Atlantic States Marine Fisheries Commission

PUBLIC INFORMATION DOCUMENT FOR AMENDMENT 1 TO THE INTERSTATE FISHERY MANAGEMENT PLAN FOR TAUTOG



This draft document was developed for Board review and discussion. This document is not intended to solicit public comment as part of the Commission/State formal public input process. Comments on this draft document may be given at the appropriate time on the agenda during the scheduled meeting. If approved, a public comment period will be established to solicit input on the issues contained in this document.

ASMFC Vision Statement: Sustainably Managing Atlantic Coastal Fisheries

August 2015

The Atlantic States Marine Fisheries Commission Seeks Your Input on Tautog Management

The public is encouraged to submit comments regarding this document during the public comment period. Comments will be accepted until 5:00 PM (EST) on [INSERT DATE]. Regardless of when they were sent, comments received after that time will not be included in the official record. The Tautog Management Board will consider public comment on this document when developing Draft Amendment 1 to the Interstate Fishery Management Plan for Tautog.

You may submit public comment in one or more of the following ways:

- 1. Attend public hearings held in your state or jurisdiction.
- 2. Refer comments to your state's members on the Tautog Management Board or Advisory Panel, if applicable.
- 3. Mail, fax, or email written comments to the following address:

Ashton Harp 1050 North Highland St., Suite 200 A-N Arlington, VA 22201 Fax: (703) 842-0741 aharp@asmfc.org (subject line: Tautog PID)

If you have any questions please call Ashton Harp at (703) 842-0740.

	commission s rocess and rineme					
	February 2015	Board Initiates Plan Amendment and Tasks PDT to Develop Public Information Document (PID)				
Current Step →	August 2015	Board Reviews Draft PID and Considers Approval for Public Comment				
	September – October 2015	Board Solicits Public Comment on the PID and States Conduct Public Hearings				
	November 2015	Board Reviews Submitted Public Comment and Advisory Panel Input and Provides Guidance to PDT on Development of Draft Amendment 1				
	February 2016	Management Board Reviews Draft Amendment 1 and Considers Approval for Public Comment				
	March – April 2016	Board Solicits Public Comment on Draft Amendment 1 and States Conduct Public Hearings				
	May 2016	Board Reviews Submitted Public Comment and Input from its Advisory Panel and the Law Enforcement Committee				
	-	Full Commission Considers Final Approval of Amendment 1				

Commission's Process and Timeline

Atlantic States Marine Fisheries Commission

Draft Public Information Document for Amendment 1 to the Interstate Fishery Management Plan for Tautog

Introduction

The Atlantic States Marine Fisheries Commission (Commission) is developing an amendment to revise the Interstate Fishery Management Plan for Tautog (FMP). The Commission is responsible for managing tautog through the coastal states of Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland, and Virginia.

This is your opportunity to inform the Commission about changes observed in the fisheries; actions you feel should or should not be taken in terms of management, regulation, enforcement, and research; and any other concerns you have about the resource or the fisheries, as well as the reasons for your concerns.

Management Issues

The Tautog FMP was approved in March 1996. Since the FMP was implemented, the tautog fishery has experienced changes in stock status, as well as management measures that are used to control harvest of the resource. Based on the 2015 Benchmark Stock Assessment and Peer Review Report, tautog is overfished and overfishing is occurring on a coastwide scale.

The 2015 Benchmark Stock Assessment and Peer Review Report suggested the delineation of separate, regional stock units as management areas. The Tautog Management Board accepted the 2015 assessment for management use, but expressed concern with the proposed stock delineations that would split Long Island Sound into two regions with potentially different regulations. In the absence of conclusive biological evidence to delineate the regional boundaries, the Board decided to initiate a plan amendment to consider the management implications of regionalization and delineate regions for future management.

Purpose of the Public Information Document

The purpose of this document is to inform the public of the Commission's intent to gather information concerning the tautog fishery and to provide an opportunity for the public to identify major issues and alternatives relative to the management of this species. In addition, this document seeks specific input from the public on the selection of regional stock areas for management use. Input received at the start of the amendment development process can have a major influence on the final outcome of the amendment. This document is intended to draw out observations and suggestions from fishermen, the public, and other interested parties, as well as any supporting documentation and additional data sources.

To facilitate public input, this document provides a broad overview of the issues already identified for consideration in the amendment; background information on the tautog population,

fisheries, and management; and a series of questions for the public to consider about the future management of the species. In general, the primary question on which the Commission is seeking public comment is: **"How would you like the tautog fishery to look in the future? And, more specifically, what do you think is the best regional breakdown for tautog management moving forward?"**

Background on Tautog Management

The FMP for Tautog (*Tautoga onitis*) was approved in 1996 (ASMFC, 1996), with the goals of conserving the resource along the Atlantic coast and maximizing long-term ecological benefits, while maintaining the social and economic benefits of recreational and commercial utilization.

The FMP required a minimum size limit to increase the spawning stock biomass and yield to the fishery. It also included fishing mortality targets intended to prevent overfishing. The FMP established a 14" minimum size limit and a target fishing mortality of F = 0.15. The target F was a significant decrease from the 1995 stock assessment terminal year fishing mortality rate in excess of F = 0.70, so a phased in approach to implementing these regulations was established. Northern states (Massachusetts through New Jersey) were to implement the minimum size and achieve an interim target of F = 0.24 by 1997, while southern states (Delaware through North Carolina) had until 1998 to do the same. All states were then required to achieve the target F = 0.15 by 1999.

Several changes were made to the management program under the FMP's adaptive management provisions in response to changes in the fishery and the latest stock assessment information, as described below.

Addendum I (1997) delayed implementation of the interim $F_{target} = 0.24$ until 1998, at which time the states would be required to reduce to $F_{target} = 0.15$ by 2000. It also established *de minimis* specifications.

Addendum II (1999) further extended the deadline to achieve the F = 0.15 target until 2002. In the interim, data were collected to conduct a stock assessment to determine the extent of reductions needed by each state to meet the F = 0.15 target.

Addendum III (2002) modified the F target to $F_{40\% SSB} = 0.29$ and mandated each state collect a minimum of 200 age samples per year to improve future stock assessments.

Addendum IV (2007) modified the F target to F = 0.20, and established biomass reference points for the first time as $SSB_{target} = 59,083,886$ lbs. and 75% of this value as $SSB_{threshold} = 44,312,915$ lbs.

Addendum V (2007) allowed states flexibility in achieving the F target through reductions in commercial harvest, recreational harvest, or some combination of both. A Massachusetts-Rhode Island model indicated regional F was lower than the coastwide target, therefore these two states were not required to implement management measures to reduce F.

Addendum VI (2011) established a new $F_{target} = 0.15$. All states adopted higher minimum size limits exceeding the FMP's minimum requirement of 14" in addition to other measures, such as possession limits, seasonal closures, and gear restrictions (See Table 2A-B). Massachusetts and Rhode Island, again, demonstrated a lower regional F and these states were not required to implement changes to their regulations.

Summary of Stock Status

The 2015 Benchmark Stock Assessment, which considered data through 2012, determined that tautog is overfished and overfishing is occurring on a coastwide basis (Massachusetts – North Carolina). The estimated three-year (2011-2013) fishing mortality is F = 0.30, well-above the $F_{target} = 0.10$, see Table 2 on page 8.

Stock Definition

Unlike previous assessments, which assessed the stock on a coastwide basis, the 2015 Benchmark Stock Assessment evaluated stock status regionally to reflect differences in life history characteristics and harvest patterns. The assessment offers two regional alternatives to assess and manage tautog.

Table 1. Proposed stock definitions

Current Stock Definition	Alternative 1 (3 stocks)	Alternative 2 (3 stocks)	
Single Steels	Massachusetts-Connecticut	Massachusetts-Rhode Island	
Single Stock: Massachusetts–North Carolina	New York–New Jersey	Connecticut–New Jersey	
Massachuseus-Norui Caronna	Delaware–North Carolina	Delaware–North Carolina	

The only difference between alternative 1 and 2 is the placement of Connecticut. The Peer Review Panel and the Technical Committee supported use of either regional approach (i.e., Alternative 1 or 2) since they reduce the risk of overfishing and account for the non-migratory nature of tautog. Stock status by region can be found in Table 2 on page 8.

Life History and Biological Overview

Age and growth studies indicate tautog are slow-growing, long-lived species that aggregate around structured habitats with a preferred home site. This unique life history makes it vulnerable to overfishing and slow to rebuild.

Fish as old as 30 years have been caught in Rhode Island, Connecticut, and Virginia, but most of the fish caught are four to eight years old. The species is believed to reach sexual maturity between the ages of three to four (Chenoweth, 1963, White, 1996).

Fecundity, which is the number of eggs produced by a female per spawning event, is strongly related to female size, with larger females producing significantly more eggs than smaller females. A 22-year trawl survey in Long Island Sound, demonstrated a decrease in abundance and a shift in the size structure of the population to smaller fish (LaPlante and Schultz, 2007).

Management Unit

Under the FMP, the management unit is defined as all US territorial waters of the northwest Atlantic Ocean (0 - 3 miles from shore) and from US/Canadian border to the southern end of the species range. Currently, all states from Massachusetts through Virginia have a declared interest in the species. While the stock ranges from Massachusetts through North Carolina, North Carolina has such minimal landings it did not declare interest in being part of the management unit. Additionally, Delaware maintains *de minimus* status, and is therefore exempt from certain regulatory and monitoring requirements.

Description of the Fishery

Tautog are targeted by both commercial and recreational fisheries, but approximately 90% of the total harvest comes from the recreational fishery. Rod and reel are the predominant commercial gear, although floating fish traps, fish pots, and otter trawl harvest are also used. Current management measures for the recreational fishery are presented in Table 3A; regulations for the commercial fishery are in Table 3B.

Recreational Fishery

Recreational harvest estimates are available for 1981 to 2014. In 1986, anglers harvested a historical high of 16.9 million pounds (lbs.). Since then harvest has generally declined. Both 1998 and 2011 had the lowest harvest, at 1.5 million lbs. On average, the recreational harvest was 3.3 million lbs. between 2000 and 2014. In 2014, recreational fishermen harvested more than 950,000 fish weighing a total of 4.2 million lbs., an increase from the 2011-2013 average recreational harvest of approximately 500,000 fish per year across a three year landing average of 1.96 million lbs.

Historically, recreational harvest is mostly attributed to New York and New Jersey, which together account for 41.9% of total harvest from 1981-2011 (Figure 1). Since 2012, the majority of recreational landings (53.9%) are attributed to Connecticut and New York (Figure 2).

On the state level, Connecticut anglers harvested the most tautog, bringing in 289,829 tautog weighing a total of 1,470,133 lbs. in live weight in 2014. New York harvested the second largest amount with 263,962 fish weighing a total of 1,211,285 lbs. Maryland anglers landed the fewest tautog, with 3,851 fish (Table 4).

In an attempt to protect spawners many states chose to limit the spring fishery starting in 1998, thereby shifting the majority of the recreational harvest to November-December. Anglers on private/rental boats comprise 70% of total harvest, the remaining 30% is split relatively evenly among the shore mode and for-hire (party/charter boat) mode.

Commercial Fishery

Commercial landings data exist for 1950 to present. In 1987, commercial landings peaked at nearly 1.16 million pounds and steadily declined to a low of 208,000 pounds in 1999. Since 2000, commercial landings have varied without trend, ranging from approximately 238,067 to

351,449 lbs. (Table 5). The ex-vessel value for tautog has increased since the historic low of \$0.03/lbs. in 1962, along with the increasing landings trend. In 2012, value surpassed \$3/lbs.

Monthly landings back to 1990 indicate approximately 30% of the annual commercial harvest occurs during May-June, and again during October-November. Harvest is lowest during January-March, when less than 5% of the annual commercial catch occurs. The commercial harvest is roughly evenly split among the remaining months.

Since 1982, commercial landings have been dominated by Massachusetts, Rhode Island, and New York, each averaging more than 20% of coastwide harvest. New Jersey and Connecticut account for the majority of the remaining harvest, averaging 15% and 8%, respectively.

Issues for Public Comment

Public comment is sought on five issues that are being considered in Draft Amendment 1. The issues listed below are intended to focus the public comment and provide the Board input necessary to develop Draft Amendment 1. The public is encouraged to submit comments on the issues listed below as well as other issues that may need to be addressed in Draft Amendment 1.

ISSUE 1: STOCK MANAGEMENT AREAS

Statement of the Problem

The tautog management unit consists of all states from Massachusetts through North Carolina. Tagging studies indicate tautog are nonmigratory and have a preferred home site. It is recognized that effective assessment and management can be enhanced through the delineation of separate, regional stock management areas. This would also allow the inclusion of biological and harvest data at a finer regional scale. Managers are seeking input on how the stock management areas should be defined in the new amendment. Meaning, what should the boundaries be for each area?

Management Options

In order to streamline the amendment process, managers are seeking public comment on a stock delineation approach through the PID, with the intention of using these comments to choose one of the below options for the development of draft Amendment. Comments are encouraged on the following stock management area options (Table 2).

Stock Region	Stock Status	SSB Target (lbs.)	SSB Threshold (lbs.)	SSB 2013** (lbs.)	F Target	F Threshold	F 2011-13 Average **
ΟΡΤΙΟ	N 1 (STATUS QUO)						
Coastwide (Massachusetts to Virginia) Overfished Experiencing Overfishing		45,441,681	34,081,261	10,762,968	0.10	0.13	0.30
	OPTION 2						
Massachusetts, Rhode Island, Connecticut	Overfished Experiencing Overfishing	8,560,550	6,419,861	3,999,185	0.15	0.20	0.48
New York, New Jersey	Overfished Not Experiencing Overfishing	7,870,503	5,820,204	4,854,579	0.17	0.26	0.24
Delaware, Maryland, Virginia*	Overfished Not Experiencing Overfishing	4,607,661	3,483,304	3,377,482	0.16	0.24	0.16
	OPTION 3						
Massachusetts, Rhode Island	Overfished Experiencing Overfishing	5,804,771	4,354,130	3,553,852	0.16	0.19	0.38
Connecticut, New York, New Jersey	Overfished Experiencing Overfishing	11,375,853	8,642,121	5,200,705	0.17	0.24	0.34
Delaware, Maryland, Virginia*	Overfished Not Experiencing Overfishing	4,607,661	3,483,304	3,377,482	0.16	0.24	0.16

Table 2. Stock status for the proposed stock management area options

* North Carolina is also considered part of the Delaware, Maryland and Virginia stock unit, but it has not declared interest in the management of tautog.

**Red numbers indicate the stock is overfished or overfishing is occurring; yellow is cautionary; green is within management limits

ISSUE 1: STOCK MANAGEMENT AREAS (Cont.)

The difference between Option 2 and Option 3 is the placement of Connecticut. By grouping Connecticut with the Southern New England states under Option 2, tautog found in Long Island Sound (LIS) will be divided into two separate stock units. This may result in differing management measures for Connecticut and New York within the LIS.

An analysis of data from the Marine Recreational Information Program (MRIP) from 2004-2014 showed Connecticut catch coming primarily from LIS; and most New York catch being split between open water (~35%) and LIS (~57%), thereby emphasizing the shared fishery resource between New York and Connecticut. In addition, Rhode Island catch is coming primarily from Narragansett Bay; and New Jersey catch is coming primarily from open water.

Management Question

• Do you support option 1 (status quo), option 2 or option 3?

ISSUE 2: FISHERY MANAGEMENT PLAN GOALS AND OBJECTIVES

Statement of the Problem

The goals and objectives for this management program are being reviewed to ensure they are consistent with the needs of the tautog fishery and resource. Should the goals and objectives of the FMP be revised?

The current goals and objectives as outlined in the FMP:

GOALS

- A. To perpetuate and enhance stocks of tautog through interstate fishery management so as to allow a recreational and commercial harvest consistent with the long-term maintenance of self-sustaining spawning stocks
- B. To maintain recent (i.e. 1982-1991) utilization patterns and proportions of catch taken by commercial and recreational harvesters
- C. To provide for the conservation, restoration, and enhancement of tautog critical habitat for all life history stages
- D. To maintain a healthy age structure

E. To conserve the tautog resource along the Atlantic coast to preserve ecological benefits such as biodiversity and reef community stability, while maintaining the social and economic benefits of commercial and recreational utilization

OBJECTIVES

- A. To establish criteria, standards, and procedures for plan implementation as well as determination of state compliance with FMP provisions
- B. To allow harvest that maintains spawning stock biomass (SSB) in a condition that provides for perpetuation of self-sustaining spawning stocks in each spawning area, based on maintain young-of-the-year indices, SSB, size and age structure, or other measures of spawning success at or above historical levels as established in the plan
- C. To achieve compatible and equitable management measures among jurisdictions throughout the fishery management unit
- D. To enact management recommendations which apply to fish landed in each state, so that regulations apply to fish caught both inside and outside of state waters
- E. To promote cooperative interstate biological, social, and economic research, monitoring and law enforcement
- F. To encourage sufficient monitoring of the resource and collection of additional data, particularly in the southern portion of the species range, that are necessary for development of effective long-term management strategies and evaluation of the management program. Effective stock assessment and population dynamics modeling require more information on the status of the resource and the biology/community/ecology of tautog than is currently available, in particular to facilitate calculation of F and stock trends
- G. To identify critical habitats and environmental factors that support or limit long-term maintenance and productivity of sustainable tautog populations
- H. To adopt and promote standards of environmental quality necessary to the long-term maintenance and productivity of tautog throughout their range
- I. To develop strategies that reduce fishing mortality, restore stock size composition and the historical

recreational/commercial split, consider ecological and socioeconomic impacts and identify problems associated with the offshore fishery. Compatible regulations between the states and the EEZ are essential

ISSUE 2: FISHERY MANAGEMENT PLAN GOALS AND OBJECTIVES (Cont.)

Management Questions

- Are these goals and objectives still appropriate for the tautog fishery and resource?
- What changes to the goals and objectives need to be made to reflect the needs of the fishery and the resource?
- Which five objectives do you feel are the most important?

ISSUE 3: MANAGEMENT MEASURES

Background

Current management measures for the recreational fishery are presented in Table 3A; regulations for the commercial fishery are in Table 3B. The recreational fishery is managed with minimum size limits (15-16" depending on the state), possession limits (3-6 fish per person per day depending on the state and season), and seasonal closures. The commercial fishery is managed with quotas, gear restrictions, minimum size limits, possession limits and seasonal closures.

Management Questions

- Do you support the use of regional management measures?
- What are the most effective management measures in place?
- Are there management measures that can be improved upon to better achieve management goals and objectives?
- Are there additional state management efforts that should be included in the FMP?

Statement of the Problem

ISSUE 4: REFERENCE POINTS AND REBUILDING TIMEFRAMES

Based on the 2015 stock assessment, tautog is overfished and overfishing is occurring on a coastwide basis. To increase SSB and yield to the fishery, the draft amendment will consider new reference points and stock rebuilding timeframes to guide management within regional stock management areas (outlined previously in issue 1).

Management Questions

- Do you support the ability to change reference points based on the latest peer-reviewed stock assessment recommendations without the need of a management document?
- Do you support the use of regional reference points?
- Do you support stock rebuilding timeframes that correspond to the needs of each regional management area (i.e. timeframes that are based upon respective stock condition relative to their regional reference points)?

ISSUE 5: OTHER ISSUES

As stated earlier in this document, the intent of the PID is to solicit comments on a broad range of issues for consideration in Draft Amendment 1. The public comment should generally focus on **"How would you like the tautog fishery and resource to look in the future?"** The Board is interested in hearing from the public on all issues associated with the fishery and resource. Comments should not be limited to issues included in this document.

Issues that have been discussed by stakeholders, scientists, and managers regarding the future of the fishery, include:

- A. Adaptive management to achieve the goals and objectives
 - a. Adaptive management provides the Board with the ability to make timely changes to the management program based on changes to the fishery or resource. These changes could be addressed through the addendum process, which typically takes 3-6 months to finalize versus the amendment process, which typically takes 12-16 months to finalize. Examples of issues addressed under adaptive management are: size limits, possession limits, seasonal closures, area closures, and creation of special management zones (to name a few).

B. Landings and biological monitoring requirements

a. The 2015 benchmark stock assessment made a number of monitoring recommendations to improve understanding of tautog life history and stock dynamics, as well as aid in development of future stock assessments. High priority needs include improved biological sampling of the commercial and recreational catch, better sampling of the smallest and largest fish, improved characterization of the lengths of discarded or released fish, and development of a comprehensive fishery-independent survey that is more appropriate for a reef-oriented species, such as a pot or trap survey.

C. Illegal fishing of undersized tautog

- a. Commercial demand
 - i. There is demand for undersized live tautog in seafood restaurant businesses, primarily Asian markets in large cities, with a premium price for those who can manage to catch and transport these fish to a retailer alive. The preferred fish size is 12", well below the minimum legal size for most states (i.e., 15-16" depending on the state).
- b. Recreational demand
 - i. Law enforcement have noted a significant number of hook and line fisherman using tautog (almost always undersize) as live bait for species such as striped bass.

ISSUE 5: OTHER ISSUES (Cont.)

Management Questions

- Do you support the use of adaptive management to meet the goals and objectives of the fishery?
- Do you support increased monitoring to improve our understanding of tautog life history and stock dynamics as well as aid in development of future stock assessments?
- Are undersized tautog harvested for recreational bait or the live fish market in your state? If so, is this a concern to you?
- As a structure orientated species, do you have regional habitat recommendations, recognizing that the Commission and the states have limited regulatory authority for habitat?
- What other changes should be made to the tautog fishery that are not covered by the topics included in this document?

References

- Atlantic States Marine Fisheries Commission. 1996. Fisheries Management Plan for Tautog. ASMFC, Washington, DC.
- Atlantic States Marine Fisheries Commission. 2015. Tautog benchmark stock assessment report for peer review. Arlington, VA.
- Chenoweth, S. 1963. Spawning and fecundity of the tautog, *Tautoga onitis*. M.S. thesis. University of Rhode Island. North Kingston, RI, 60 p.
- LaPlante, L.H. and Eric Schultz. 2007. Annual Fecundity of Tautog in Long Island Sound: Size Effects and Long-Term Changes in a Harvested Population. American Fisheries Society 136: 1520-1533.
- White, G.G. 1996. Reproductive Biology of Tautog, *Tautoga onitis*, in the Lower Chesapeake Bay and Coastal Waters of Virginia. M.S. Thesis. The College of William and Mary.

		POSSESSION LIMITS		
STATE	SIZE LIMIT (inches)	(number of fish/person/day)	OPEN SEASONS	
Massachusetts	16"	3	Jan 1 – Dec 31	
		3	Apr 15 – May 31	
		3	Aug 1 – Oct 15	
Rhode Island	16"	6 (up to 10 per vessel)	Oct 16- Dec 15 (private)	
		6	Oct 20 – Dec 15 (party, charter)	
		2	Apr 1-Apr 30	
Connecticut	16"	2	July 1 – Aug 31	
		4	Oct 10 – Dec 6	
New York	16"	4	Oct 5 – Dec 14	
	15"	4	Jan 1 – Feb 28	
Now Jorsov		4	Apr 1 – Apr 30	
New Jersey		1	Jul 17 – Nov 15	
		6	Nov 16 – Dec 31	
		5	Jan 1 – Mar 31	
DI	15"	3	Apr 1 – May 11	
Delaware		5	July 17 – Aug 31	
		5	Sept 29 – Dec 31	
		4	Jan 1- May 15	
Maryland	16"	2	May 16 – Oct 3	
		4	Nov 1 – 26	
			Jan 1 - Apr 15	
Virginia	16"	3	Sept 24 - Dec 31	
North Carolina	-	-	-	

 Table 3A. Recreational regulations for tautog by state

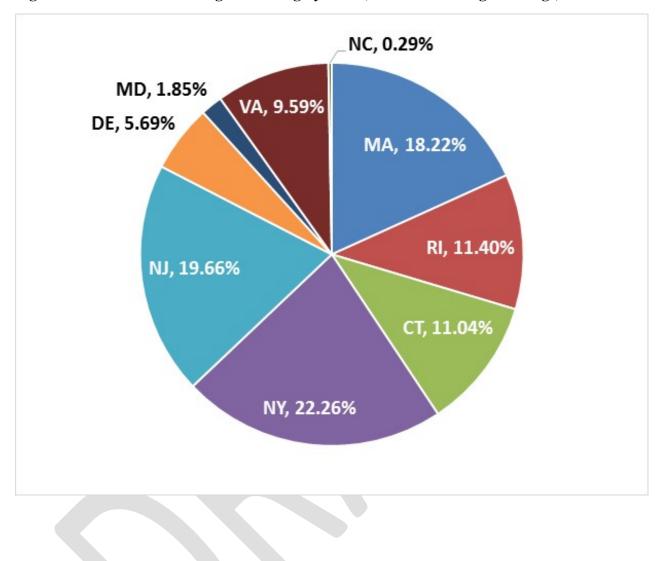
STATE	SIZE LIMIT	POSSESSION LIMITS (number of fish)	OPEN SEASONS	QUOTA (pounds)	GEAR RESTRICTIONS*
Massachusetts	16"	40	April 14-May 16 Sept 1-Oct 31	61,180*	Mandatory pot requirements. Limited entry and area/time closures for specific gear types.
Rhode Island	16"	10	Apr 15 - May 30 Aug 1 - Sept 15 Oct 15 - Dec 31	51,348 (17,116 per season)	Harvest allowed by permitted gear types only.
Connecticut	16"	10	Apr 1- Apr 30 Jul 1 - Aug 31 Oct 8 - Dec 24	NA	Mandatory pot requirements.
New York	15"	25 (10 fish w/ lobster gear and when 6 lobsters are in possession)	Jan 1 - Feb 28 Apr 8 –Dec 31	-	Mandatory pot requirements. Gill or trammel net is prohibited.
New Jersey	15"	> 100 lbs requires directed fishery permit	Jan 1 - 15 June 11 - 30 Nov 1 - Dec 31	103,000	Mandatory pot requirements.
Delaware	15"	5 3 5 5	Jan 1 - Mar 31 Apr 1 - May 11 July 17 - Aug 31 Sept 29 - Dec 31	-	Mandatory pot requirements.
Maryland	16"	4 2 4	Jan 1- May 15 May 16 - Oct 31 Nov 1 - 26	-	Mandatory pot requirements.
Virginia	15"	-	Jan 1 – Jan 17 Mar 16 – Apr 30 Nov 13 – Dec 31	-	Mandatory pot requirements. Pots prohibited in tidal waters.
North Carolina	-	_	-	-	Mandatory pot requirements.

Table 4. Recreational harvest (A+B1) in tautog in pounds, 1981-2014 (MRIP)

Year	MA	RI	СТ	NY	NJ	DE	MD	VA	NC	Total
1981	790,610	664,568	242,337	1,496,039	161,423	6,584	10,296	742,653	536	4,115,046
1982	3,226,868	777,930	610,608	1,674,949	1,241,155	428,036	90,645	271,919	15,849	8,337,959
1983	1,837,262	615,595	458,582	1,124,844	414,957	4,437	6,551	1,267,165	20,144	5,749,537
1984	733,876	1,809,822	733,710	541,805	717,261	95,740	79,110	669,869	NA	5,381,193
1985	328,041	277,384	471,185	2,034,903	741,656	144,859	1,107	298,797	7,154	4,305,086
1986	7,862,584	2,042,584	838,346	2,833,208	2,132,571	264,744	10,049	918,138	4,173	16,906,397
1987	1,751,372	507,424	1,106,606	2,288,076	2,130,955	387,075	266,094	442,751	8,430	8,888,783
1988	2,255,930	612,123	610,171	2,380,285	1,331,833	249,803	446,947	1,410,003	4,605	9,301,700
1989	1,076,366	296,889	1,038,217	1,018,015	1,289,185	743,339	78,391	806,336	31,012	6,377,750
1990	895,327	389,579	200,000	1,980,289	1,256,488	142,627	59,720	229,442	2,703	5,156,175
1991	798,889	1,007,549	648,634	2,352,646	2,189,144	354,498	106,223	619,214	24,645	8,101,422
1992	1,668,485	656,712	1,048,639	1,199,558	2,485,693	183,854	159,730	255,995	12,559	7,671,225
1993	752,598	389,733	531,023	1,800,794	1,361,612	217,881	105,231	758,410	9,738	5,927,020
1994	373,189	328,668	417,438	585,037	330,551	152,033	177,358	1,101,130	2,708	3,468,112
1995	309,224	237,093	402,616	369,643	1,722,713	793,339	115,993	613,348	3,405	4,567,374
1996	397,284	248,840	245,816	193,045	1,123,174	158,751	26,483	778,315	13,191	3,184,899
1997	166,042	301,109	84,297	331,529	483,639	204,419	182,995	391,258	58,751	2,204,039
1998	96,695	316,339	231,622	208,743	41,431	257,348	27,648	273,515	26,420	1,479,761
1999	363,471	223,763	61,142	761,446	511,673	358,328	37,677	203,249	11,940	2,532,689
2000	442,816	203,602	58,475	258,100	1,812,960	373,581	56,126	188,187	4,502	3,398,349
2001	502,247	165,380	63,157	171,927	1,482,613	159,961	72,357	127,555	4,503	2,749,700
2002	521,611	265,116	447,140	2,135,221	1,184,560	652,007	104,246	116,797	4,448	5,431,146
2003	221,843	479,345	603,861	315,384	164,327	200,618	43,212	308,838	20,512	2,357,940
2004	107,905	698,737	77,219	966,022	283,109	240,288	21,633	524,251	31,226	2,950,390
2005	382,866	807,715	145,342	314,691	144,423	220,642	84,538	242,650	30,277	2,373,144
2006	294,785	380,009	842,213	793,999	726,554	406,499	47,484	468,246	3,204	3,962,993
2007	333,668	621,747	1,384,528	823,257	1,064,250	298,500	137,026	246,802	58,480	4,968,258
2008	109,932	491,953	720,575	1,081,693	520,100	380,729	69,331	222,485	1,535	3,598,333
2009	85,414	323,717	303,047	1,431,273	408,567	387,643	108,297	268,102	18,006	3,334,066
2010	162,488	923,690	412,775	502,526	1,067,379	146,044	201,753	479,462	9,389	3,905,506
2011	129,669	80,300	88,728	450,171	381,449	152,895	33,859	173,871	1,555	1,492,497
2012	94,699	534,716	982,891	252,745	133,048	171,329	17,670	49,988	11,687	2,248,773
2013	197,775	593,304	392,146	355,232	395,539	138,051	18,681	23,836	9,636	2,124,200
2014	399,812	297,955	1,470,133	1,211,285	579,934	187,915	3,004	121,352	9,472	4,280,862

Year	Southern New England	Mid-Atlantic	DelMarVa + North Carolina	Total (Coastwide)
1981	193,200	135,800	2,900	331,900
1982	176,800	238,600	4,156	419,556
1983	233,700	189,000	2,819	425,519
1984	435,500	232,200	9,915	677,615
1985	516,600	210,000	7,770	734,370
1986	633,100	302,000	5,706	940,806
1987	829,700	320,400	7,080	1,157,180
1988	718,100	343,000	9,714	1,070,814
1989	666,600	337,300	12,531	1,016,431
1990	582,166	280,655	10,684	873,505
1991	779,943	319,435	10,733	1,110,111
1992	717,758	285,343	9,071	1,012,172
1993	447,993	242,941	7,506	698,440
1994	210,781	234,016	14,693	459,490
1995	150,753	188,849	35,965	375,567
1996	130,723	194,901	31,810	357,434
1997	118,360	127,954	34,598	280,912
1998	118,528	111,318	24,340	254,186
1999	114,670	65,193	28,962	208,825
2000	148,224	79,589	19,636	247,449
2001	162,654	122,947	19,879	305,480
2002	224,861	97,410	29,178	351,449
2003	181,639	139,030	19,832	340,501
2004	150,810	127,663	22,276	300,749
2005	166,235	113,688	12,271	292,194
2006	211,477	123,964	14,424	349,865
2007	189,263	136,777	14,886	340,925
2008	142,054	152,529	16,357	310,940
2009	126,817	101,880	14,947	243,644
2010	136,318	142,366	9,170	287,855
2011	120,000	128,626	17,758	266,384
2012	124,229	97,257	16,581	238,067
2013	129,479	118,512	15,829	263,820
2014	121,740	109,591	9,817	241,148

Table 5. Commercial landings for tautog in pounds (lbs.), by region, 1981-2012(NOAA Fisheries and ACCSP)





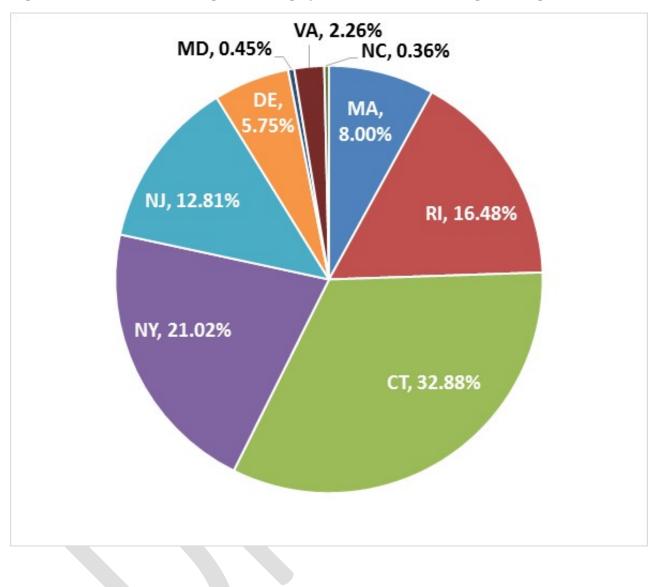


Figure 2. Recreational landings for tautog by state (2012-2014 average landings)