

2005 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR
BLUEFISH
(Pomatomus saltatrix)

Prepared by:

Julie Nygard (ASMFC)

Bluefish Plan Review Team

Wilson Laney (USFWS)
Herb Austin (VIMS)
Louis Daniel (NC)
Byron Young (NY)
Chris Moore (MAFMC)
Margaret Murphy (SAFMC)

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I. Status of the FMP

The bluefish fishery management plan (FMP) was adopted by ASMFC's member states in October 1989 and was approved by the Secretary of Commerce in March 1990. The FMP is the first plan developed jointly by an interstate commission (ASMFC) and a federal fishery management council (Mid-Atlantic Fishery Management Council or MAFMC).

ASMFC and MAFMC approved Amendment 1 to the FMP in October 1998 and the Secretary of Commerce partially approved the Amendment on July 29, 1999. Member states were responsible for implementation of the management measures outlined in the Amendment prior to January 1, 2000. On July 26, 2000 the National Marine Fisheries Service published the final rule to implement the measures contained in Amendment 1. The goal of the Amendment is to conserve the bluefish resource along the Atlantic coast, specifically:

1. Increase understanding of the stock and fishery
2. Provide highest availability of bluefish to U.S. fishermen; while maintaining, within limits, traditional uses of bluefish
3. Provide for cooperation among the coastal states, the various regional marine fishery management councils, and federal agencies involved along the coast to enhance the management of bluefish throughout its range
4. Prevent recruitment overfishing
5. Reduce the waste in both the commercial and recreational fisheries.

States with a declared interest in the bluefish FMP include all member states except Pennsylvania and the District of Columbia. Management issues are addressed through the ASMFC Bluefish Management Board and the MAFMC Coastal Migratory Species Committee. The ASMFC Bluefish Technical Committee provides technical advice. A joint ASMFC-MAFMC Technical Monitoring Committee conducts annual plan monitoring and framework adjustment recommendations and the ASMFC Stock Assessment Subcommittee handles stock assessment issues.

II. Status of the Stock

The 2003 update on the status of the stock indicated that fishing mortality rates on bluefish peaked in 1987 at $F=0.718$ and declined to $F=0.184$ in 2002. The current stock assessment estimates $F=0.19$, well below the 2003 and 2004 targets, 0.41 and 0.31, respectively. According to the biological reference points in Amendment 1, the stock is overfished but overfishing is not occurring. However, new biological reference points updated in 2005, but yet to be peer approved, suggest that the stock is not overfished and overfishing is not occurring. The total stock biomass is estimated at 92.3 million pounds for 2004.

III. Status of the Fishery

Recreational catch of bluefish has averaged over 41 million pounds since 1981 although catch declined steadily over the time period. In 2004, recreational anglers along the Atlantic Coast landed 6,939 bluefish. Most of the recreational activity occurs from July to October, when almost 70% of the bluefish harvest is taken. Most of the recreational catch of bluefish is taken in the North and Mid-Atlantic states (New York to Virginia). Recreational landings hit a low of 3,682 fish in 1999 but has averaged over 5,900 fish since 1999 (Table 1).

Commercial landings decreased from 16.5 million pounds (lbs) in 1981 to 7.3 million lbs in 1999. Commercial landings have been regulated by quota since implementation of Amendment 1 in 2000. Since implementation of Amendment 1, landings have varied with a low of 6.8 million pound landed in 2002. Preliminary landing estimates for 2004 increased to 7.2 million pounds.

IV. Status of Assessment Advice

The ASMFC Bluefish Technical Committee conducted a stock assessment in 2005. The assessment was sent to peer review in June 2005. Results of the peer review will be available in mid-July 2005.

V. Status of Research and Monitoring

Many states, NMFS, and SEAMAP conduct fishery-independent surveys. Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Virginia, North Carolina, and South Carolina use trawls to monitor adults and juveniles. New Hampshire, New York, Maryland, and Virginia conduct haul seine surveys. North Carolina surveys Pamlico Sound in 2001 using multiple mesh gill nets. Year class strength is monitored through the NMFS autumn trawl survey.

Commercial landings information is collected by most states from dealer or fisherman reporting programs. Fishermen in the EEZ are required to report their landings to the NMFS. North Carolina and Virginia are the only states that significantly sample bluefish commercial fisheries for size and age composition of the catch. Recreational harvest is monitored by the Marine Recreational Fisheries Statistics Survey.

VI. Status of Management Measures and Issues

The ASMFC and MAFMC adjust the quota and harvest limit annually using the specification setting process detailed in Amendment 1. The recreational fishery is allocated 83% of the entire quota. Coastwide, the commercial fishery is limited to 17% of the total allowable landings each year. The commercial quota can be increased if it is anticipated that the recreational fishery will not land their entire allocation for the upcoming year. The coastwide commercial quota is divided into individual state-by-state quotas based on landings from 1981-1989.

The Technical Monitoring Committee is responsible for reviewing the best available data and recommending an annual commercial quota and recreational possession limit. Based on the latest stock assessment information and the rebuilding schedule in Amendment 1, the Technical Monitoring Committee recommended a total allowable landings (TAL) of 31.85 million pounds for 2004. The Committee recommends to establish a 10.5 million pound commercial quota and a recreational harvest limit of 21.35 million pounds for 2004.

VII. Current State-by-State Implementation of FMP Compliance Requirements

These states or jurisdictions are required to comply with the provisions of the Bluefish FMP: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Potomac River Fisheries Commission, Virginia, North Carolina, South Carolina, Georgia, and Florida. The following are specific FMP compliance requirements:

- Each state must restrict the possession of bluefish by anglers to not more than fifteen fish per day, or have an ASMFC-approved equivalent conservation program (Table 4).
- Each state must restrict its commercial fishery to the quota adopted under procedures specified in the FMP.

The final compliance criteria include:

- Monitoring requirements for the commercial fishery
- Commercial and party/charter vessel permitting requirements
- Dealer permitting requirements
- Annual compliance reporting.

The Chair of the Plan Review Team has reviewed all of the compliance reports and recommends that each state, except North Carolina, be found in compliance with respect to implementing the recreational bag limit and limiting their commercial fishery to their state quota. North Carolina commercial fisheries landed 3,762,944 lbs of bluefish. The original quota of 3,334,913 was augmented by transfers from the State of Maine (69,000 lbs) and Commonwealth of Virginia (300,000 lbs). Despite the transfers, the landings exceeded the quota by 59,031 lbs.

The Chair of the Plan Review Team requests that the State of South Carolina and the State of Georgia be granted a *de minimis* status because their commercial landings from the most recent year were less than 0.1% of the coastwide commercial landings.

VIII. Prioritized Research Needs

1. Collect size and age composition of the fisheries by gear type and statistical area.
2. Target commercial and recreational landings for biological data collection when possible
3. Increase intensity of biological sampling of the NER commercial and coastwide recreational fisheries.
4. Initiate research on species interactions and predator-prey relationships.
5. Complete a scale-otolith age comparison study.
7. Evaluate measures of CPUE under different assumptions of effective effort to allow evaluation of sensitivity of results.
8. Initiate fisheries-dependent and independent sampling of offshore populations of bluefish during the winter months.
9. Conduct research to determine the timing of sexual maturity and fecundity of bluefish.
10. Continue work on catch and release mortality.
11. Age any archived age data for bluefish and used the data to supplement North Carolina age keys.
12. Conduct research on oceanographic influences on bluefish recruitment.
13. Study tag mortality and retention rates for ALS dorsal loop and other tags used for bluefish.

14. Initiate a coastal surf-zone seine study to provide more complete indices of juvenile abundance.
15. Test the sensitivity of the bluefish assessment to assumptions concerning age-varying M , level of age-0 discard, and selection patterns.
16. Investigate the long term, synergistic effects of combinations of environmental variables on various biological and sociological parameters such as reproductive capability, genetic changes, and suitability for human consumption.
17. Conduct studies on the interactive effects of pH, contaminants, and other environmental variables on survival of bluefish.

Table 1. Estimated number of bluefish caught and the estimated number of bluefish landed by marine recreational fishermen each year, 1981 to 2004.

Year	Catch ('000)	Landings ('000)
1981	31,261	23,888
1982	27,220	23,724
1983	30,137	24,884
1984	26,508	20,798
1985	22,474	19,246
1986	30,411	24,441
1987	27,603	21,076
1988	13,365	9,905
1989	18,637	13,600
1990	16,446	11,365
1991	18,292	11,943
1992	11,440	7,158
1993	9,925	5,725
1994	11,920	5,768
1995	10,494	5,168
1996	9,521	4,205
1997	12,574	5,413
1998	9,204	4,202
1999	11,488	3,682
2000	16,260	4,897
2001	20,412	6,663
2002	15,217	5,300
2003	14,679	5,888
2004	18,679	6,939

Table 2. Bluefish Commercial Landings and Recreational Catch (thousands of pounds) (1981 to 2004).

Year	Commercial	Recreational	Total	% Commercial
1981	16,457	95,288	111,742	15
1982	15,426	83,006	98,436	16
1983	15,798	89,122	104,921	15
1984	11,861	67,453	79,316	15
1985	13,497	52,515	66,016	20
1986	14,663	92,887	107,564	14
1987	14,502	76,653	91,157	16
1988	15,787	48,222	64,012	25
1989	10,450	39,260	49,601	21
1990	13,779	30,557	44,336	31
1991	13,580	32,997	46,578	29
1992	11,475	24,275	35,753	32
1993	10,600	20,292	30,414	33
1994	9,489	15,541	25,036	38
1995	7,998	14,306	22,310	36
1996	9,068	11,746	21,041	44
1997	8,960	14,302	23,366	39
1998	8,246	12,334	20,588	40
1999	7,351	8,253	15,346	46
2000	8,066	10,605	18,588	43
2001	8,698	13,230	21,916	40
2002	6,876	11,371	18,221	38
2003	7,406	13,961	21,200	34
2004	7,200	18,988	26,188	28

Source: NMFS General Canvass and MRFSS data.

Table 3. 2004 State commercial bluefish quotas based on a coastwide quota of 10.5 million pounds and 1981-1989 NMFS General Canvass Data .

State	1981-89 Total	%	Quota	Quota Less RSA
ME	858,177	0.6685	70,193	69,356
NH	532,032	0.4145	43,523	43,116
MA	8,621,803	6.7167	705,254	698,660
RI	8,739,090	6.8081	714,851	708,168
CT	1,625,500	1.2663	132,962	131,719
NY	13,330,736	10.3851	1,090,436	1,080,242
NJ	19,018,645	14.8162	1,555,701	1,541,158
DE	2,410,900	1.8782	197,211	195,367
MD	3,853,253	3.0018	315,189	312,242
VA	15,248,930	11.8795	1,247,348	1,235,687
NC	41,154,504	32.0608	3,366,384	3,334,913
SC	45,161	0.0352	3,696	3,661
GA	12,205	0.0095	998	988
FL	12,912,995	10.0597	1,056,269	1,046,394
TOTAL	128,363,931	100.000	10,500,011	10,401,851

Table 4. Status Of Bluefish Fishery Management Plan Implementation by States in 2004.

State	Recreational Limit	Recreational Size Limit	Commercial Trip Limit	Commercial Open Season
ME	3			
NH	10			
MA	10		5,000 lb/day	
RI	10			
CT	10		500 lb/day	4/15-12/31
NY	10			Gear Specific
NJ	15			Gear Specific
DE	10		Gear Specific	Gear Specific
MD	10	8"		
PRFC	10			
VA	10			
NC	15 ²			
SC	15			
GA	15 ³	12" FL		
FL	10	12" FL	7,500 lb/day	

1 No more than 10 less than 12"

2 Only 5 greater than 24"

3 Recreational Season from 3/16 to 11/30