic Zone (EEZ), with the exception of a defined route to and from Block Island in Rhode Island.

VI. Current state-by-state implementation of FMP compliance requirements as of November 8th, 2002

The FMP has several compliance requirements, which involve both the monitoring and regulatory aspects of state striped bass management programs (see above), and are enforceable through the Atlantic Striped Bass Conservation Act.

Amendment 5 also dictated that states submit semi-annual law enforcement activity reports (which was changed to an annual report through Addendum IV). These reports, in a standardized format, detailed the effort and success involved in enforcing striped bass regulations in each jurisdiction. State compliance with the law enforcement reports is summarized in Table 1 under “Annual reporting”.

All states must submit an annual harvest report for the previous year by April 1. The report summarizes the activity and results of monitoring programs required by the FMP, the regulations in effect, and estimates of harvest/non-harvest losses. State compliance with reporting law enforcement activity, harvest, and monitoring results is summarized in Table 1 under “Annual reporting”.

VII. Recommendations

The Plan Review Team identified a number of concerns during the annual compliance review. The following recommendations have been developed to address the PRT concerns.

- 1) Many of the jurisdictions submitted their annual compliance reports substantially after the May 15 deadline. The PRT recommends that the Board review the content of the annual reports to determine if there is a more efficient approach to collecting the necessary information to ensure that states are able to meet the report deadline.
- 2) The annual reports submitted by the states included a wide range in the level of detail regarding monitoring and survey information. The PRT recommends that the Board review the data elements included in the current annual report outline, and determine which elements are necessary. The annual report section of Amendment 6 should be modified accordingly.
- 3) The PRT recommends that the jurisdictions continue to collect tagging information in order to support the assessment of the exploitation of individual stocks of striped bass.
- 4) The Technical Committee has highlighted some information that would suggest that the fishing mortality on the Delaware River Stock is substantially exceeding the target in Amendment 5. The PRT recommends that the Management Board pays particular attention to this stock and make management changes if necessary to ensure the health of this population.

Table 1. Status of compliance with monitoring and reporting requirements.

(Y = compliance standards met, N = compliance standards not met, N/A = not applicable)

State	Fishery-independent monitoring	Fishery-dependent monitoring	Annual reporting
ME	Y	N/A	Y
NH	N/A	N/A	Y
MA	Y	Y	Y
RI	N/A	Y	Y
CT	N/A	Y	Y
NY	Y	Y*	Y
NJ	Y	Y	Y
PA	Y	N/A	Y
DE	Y	Y	Y
MD	Y	Y	Y
PRFC	N/A	Y	Y
DC	N/A	Y	Y
VA	Y	Y	Y
NC	Y	Y	Y

* The PRT has raised the concern that the catch information from the Hudson River has not been reported for the last two years.

Table 2. 2001 COMMERCIAL FISHERY REGULATIONS – ATLANTIC STRIPED BASS*

* All regulations are subject to change. Readers should contact their state fisheries offices for detailed regulations.

STATE	SIZE LIMITS	SEASONAL QUOTA (LB)	OPEN SEASON
Maine	No Fishery		
New Hampshire	No Fishery	4,000	
Massachusetts	34" minimum	802,000	July 3 until quota is reached
Rhode Island	28" min. (trap fishery) 34" min. (hook & line)	52,502 (trap) 81,390 (H & L)	1 June – July (4 fish, H&L) Aug. 1 until quota reached (4 fish, H&L)
Connecticut	No Fishery		
New York	24" – 36"	590,155	July 1 - Dec. 15
New Jersey	No Fishery	Bonus fishery of 225,000 lbs. from Comm. cap	
Pennsylvania	No Fishery		
Delaware	20" Minimum	193,447 lb.	Gillnet 1 March – 30 April, 15 Nov. – 30 Dec. Hook and Line 1 Sep. – 31 Dec. Spawning Grounds 1 Jan. – 31 March 1 June – 31 December
Maryland	Bay and Rivers 18" – 36" Ocean 24"	Bay and Rivers 1,761,000 lb. (portion of 10,500,000 lb. baywide quota Ocean 91,000 lb.	Bay Pound Net 1 June – 30 Nov. Bay Haul Seine 7 June – 29 Nov. Bay Hook and Line 18 June – 28 Nov. Bay Drift Gill Net 1 Jan. – 28 Feb., 2 Dec. – 31 Dec. Ocean 1 Jan. – 30 April, Nov. 1 – 31 Dec.
PRFC	18 – 35"	883,850 lb. (part of 10,500,000 lb. baywide quota)	Seasons for fyke nets, haul seines, gillnets, poundnets, and hook and line fisheries.
District of Columbia	No Fishery		
Virginia	Bay and Rivers 18" min & 28" max from March 26 - June 15 Ocean 28" minimum	1,701,748 lb. (portion of 10,500,000 lb. baywide quota)	Bay and Rivers 1 Feb – 31 Dec. Ocean 1 Feb – 31 Dec.
North Carolina	Albemarle Sound 18" Atlantic Ocean 28"	Albemarle Sd. 225,000 Atl. Ocean 336,000	Albemarle Sound Spring and Fall Seasons Atlantic Ocean Seasons Based on Gear Type

Table 3. 2001 RECREATIONAL FISHERY REGULATIONS – ATLANTIC STRIPED BASS*

* All regulations are subject to change. Readers should contact their state fisheries offices for detailed regulations.

STATE	SIZE LIMITS	DAILY BAG LIMIT	SEASONAL QUOTA (LB)	OPEN SEASON
Maine	20 – 26” 40” minimum	1 fish between 20” and 26” <u>OR</u> 1 fish above 40”	None	Catch & Release only spawning areas after May 1
New Hampshire	28” minimum	1 fish	None	All year
Massachusetts	28” minimum	1 fish	None	All year
Rhode Island	28” minimum	2 fish	None	All year
Connecticut	Shore/Private Boats 24 – 32” 41” minimum Party/Charter Boats 28” minimum	1 fish between 24” and 32” <u>AND</u> 1 fish above 41” 2 fish	None	All year
New York	Hudson River 18” minimum Ocean and Delaware River 28” minimum	Hudson River 1 fish Ocean 1 fish Charter and Delaware River 2 fish	None	Hudson River 15 Mar. - 30 Nov. Ocean 8 May – 15 Dec. Delaware River All year
New Jersey	24 – 28” 28” minimum Bonus Program 28” minimum	1 fish between 24” and 28” <u>AND</u> 1 fish above 28” Bonus Program 1/day in addition to regular fishery	Bonus program of 225,000 lbs. from commercial cap	All year, except <u>Delaware River spawning grounds:</u> 1 Jan – Mar 31 1 June - 31 Dec <u>Other Rivers:</u> 1 Mar – 31 Dec.
Pennsylvania	28” minimum	2	None	Non-Tidal All year Tidal Delaware River March, 1 June – 31 Dec
Delaware	24 – 28” 28” minimum	1 fish between 24” and 28” <u>AND</u> 1 fish above 28”	None	All year, except <u>Delaware River spawning grounds:</u> 1 Jan – Mar 31 1 June - Dec 31

Table 3 (continued). 2001 RECREATIONAL FISHERY REGULATIONS – ATLANTIC STRIPED BASS*

* All regulations are subject to change. Readers should contact their state fisheries offices for detailed regulations.

Maryland	<p>Spring 28" minimum</p> <p>Summer/Fall 18 – 28"</p> <p>28" minimum</p> <p>Ocean 28" minimum</p>	<p>Spring 1 fish</p> <p>Summer/Fall 2 fish between 18" and 28" <u>OR</u> 1 fish between 18" and 28" <u>AND</u> 1 fish above 28"</p> <p>Ocean 2</p>	<p>Spring Part of 30,000 fish cap</p> <p>Summer/Fall 3,764,450 lb. (portion of 10,500,000 lb baywide quota)</p> <p>Ocean None</p>	<p>Spring Bay: 20 Apr. – May 15 Potomac tribs: 20 Apr. – 15 May</p> <p>Summer/Fall Bay: 16 May – 15 Dec. Potomac tribs: 16 May – 31 Dec.</p> <p>Ocean All year</p>
PRFC	<p>Spring 28" minimum</p> <p>Summer/Fall 18" (28")</p>	<p>Spring 1</p> <p>Summer/Fall 2 fish, only one of which may be larger than 28"</p>	<p>Spring Portion of 30,000 fish cap</p> <p>Summer/Fall 723,150 lb. (portion of 10,500,000 lb baywide quota)</p>	<p>Spring 15 April – 15 May</p> <p>Summer/Fall 16 May – 31 December</p>
District of Columbia	<p>18" Minimum 36" Maximum</p>	<p>1</p>	<p>None</p>	<p>4 May – 31 July 1 Sept. – 17 Nov.</p>
Virginia	<p>Spring 18 – 28"</p> <p>Trophy 32" minimum</p> <p>Fall 18"</p> <p>Ocean 28"</p>	<p>Spring 2 fish</p> <p>Trophy 1 fish</p> <p>Fall 2 fish</p> <p>Ocean 2 fish</p>	<p>Trophy Portion of 30,000 fish cap</p> <p>Spring/Fall 1,701,748 lb. (portion of 10,500,000 lb baywide quota)</p> <p>Ocean None</p>	<p>Spring 16 May – 15 June</p> <p>Trophy 1 May – 15 May</p> <p>Fall 4 Oct. – 31 Dec.</p> <p>Ocean 1 Jan – 31 Mar 16 May – 31 Dec</p>
North Carolina	<p>Roanoke River 18" Minimum, but no fish between 22 - 27" in April & May</p> <p>Sounds and Rivers 18" minimum</p> <p>Atlantic Ocean 28" minimum</p>	<p>Rivers 3 fish</p> <p>Albemarle Sound 2 fish</p> <p>Atlantic Ocean 2 fish</p>	<p>Roanoke Riv. 112,500</p> <p>Albemarle Sd 56,250 spring 56,250 fall</p> <p>Other Areas None</p> <p>Atl. Ocean None</p>	<p>Roanoke River Tues., Wed., Sat., Sun. from 15 Mar</p> <p>Other areas All year</p> <p>Albemarle Sd. Wed., Fri., Sat., Sun. from 1 Jan</p> <p>Atlantic Ocean All year</p>