

JOB 1: MARINE ANGLER SURVEY

Part 1: Marine Recreational Fishery Statistics Survey

Part 2: Volunteer Angler Survey

PART 1: MARINE RECREATIONAL FISHERY STATISTICS SURVEY

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JOB 1: MARINE ANGLER SURVEY
PART 1: MARINE RECREATIONAL FISHERY STATISTICS SURVEY

GOAL

To provide long term monitoring of marine recreational fishing activity including angler participation and catch statistics in a manner that is comparable to other Atlantic coastal states.

OBJECTIVES

Provide estimates of:

- 1) *Number of marine anglers in Connecticut each year.*
- 2) *Total effort (trips) expended by anglers in Connecticut each year.*
- 3) *Total catch (numbers of fish kept and released fish) and harvest (numbers and the weight of kept fish) of the most commonly sought species: bluefish, scup, winter flounder, summer flounder, tautog, and striped bass.*
- 4) *Length-frequency of harvested bluefish, scup, winter flounder, summer flounder, tautog, and striped bass.*

INTRODUCTION

The Connecticut Department of Energy and Environmental Protection (DEEP), Bureau of Natural Resources, Marine Fisheries Division, has been collecting marine recreational fisheries information along the Connecticut coastline since 1979. However, in order to improve state-wide marine fisheries statistics and become more consistent with other states, Connecticut joined with the National Marine Fisheries Service (NMFS) Marine Recreational Fishery Statistics Survey (MRFSS) in July, 1987. Before Connecticut's involvement in the MRFSS, data collection was conducted by NMFS's contractor just as in other states where state agencies do not participate in the program.

METHODS

Currently the MRFSS is undergoing a series of procedural changes in order to improve accuracy and precision on both angler effort and catch estimates. The new changes entail new estimation methods including telephone and intercept collection procedures and will be housed under the new Marine Recreational Information Program (MRIP). However, the MRIP still utilizes traditional MRFSS methodology as discussed in the background section of this report.

Background

Presently, MRIP is based on two complementary surveys: A random telephone survey of households, and an intercept survey of anglers at fishing sites (NMFS 1992). NMFS utilized a contractor to conduct the telephone survey to calculate total angler participation and trip estimates. Connecticut performed the angler intercept survey (angler interviews) in order to collect angler catch and effort data, biological data, and socioeconomic and demographic information.

MRIP's primary objectives are (1) to provide a collection of accurate and representative data on the marine recreational fishery and (2) to produce accurate and precise regional (e.g. ME-CT) catch estimates which can be used by fishery managers to assess the impacts of recreational fishing on finfish stocks. In order to produce estimates with adequate precision at the state level (where proportional Standard Error (PSE) $\leq 20\%$, a modified version of Coefficient of Variation = $S.E./Mean * 100$), the initial intercept quota's were increased. Telephone and Intercept Surveys are collected in bimonthly time periods (termed Waves) and further broken down by mode in the Intercept Survey. The three principal modes of marine recreational fishing include shore mode (anglers fishing from beach and bank or manmade structure), private/rental boat mode (anglers fishing from a privately owned or rental boats), and charter boat and headboat modes where anglers pay a captain/vessel for hire to fish.

In 2001, NMFS base allocations for the Northeast and Mid-Atlantic sub-regions were increased 1.5 times in order to increase effort and catch precision estimates for those areas. The increase was accomplished through a grant proposal submitted by the Atlantic Coastal Cooperative Statistics Program (ACCSP) Recreational Statistics Technical Committee and later approved by the ACCSP Coordinating Council. ACCSP is comprised of fifteen Atlantic coastal states and two federal agencies, which oversee and administer the collection of commercial and recreational fishery statistics. ACCSP provided funding for the additional intercept sampling as described in Table 1.1. However since state participation in 1987, Connecticut had already funded increased NMFS Intercept Survey allocation. ACCSP's involvement basically reduces Connecticut's expenditure toward processing additional intercepts by NMFS' contractor. Wave 1 is not sampled in Connecticut or any states in the Mid Atlantic (NY-VA) and Northeast (ME-CT) sub-regions due to low fishing activity (NMFS 1992).

In addition, the sampling methodology of the headboat and charter boat modes was modified beginning in Wave 4 (July-August) 2003 in order to improve catch and trip estimates. This change was the beginning transition point from the MRFSS to the MRIP. The new changes in the survey (termed "the For-Hire Survey" component) called upon each state to provide and update a comprehensive list of current headboat and charter boat vessels and operators. This list provided a sampling frame where ten percent of for-hire vessel operators would be randomly selected to be contacted by telephone to report their fishing trip effort (angler trips) for a given two week period. Coupled with the telephone survey, dockside validations of vessels was performed where vessels were randomly selected and checked to determine if the vessel was out fishing or not. The same list would generate intercept assignments by wave. For-hire intercept assignments were split by vessel type (charter - 6 or less passengers) and headboats (more than

6) since sampling methods differ. Anglers fishing in the charter boat fishery were interviewed at dockside where headboat anglers were interviewed on board while at sea. Dockside sampling of charter boat anglers was selected because of the six passenger limitation. At sea sampling was selected to increase the number of length and weight measurements on harvested fish in addition to length measurements on discarded fish. Intercept collection quotas for the headboat mode were set by the number of trips (based on 2 samplers/trip). All other modes were allocated by the number of intercepts.

Table 1.1: MRIP + ACCSP State Add-on Angler Intercept, Headboat Trip, and Dockside Validation Allocations by Mode and Wave, 2012

NMFS+ACCSP	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	
Mode	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total (%)
Shore (SH)	45	64	83	63	42	297 (26%)
Charter Boat (CH)	0	50	52	48	45	195 (17%)
Private/Rental Boat (PR)	48	113	270	139	63	633 (56%)
Headboat Trips (HB) (based on 2 samplers/trip)	0	6	8	6	0	20 Trips
Total Number of Intercepts (SH, CH, PR)	93	227	405	250	150	1,125
Dockside Validations	0	81	101	101	81	364

MRIP Estimation Methods

MRIP estimation methods used to compute catch and effort statistics were based on the following criteria: (1) improved guidelines for recording proxy data in lieu of missing data, (2) imputation for missing data, (3) telephone survey sample weighting, and (4) cleanup of historical intercept data (NMFS 1994). In cases where gaps or insufficient data occurs, proxy data (information obtained in the Telephone Survey from someone in a fishing household other than the angler) were used to fill voids in the database. In addition, catch and effort statistics for 1979-80 were omitted because of inadequate information (missing files that contained non-fishing household sample size information).

Angler participation and fishing trip estimates were derived primarily from the Telephone Survey and, in special situations, the Intercept Survey (NMFS 1992). In the Telephone Survey, households with telephones located in coastal counties or within 50 miles of the coastline were randomly selected and called to determine if a household fell into either of two categories: (1) households that comprised one or more marine recreational anglers and (2) non-fishing households. Households with anglers were further surveyed in order to collect fishing trip information used in estimating total fishing trips and angler participation. In situations where anglers did not possess a telephone (or live in a household), Intercept Survey data were used in order to account for that segment of the angling population that would otherwise be missed.

MRIP Catch Type Categories

Catch estimates were broken down into three categories: Catch Type A, B1 and B2. Catch Type A consisted of catches that were kept by anglers and available for inspection by field interviewers. Catch Type B1 included angler catches that were used for bait, discarded dead, etc., and were not available for inspection, and Catch Type B2 was comprised of fish that were caught and released alive. Total catch estimates consist of Catch Types A+B1+B2. Harvested catch (fish removed from the population) include Catch Type A+B1 only. Catch Types A and B1 were the only catch groups estimated in both numbers and weights. Since Catch Type B1 are unobserved catches, Catch Type A mean weight estimates were used to expand Catch Type B1 estimates.

RESULTS AND DISCUSSION

Connecticut Intercept Survey 2012

During March-December 2012, a total of 244 assignments were completed and 1,825 interviews (intercepts) with marine anglers were conducted by Marine Fisheries Division staff for MRIP (Table 1.2). Intercept shortfalls occurred in Waves 2 and 6 for NMFS + ACCSP add-on quotas because of low fishing activity and poor weather conditions. Furthermore, the charter and headboat fishery did not start for-hire operations until late May (weekends only) and full time until mid June and terminated by the first of November. In addition, no weekday headboat assignments were scheduled by NMFS' contractor for the first month of each wave. NMFS' contractor was notified of the problem but the issue was never resolved. This year the number of assignments where zero intercepts were collected was 29.1% (71 assignments).

Table 1.2: Total Number of Angler Intercepts Collected by Mode, Headboat Trips Conducted, and Dockside Validations Completed by Wave, 2012

Mode	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Total (%)
	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	
Shore (SH)	15	132	145	93	12	397 (22%)
Charter Boat (CH)	0	72	103	86	0	261 (14%)
Private/Rental Boat (PR)	56	217	312	217	65	867 (48%)
Headboat Trips (HB) (2 interviewers/trip)*	0 Trip (0 Ints.)	5 Trips (101 Ints.)	7 Trips (134 Ints.)	3 Trips (65 Ints.)	0 Trips (0 Ints.)	15 Trips (300 Ints. 16%)
Total Number of Intercepts Collected	71	522	694	461	77	1,825
Dockside Validation	0	87	136	112	39	374

MRIP 2012 Statistics

MRIP intercept sampling procedures and statistics are continuously updated by NMFS and are available on line to the public. Estimates of participants, trip effort, and catch can be queried by region, sub-region, and state by visiting their web site at <http://www.st.nmfs.noaa.gov/st1/recreational/queries/>.

For that reason, this report will not include MRIP statistics. However, intercept collection information will continue to be reported along with historical accounts of Connecticut's marine recreational fishery regulations (Table 1.3).

In addition, MRIP is in the process of implementing new access point angler intercept survey collection procedures in 2013. MRIP continues its efforts to improve angler trip and catch estimates for fisheries management purposes. More detailed information concerning MRIP can be located at the following web site: <https://www.countmyfish.noaa.gov>.

MODIFICATIONS

CT DEEP Marine Fisheries Division participates in the MRIP survey as a subcontractor to NOAA's private contractor, currently Research Triangle Institute (RTI). Survey design changes NOAA proposed for 2013 include a 24 hour sampling frame and fixed site assignments regardless of observed activity level. These changes are intended to improve the reliability of survey results. However, these changes are also expected to add considerably to the cost of conducting the survey including in the number of staff and vehicles required to conduct the survey. The proposal to add 24 hour sampling also raised safety concerns for our creel agents and presented an unacceptable supervisory burden on staff. As a consequence the agency has decided to withdraw from its role as a subcontractor and allow RTI to conduct the Connecticut survey directly. Following discussions with NOAA and RTI, Marine Fisheries staff assisted in the transition by performing 50% of wave 2 (March-April) site assignments. RTI took over the survey in wave 3 (May-June).

With RTI carrying out the MRIP survey, Job 1 staff will focus 2013 efforts on collecting additional length composition data needed for stock assessment and management alternatives analysis. Length data will be collected through both a random creel agent survey of boat and shore anglers and a self-selecting single trip volunteer angler survey. Individual trip angler survey cards were developed for each survey type which allows anglers to record lengths of both kept and released fish, the total number of both kept and released fish by species and related trip information. We believe randomly collected size composition information on both kept and released fish will serve as an important complement to the MRIP survey which historically collects few lengths from kept fish and provides no insight into the size composition of released fish from the private boat and shore modes. This data is critical in stock assessment work (ultimately as numbers of fish at age and mean weight at age in the recreational fishery and the stock).

This information will also enhance our understanding of minimum size regulation effects across angler groups, especially shore versus boat based anglers. The agency is committed to providing a quality fishing experience for all anglers including a reasonable opportunity to harvest fish. Improving our understanding of the size composition available to anglers by mode will aid our efforts to level the playing field for shore bound anglers by appropriately adjusting minimum size regulations at public shore fishing sites.

LITERATURE CITED

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NMFS. 1994. Marine recreational fishery statistics survey. Changes in estimation procedures. mimeo 2pp. Silver Spring, MD.

A History of Connecticut Marine Recreational Fisheries Regulations for Selected Species from 1935-2012

Striped Bass

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
1935	16 in. (fork length)	None.	Year round.	None.	Spearing prohibited.
1953	16 in. (fork length)	None.	Year round.	None.	No sale; spearing prohibited.
Jan 1982	16 in. (fork length)	4 fish between 16 and 24in. No limit >24in.	Year round.	None.	No sale; spearing prohibited.
Aug 1984	24 in. (fork length)	None.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing prohibited.
Aug 1985	26 in. (fork length)	None.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing prohibited.
Jul 1, 1986- Striped bass fishery closed in all state waters (Moratorium)					
1987	33 in. (total length)	1 fish/angler.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing and gaffing prohibited; fish must be landed intact.
Apr 1, 1989	34 in. (total length)	1 fish/angler.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing and gaffing prohibited; fish must be landed intact.
Jul 1, 1989	36 in. (total length)	1 fish/angler.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing and gaffing prohibited; fish must be landed intact.
Jan 1, 1990	38 in. (total length)	1 fish/angler.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing and gaffing prohibited; fish must be landed intact.
Sep 1990	36 in. (total length)	1 fish/angler.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing and gaffing prohibited; fish must be landed intact.
Apr 22, 1994	34 in. (total length)	1 fish/angler.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing and gaffing prohibited; fish must be landed intact.
1995	28 in. (total length)	2 fish/angler.	Apr 1-Dec 14	Dec 15-Mar 31 in all state waters.	No sale; spearing and gaffing prohibited; fish must be landed intact.
Jul 29, 1996	28 in. (total length)	2 fish/angler.	Year round.	None.	No sale; spearing and gaffing prohibited; fish must be landed intact.
May 10, 2000	24-30 in. and ≥ 40 in (total length) Party/Charter Only-29½ in. (total length)	1 fish/angler per length group. 2 fish/angler.	Year round.	None.	No sale; spearing and gaffing prohibited; fish must be landed intact.
Feb 27, 2001	24-32 in. and ≥ 41 in (total length) Party/Charter Only-28 in. (total length)	1 fish/angler per length group. 2 fish/angler.	Year round.	None.	No sale; spearing and gaffing prohibited; fish must be landed intact.
May 15, 2003	28 in. (total length)	2 fish/angler.	Year round.	None.	No sale; spearing and gaffing prohibited; fish must be landed intact.

Striped bass (Con't.)

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Mar 14, 2012- Current	28 in. (total length)	2 fish/angler.	Year round.	None.	No sale; spearing and gaffing prohibited; fish must be landed intact.
	22 in. up to but not including 28 in. (total length)	2 bonus (extra) fish/angler.	May 1-Jun 30 in all state waters.	Jul 1-Apr 30 in all state waters.	Bonus Striped Bass Voucher Program. Angler must fill out voucher upon harvest. No sale; spearing and gaffing prohibited; fish must be landed intact.

Bluefish

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Jan 1, 1991	None	10 fish/angler for fish > 12 in (total length).	Year round.	None.	None.
Apr 22, 1994- Current	None	10 fish/angler	Year round.	None.	None.

Summer Flounder (Fluke)

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Jan 1, 1982	14 in. (total length)	None.	Year round.	None.	None.
Apr 22, 1994	14 in. (total length)	6 fish/angler	May 15-Sep 30.	Oct 1-May 14 in all state waters	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
Jul 29, 1996	14 in. (total length)	6 fish/angler	Year round.	None.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
Apr 24, 1997	14½ in. (total length)	6 fish/angler	Year round.	None.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
May 5, 1998	15 in. (total length)	6 fish/angler	Year round.	None.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
Mar 17, 1999	15 in. (total length)	8 fish/angler	May 29-Sep 11.	Sep 12-May 28 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
May 10, 2000	15½ in. (total length)	8 fish/angler	May 10-Oct 2.	Oct 3-May 9 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
May 17, 2001	17 in. (total length)	6 fish/angler	Year round.	None.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
May 27, 2005	17 ½ in. (total length)	6 fish/angler	Apr 30-Dec 31.	Jan 1-Apr 29 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
Apr 30, 2006	18 in. (total length)	6 fish/angler	Apr 30-Dec 31.	Jan 1-April 29 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
Apr 2, 2007	18 in. (total length)	5 fish/angler	Apr 30-Sep 5.	Sep 6-Apr 29 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
Apr 5, 2008	19 ½ in. (total length)	5 fish/angler	May 24-Sep 1.	Sep 2-May 25 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
May 1, 2009	19 ½ in. (total length)	3 fish/angler	Jun 15-Aug 19.	Aug 20-Jun 14 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
Apr 1, 2010	19 ½ in. (total length)	3 fish/angler	May 15-Aug 25.	Aug 26-May 14 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).

Summer flounder (Fluke) Con't.

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Apr 5, 2011	18 ½ in. (total length)	3 fish/angler	May 15-Sep 5.	Sep 6-May 14 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
	17 in. (total length)	1 fish/angler			Designated Shore Based Fishing Sites only.
Mar 14, 2012- Current	18 in. (total length)	5 fish/angler	May 15-Oct 31.	Nov 1-May 14 in all state waters.	On the water fillets must meet minimum length or be accompanied by legal sized rack (carcass).
	16 in. (total length)	5 fish/angler			Enhanced Opportunity Shore Angler Program Designated Fishing Sites only.

Winter Flounder

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Jan 1, 1982	8 in. (total length)	None.	Year round.	None.	None.
Jan 1, 1985	10 in. (total length)	None.	Year round.	None.	None.
Aug 19, 1986	10 in. (total length)	None.	Year round except for Niantic River.	Niantic River closed Dec 1- Mar 31	None.
Apr 22, 1994	11 in. (total length)	8 fish/angler	Apr 15-Feb 28.	Mar 1-Apr 14 in all state waters.	None.
Oct 1, 1995	12 in. (total length)	8 fish/angler	Apr 15-Feb 28.	Mar 1-Apr 14 in all state waters.	None.
Jan 1, 1996	12 in. (total length)	8 fish/angler	Year round.	None.	None.
Aug 1, 2005	12 in. (total length)	10 fish/angler	Apr 1-May 30.	Jun 1- Mar 31 in all state waters.	None.
Nov 1, 2010- Current	12 in. (total length)	2 fish/angler	Apr 1-May 30.	Jun 1- Mar 31 in all state waters.	None.

Black Sea Bass

Effective Date	Minimum Size (Excluding tendril or long filament on tail)	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Apr 24, 1997	9 in. (total length)	None.	Year round.	None.	None.
May 5, 1998	10 in. (total length)	20 fish/angler	Year round.	None.	None.
May 17, 2001	11 in. (total length)	25 fish/angler	May 10-Feb 28.	Mar 1-May 9 in all state waters.	None.
Jun 19, 2002	11½ in. (total length)	25 fish/angler	Year round.	None.	None.
May 15, 2003	12 in. (total length)	25 fish/angler	Jan 1-Sep 1 and Sep 16-Nov 30.	Sep 2-Sep 15 and Dec 1-Dec 31 in all state waters.	None.

Black Sea Bass (Con't.)

Effective Date	Minimum Size (Excluding tendril or long filament on tail)	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Aug 5, 2004	12 in. (total length)	25 fish/angler	Jan 1-Sep 7 and Sep 22-Nov 30.	Sep 8-Sep 21 and Dec 1-Dec 31 in all state waters.	None.
May 27, 2005	12 in. (total length)	25 fish/angler	Jan 1-Nov 30.	Dec 1-Dec 31.	None.
Apr 30, 2006	12 in. (total length)	25 fish/angler	Year Round.	None.	None.
May 1, 2009	12 ½ in. (total length)	25 fish/angler	Year Round.	None.	None.
Apr 1, 2010	12 ½ in. (total length)	25 fish/angler	May 22-Sep 12.	Sep 13-May 21 in all state waters.	None.
Jun 8, 2010	12 ½ in. (total length)	25 fish/angler	May 22-Oct 11 and Nov 1-Dec 31.	Jan 1-May 21 and Oct 12-Oct 31 in all state waters.	None.
Apr 5, 2011	13 in. (total length)	25 fish/angler	Jul 1-Oct 1 and Nov 1-Dec 31.	Jan 1-Jun 30 and Oct 2-Oct 31 in all state waters.	None.
Mar 14, 2012-Current	13 in. (total length)	15 fish/angler	Jun 15-Dec 31.	Jan 1-Jun 14 in all state waters.	None.

Scup (Porgy)

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Jan 1, 1982	7 in. (total length)	None.	Year round.	None.	None.
Jan 1, 1985	8 in. (total length)	None.	Year round.	None.	None.
May 10, 2000	8 in. (total length)	50 fish/angler	Year round.	None.	None.
May 10, 2001	9 in. (total length)	25 fish/angler	Jun 3-Oct 23.	Oct 24-Jun 2 in all state waters.	None.
Jun 19, 2002	10 in. (total length)	50 fish/angler	Jul 13-Sep 25.	Sep 26-Jul 12 in all state waters.	None.
May 15, 2003	10 in. (total length)	50 fish/angler	May 24-Oct 30.	Oct 31-May 23 in all state waters.	None.
May 24, 2004	10 ½ in. (total length)	20 fish/angler	Jul 23-Oct 12 and Nov 1-Dec 31.	Jan 1-Jul 22 and Oct 13-Oct 31 in all state waters.	None.
May 27, 2005	10 ½ in. (total length)	25 fish/angler Party/charter boats <i>only</i> – 60 fish/angler	Jul 1-Oct 31. Sep 1-Oct 31.	Nov 1-Jun 30 in all state waters.	None.
Apr 30, 2006	10 ½ in. (total length)	25 fish/angler Party/charter boats <i>only</i> – 60 fish/angler	Jun 1-Oct 31. Sep 1-Oct 31.	Nov 1-May 31 in all state waters.	None.

Scup (Porgy) Con't.

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Apr 4, 2008 Party/ charter boats	10 ½ in. (total length) 11 in. (total length)	10 fish/angler 10 fish/angler Party/charter boats – 45 fish/angler	Jun 1- Sep 26. Jun 12- Aug 31. Sep 1- Oct 15.	Sep 27- May 31 in all state waters. Oct 16- Jun 13 in all state waters.	None.
May 1, 2009 Party/ charter boats	10 ½ in. (total length) 11 in. (total length)	10 fish/angler 10 fish/angler Party/charter boats – 45 fish/angler	May 24- Sep 26. Jun 12- Aug 31. Sep 1- Oct 15.	Sep 27- May 23 in all state waters. Oct 16- Jun 11 in all state waters.	None.
Apr 1, 2010 Party/ charter boats	10 ½ in. (total length) 11 in. (total length)	10 fish/angler 10 fish/angler Party/charter boats – 40 fish/angler	May 24- Sep 26. Jun 8- Sep 6. Sep 7- Oct 11.	Sep 27- May 23 in all state waters. Oct 12- Jun 7 in all state waters.	None.
Sep 23, 2011 Party/ charter boats	10 ½ in. (total length) 11 in. (total length)	10 fish/angler 10 fish/angler Party/charter boats – 40 fish/angler	May 24- Dec 31. Jun 8- Sep 6 and Oct 12 – Dec 31. Sep 7- Oct 11.	Jan 1- May 23 in all state waters. Jan 1 - Jun 7 in all state waters.	None.
Mar 14, 2012- Current Party/ charter boats	10 ½ in. (total length) 11 in. (total length)	20 fish/angler 20 fish/angler Party/charter boats – 40 fish/angler	May 1- Dec 31. May 1- Aug 31 and Nov 1 – Dec 31. Sep 1- Oct 31.	Jan 1- Apr 30 in all state waters.	None.
Enhanced Opportunity Shore Angler Program	9 in. (total length)	20 fish/angler	May 1-Dec 31.		Enhanced Opportunity Shore Angler Program Designated Fishing Sites only.

Tautog (Blackfish)

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Sep 19, 1987	12 in. (total length)	None.	Year round.	None.	None.
May 19, 1995	14 in. (total length)	None.	Year round.	None.	None.
Jul 29, 1996	14 in. (total length)	4 fish/angler	Jun 15-Apr 30.	May 1-Jun 14 in all state waters.	None.
May 15, 2003	14 in. (total length)	4 fish/angler	Jan 1-Apr 30 and Jun 15-Nov 23.	May 1-Jun 14 and Nov 24-Dec 31 in all state waters.	None.
Feb 27, 2004	14 in. (total length)	4 fish/angler	Jan 1-Apr 30, Jun 15-Sep 7 and Sep 22 – Dec 13.	May 1-Jun 14, Sep 8 – Sep 21 and Dec 14-Dec 31 in all state waters.	None.
Jan 4, 2008	14 in. (total length)	4 fish/angler	Jan 1-Apr 30 and Oct 1-Dec 6.	May 1-Jun 30, Sep 1-Sep 30, and Dec 7-Dec 31 in all state waters.	None.
		2 fish/angler	Jul 1-Aug 31.		
Jan 31, 2012	Not applicable.	Possession prohibited	Season Closed	Feb 1-Apr 30 in all state waters.	None.
Mar 14, 2012- Current	16 in. (total length)	2 fish/angler	Apr 1-Apr 30 and Jul 1-Aug 31.	May 1-Jun 30, Sep 1-Oct 9, and Dec 7-Mar 31 in all state waters.	None.
		4 fish/angler	Oct 10-Dec 6.		

Weakfish

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Jan 1, 1995	16 in. (total length)	None.	Year round.	None.	None.
Apr 1, 2003	16 in. (total length)	10 fish/angler	Year round.	None.	None.
Oct 29, 2007	16 in. (total length)	6 fish/angler	Year round.	None.	None.
Apr 1, 2010- Current	16 in. (total length)	1 fish/angler	Year round.	None.	None.

Hickory Shad

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Mar 17, 1999- Current	None.	6 fish/angler, or in aggregate with American shad.	Year round.	None.	None.

White Perch

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Apr 1, 2003-Current	7 in. (total length)	30fish/angler.	Year round.	See Other Restrictions.	Only for Long Island Sound and Tidal Rivers and Streams.

American Eel

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
May 10, 2000-Current	6 in. (total length)	50 fish/angler	Year round.	None.	None.

Sandbar Shark (Brown Shark)

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Feb 2, 2010	Not applicable.	Prohibited to possess or land.	None.	Year round in all state waters.	None.

Smooth Dogfish

Effective Date	Minimum Size	Daily Possession Limit	Fishing Season	Closed Season/Area	Other Restrictions
Feb 2, 2010	Not applicable.	Prohibited to possess or land.	None.	Year round in all state waters.	None.
Apr 27, 2012-Current	None.	None.	Year round.	None.	None.

Gear Restrictions

1935-Current	Striped bass may be taken by hook and line method only (spearing is prohibited).
Apr 22, 1994-Current	Spearing is allowed as a recreational activity only and must abide all recreational fishing regulations (with the exception of striped bass where spearing is prohibited-see above).

PART 2: VOLUNTEER ANGLER SURVEY

PART 2: VOLUNTEER ANGLER SURVEY

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JOB 1: MARINE ANGLER SURVEY
PART 2: VOLUNTEER ANGLER SURVEY

OBJECTIVES

Provide estimates of:

1) Size composition data on both kept and released bluefish, striped bass other common species.

Anglers participating in the Volunteer Angler Survey measured bluefish, striped bass and other species. Length frequencies of popular species: bluefish, striped bass, summer flounder, winter flounder, scup, tautog and black sea bass are listed in Tables 1.1A - 1.7A.

2) Catch frequency (trips catching 0,1,2,...fish) data on both kept and discarded fish.

Catch frequency data and percent distribution on both kept (harvested) and released for selected species are listed in Tables 1.8A-1.9A.

INTRODUCTION

The purpose of the Volunteer Angler Survey (VAS) is to supplement the National Marine Fisheries Service, Marine Recreational Fishery Statistics Survey/Marine Recreational Information Program by providing additional length measurement data particularly concerning fish that are released. In 1994, the VAS program was incorporated into the Marine Angler Survey (Job 1) in order to improve and expand the survey.

The survey's initial objective was to collect marine recreational fishing information concerning finfish species with special emphasis on striped bass. In 1994, the collection of bluefish length measurements was added to the survey to fully understand that fishery. In 1997, length measurement information on other marine finfish was added to the survey. This report primarily consists of data collected in 2012.

METHODS

The VAS is designed to collect trip and catch information from marine recreational (hook and line) anglers who volunteer to record their fishing activities by logbook. The logbook format consists of recording fishing effort, target species, fishing mode (boat and shore), area fished (subdivisions of Long Island Sound and adjacent waters), catch information concerning finfish kept (harvested) and released, and striped bass and bluefish length measurements (Appendix 1.1A). In 1997, the logbook was modified in order to collect length measurement data on other species. Instructions for volunteers were provided on the inside cover of the postage paid logbook. Each participating angler was assigned a personal numeric code for confidentiality purposes. After the logbook data were computer entered, logbooks were returned to each volunteer for their own personal record. For their participation, volunteers were sent a newsletter with updates of survey results and a nylon wallet with embossed VAS logo. Furthermore, to

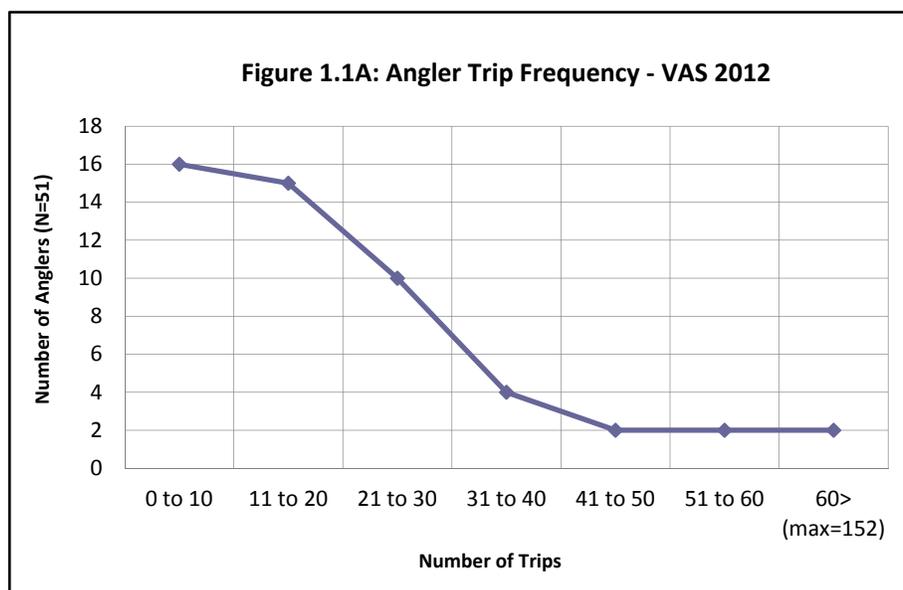
improve communications with recreational anglers and to encourage more public input, volunteers were notified of upcoming public hearings including proposed and final changes in recreational fishing regulations.

RESULTS AND DISCUSSION

Over the years the number of participants in the survey ranged from as low as 18 anglers participating in 1979 to a high of 115 anglers in 1997. Advertising the VAS program through the DEEP's annually published Connecticut Angler's Guide including the state web site www.ct.gov/dep has helped increase volunteer participation. The guide is distributed to anglers purchasing Connecticut fishing licenses in addition to being circulated by bait and tackle shops and other entities.

VAS 2012

In 2012, a total of 51 anglers participated in the survey. Those 51 anglers made 1,194 fishing trips and measured 8,161 fish. The average number of trips volunteers took was about 23 trips per year and the range in trips was 4 to 152 (Figure 1.1A). Volunteers including additional anglers involved in a fishing party made a total of 2,297 fishing trips (note: targeted trips in the following paragraphs are not additive to the trip total since more than one species may be sought during an angler trip). Boat trips comprised 65% of the total trips taken. The percent of successful trips, where at least one fish of any species was caught, was 91% for boat anglers and 71% for shore anglers. Besides striped bass and bluefish, VAS anglers pursued and caught a wide range of inshore and offshore pelagic species and recorded length measurements on many species. This report contains statistics on species anglers targeted the most and that are under a current fishery management plan (bluefish, striped bass, summer flounder, scup, winter flounder, tautog, and black sea bass). Please refer to Tables 1.1A-1.7A for length frequency distribution tables and catch trip frequency distributions for kept (harvested) and released fish are listed in Tables 1.8A-1.9A.



Bluefish

VAS participants made 887 targeted bluefish trips (boat and shore modes combined) and recorded a total of 1,590 adult bluefish caught (bluefish >12 inches). Of the total number of targeted trips, 22% were unsuccessful. The overall catch including trips not targeting bluefish was 1,973 fish. Of the overall catch, anglers measured 1,507 adult bluefish (76%) and released about 76%. The 50th percentile length measurement for bluefish was approximately 21 inches (total length). The targeted catch-per-unit-of-effort (CPUE) was 1.8 and 0.4 fish per angler trip for total and harvested catches.

Striped bass

Volunteers made 1,580 trips targeting striped bass and caught a total of 1,528 fish (overall catch including trips not targeting striped bass was 1,575 fish). About 20% or 314 trips targeting striped bass were unsuccessful. Of the overall catch, about 88% of the catch was released. VAS anglers measured 1,437 striped bass (91% of the overall catch). Legal size striped bass (≥ 28 inches) comprised about 25% of the measured catch. The percent of legal size striped bass released was estimated at 48%. The 50th percentile length measurement for striped bass was about 20 inches. Striped bass ranged in length from as small as 8 inches to 52 inches. Targeted CPUE was 1.0 and 0.1 fish per angler trip for total and harvested catches.

Summer flounder

A total of 561 fishing trips were directed toward catching 1,330 summer flounder. Only 4% of the trips targeting summer flounder were unsuccessful. The overall catch was 1,400 fish. Volunteers measured 1,292 fish or about 92% of the overall catch. Approximately 82% of the overall catch was released. About 22% of the measured catch was comprised of legal size summer flounder (18 inches or greater). VAS anglers released 23% of legal size summer flounder. The 50th percentile length measurement for summer flounder was about 15.5 inches. Length measurements ranged from 8 to 29 inches. Summer flounder targeted CPUE was 2.4 and 0.4 fish per angler trip for total and harvested catches.

Winter flounder

Volunteers made 29 trips that targeted winter flounder. Both targeted and non-targeted trips produced 73 fish. Of the total trips targeting winter flounder, 14% of the trips were unsuccessful. A total of 61 winter flounder caught were measured. Anglers released about 52% of the overall catch and 84% of the measured catch were of legal size (12 inches and greater). Anglers released 47% of legal sized fish, however, the daily creel limit for winter flounder was only 2 fish per person. The 50th percentile length measurement for winter flounder was about 13.5 inches. Length measurements ranged from 6 to 18 inches. Winter flounder targeted CPUE was 1.8 and 1.0 fish per angler trip for total and harvested catches.

Scup

Volunteers made 161 targeted trips for scup producing a total of 938 fish. Of the total trips targeting scup, only 2% of the trips were unsuccessful. The overall total catch was 1,618 fish. Volunteers measured about 74% (1,192) of the overall total catch. Of the overall total catch, 66% were released. Legal sized fish (10.5 inches and greater) comprised 63% of the measured catch. The proportion of legal sized fish released by anglers was approximately 45%. The 50th percentile length measurement for scup was about 11 inches. Length measurements ranged from as little as 4 inches to 19 inches. Scup targeted CPUE was 5.8 and 2.1 fish per angler trip for total and harvested catches.

Tautog

VAS anglers made 189 trips that targeted tautog and caught a total of 1,083 fish. Of the total trips targeting tautog, only 4% of the trips were unsuccessful. The overall total catch was 1,122 fish and 72% was released. Volunteers measured 893 tautog or about 80% of the overall total catch. About 41% of the measured catch was comprised of legal size fish (16 inches or greater). Of the legal size measured catch, approximately 16% were released. The 50th percentile length measurement for tautog was about 14.5 inches. Length measurements ranged from 5 to 25 inches. Tautog targeted CPUE was 5.7 and 1.6 fish per angler trip for total and harvested catches.

Weakfish

Only 7 trips targeted weakfish. A total of three weakfish were caught, however, two were caught incidentally.

Black sea bass

VAS anglers took 60 trips targeting black sea bass catching 411 fish. The overall catch was 964 black sea bass and 83% were released. Volunteers measured 603 fish or 63% of the overall total catch. Of the measured catch, 15% caught were of legal size (13 inches and greater). The 50th percentile length measurement for black sea bass was about 6.5 inches and the percent of legal size fish released was 30%. Black sea bass targeted CPUE was 6.8 and 2.3 fish per angler trip for total and harvested catches.

CONCLUSIONS

VAS anglers provide valuable recreational fisheries data at a relatively low cost. In addition, collecting length data on released fish is often difficult or unattainable through conventional access point angler intercept surveys. The VAS program provides this information which is essential in assessing the recreational fishery in Connecticut as required by the Atlantic States Marine Fisheries Commission. Any anglers interested in participating in the program can contact Rod MacLeod at 860-434-6043, or e-mail address: rod.macleod@ct.gov or writing to State of Connecticut, DEEP, Marine Fisheries Office, P.O. Box 719, Old Lyme CT 06371.

MODIFICATIONS

For 2013, the VAS logbook format will be slightly modified so that the information collected will be compatible with Atlantic Coast Cooperative Statistics Program (ACCSP) minimum data element standards. These changes should not affect the time series for comparison purposes. In addition, the logbook will be made available in both electronic and paper logbook form to all participants. All reported data by VAS anglers will be stored in the central ACCSP data warehouse.

ACKNOWLEDGMENTS

I am very grateful to all anglers who have participated in the survey. Without their cooperation and assistance, the VAS program would not be possible.

Table 1.1A: Bluefish (12> inches) Length Frequency Distribution, 2012

Total Length (inches)	2012 Measurement Data Bluefish (12>inches)			Total Length (inches)	Freq	%Freq	%Cum
	Freq	%Freq	%Cum				
13	24	1.6	1.6	27	55	3.6	86.5
14	45	3.0	4.6	28	41	2.7	89.2
15	59	3.9	8.5	29	33	2.2	91.4
16	103	6.8	15.3	30	40	2.7	94.0
17	89	5.9	21.2	31	22	1.5	95.5
18	148	9.8	31.1	32	21	1.4	96.9
19	86	5.7	36.8	33	16	1.1	98.0
20	122	8.1	44.9	34	17	1.1	99.1
21	95	6.3	51.2	35	8	0.5	99.6
22	113	7.5	58.7	36	4	0.3	99.9
23	82	5.4	64.1	37	0	0.0	99.9
24	126	8.4	72.5	38	2	0.1	100.0
25	77	5.1	77.6	Total	1,507		
26	79	5.2	82.8				

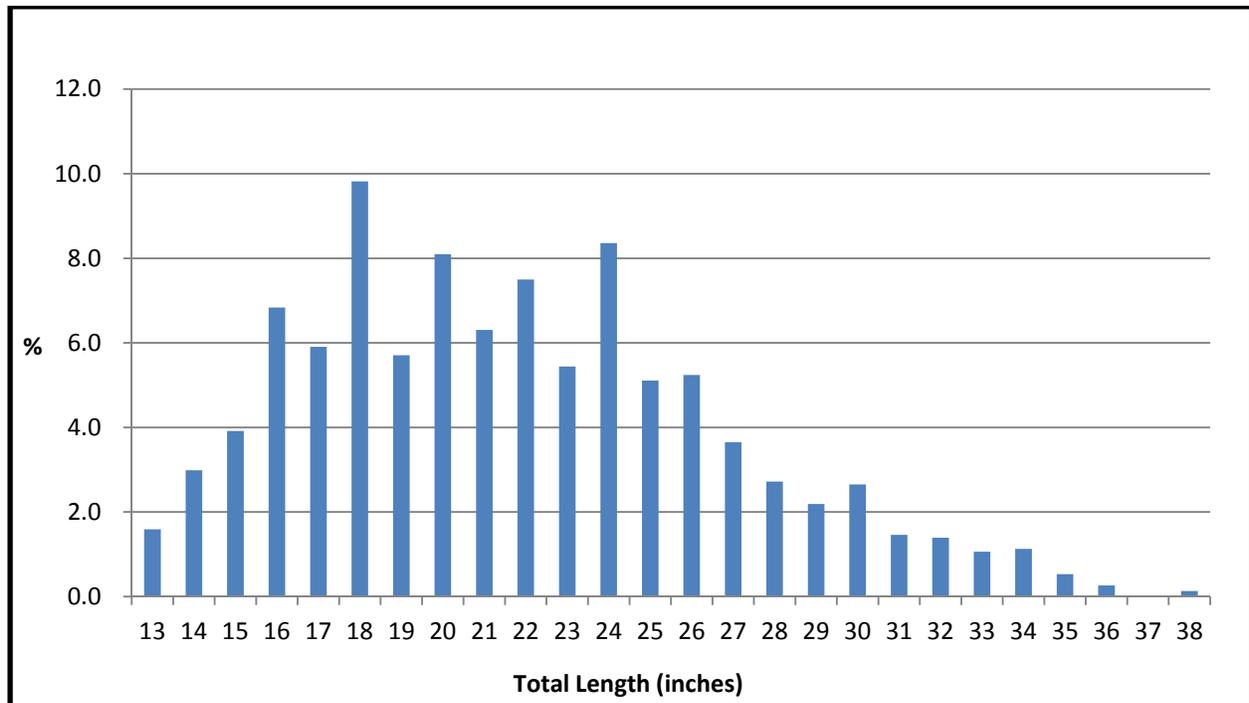


Table 1.2A: Striped Bass Length Frequency Distribution, 2012

Total Length (inches)	2012 Measurement Data Striped Bass			Total Length (inches)	Freq	%Freq	%Cum
	Freq	%Freq	%Cum				
< or = 8	2	0.1	0.1	30	40	2.8	82.8
9	2	0.1	0.3	31	42	2.9	85.7
10	10	0.7	1.0	32	41	2.9	88.6
11	13	0.9	1.9	33	30	2.1	90.7
12	32	2.2	4.1	34	38	2.6	93.3
13	43	3.0	7.1	35	22	1.5	94.9
14	66	4.6	11.7	36	25	1.7	96.6
15	98	6.8	18.5	37	10	0.7	97.3
16	128	8.9	27.4	38	13	0.9	98.2
17	88	6.1	33.5	39	7	0.5	98.7
18	121	8.4	42.0	40	4	0.3	99.0
19	72	5.0	47.0	41	3	0.2	99.2
20	62	4.3	51.3	42	4	0.3	99.4
21	39	2.7	54.0	43	1	0.1	99.5
22	61	4.2	58.2	44	1	0.1	99.6
23	27	1.9	60.1	45	3	0.2	99.8
24	57	4.0	64.1	46	0	0.0	99.8
25	61	4.2	68.3	47	1	0.1	99.9
26	63	4.4	72.7	48	0	0.0	99.9
27	30	2.1	74.8	49	0	0.0	99.9
28	37	2.6	77.4	50	1	0.1	99.9
29	38	2.6	80.0	51	0	0.0	99.9
				52	1	0.1	100.0
				Total	1,437		

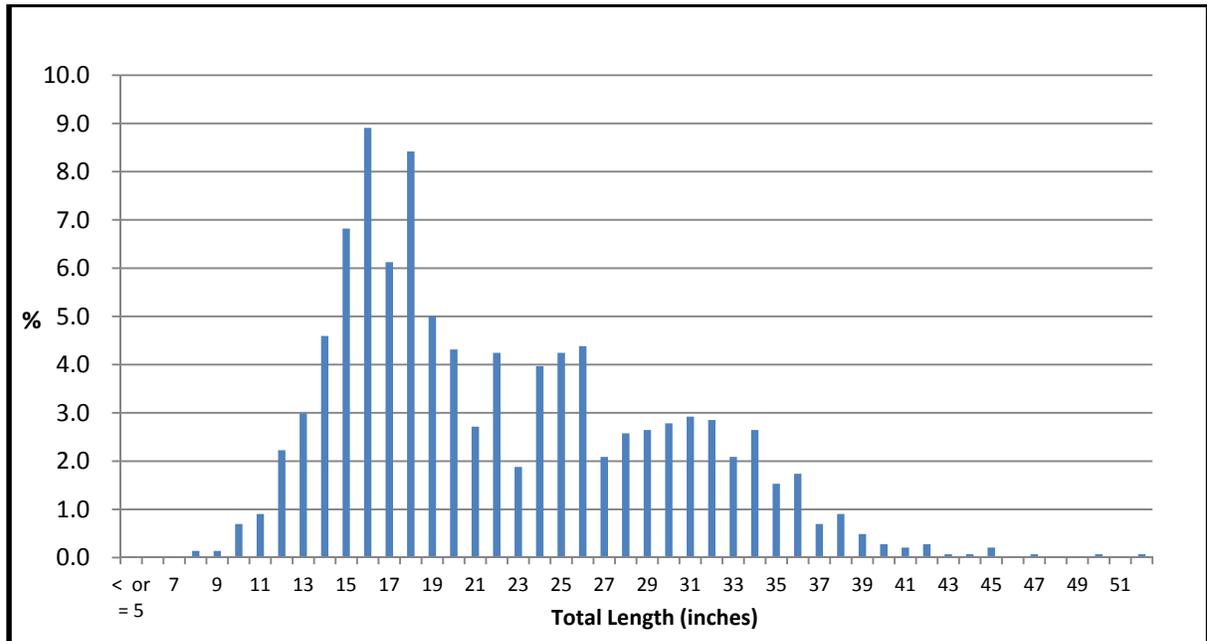


Table 1.3A: Summer Flounder Length Frequency Distribution, 2012

Total Length (inches)	2012 Measurement Data Summer Flounder		
	Freq	%Freq	%Cum
< or = 8	4	0.3	0.3
9	0	0.0	0.3
10	21	1.6	1.9
11	14	1.1	3.0
12	58	4.5	7.5
13	70	5.4	12.9
14	181	14.0	26.9
15	163	12.6	39.5
16	231	17.9	57.4
17	191	14.8	72.2
18	139	10.8	83.0
19	89	6.9	89.9
20	60	4.6	94.5
21	20	1.5	96.0
22	27	2.1	98.1
23	9	0.7	98.8
24	8	0.6	99.4
25	1	0.1	99.5
26	4	0.3	99.8
27	0	0.0	99.8
28	1	0.1	99.9
29	1	0.1	100.0
Total	1,291		

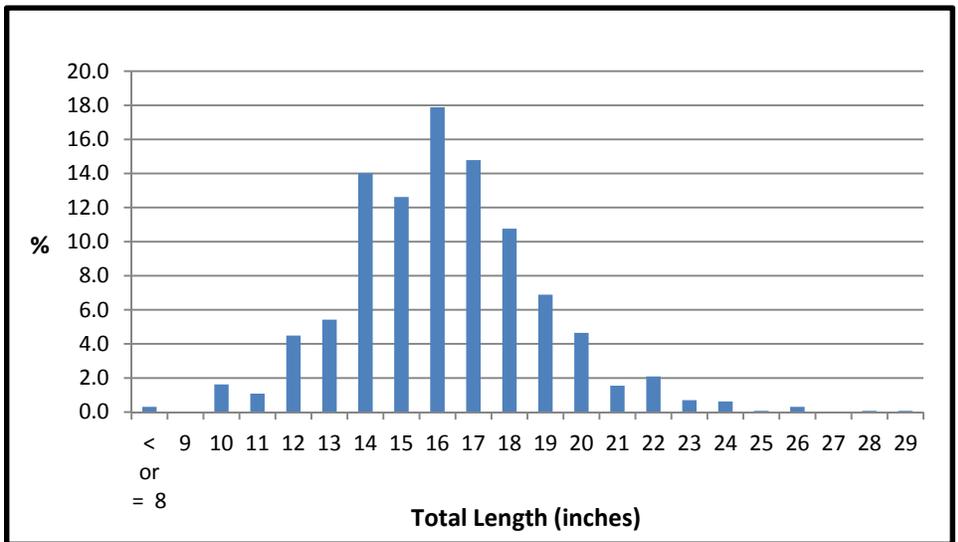


Table 1.4A: Winter Flounder Length Frequency Distribution, 2012

Total Length (inches)	2012 Measurement Data Winter Flounder		
	Freq	%Freq	%Cum
< or = 10	6	9.8	9.8
11	2	3.3	13.1
12	4	6.6	19.6
13	12	19.7	39.3
14	14	23.0	62.3
15	14	23.0	85.2
16	5	8.2	93.4
17	3	4.9	98.3
18	1	1.6	100.0
Total	61		

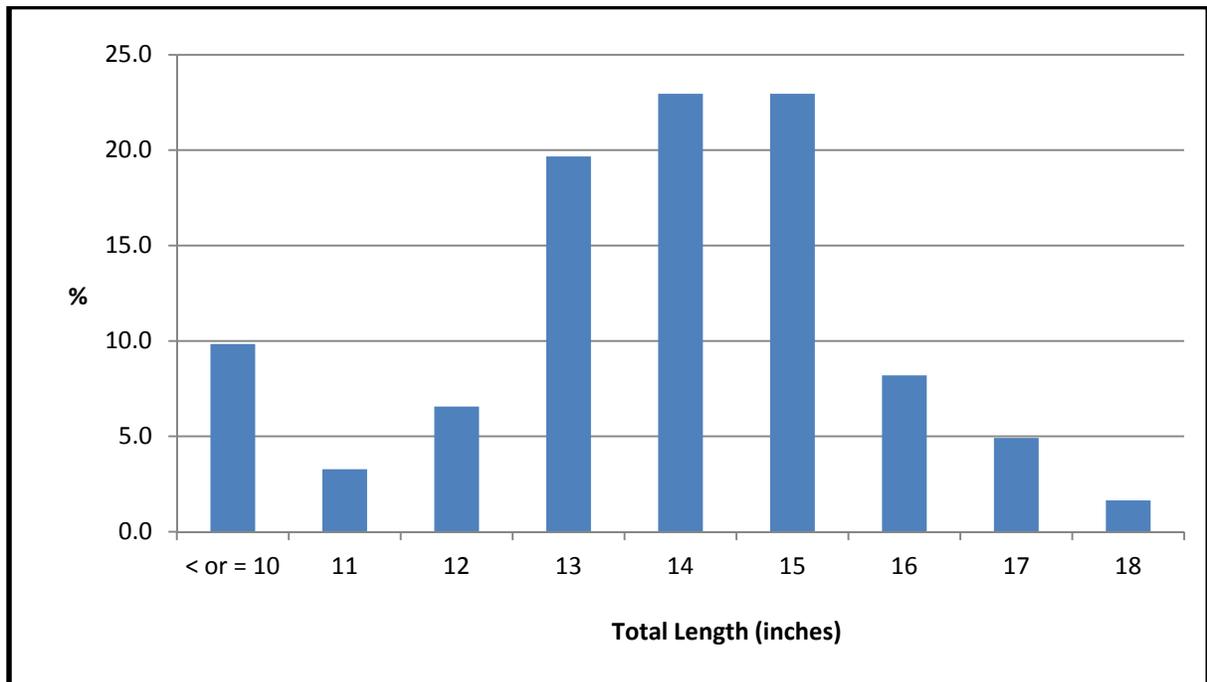


Table 1.5A: Scup Length Frequency Distribution, 2012

Total Length (inches)	2012 Measurement Data		
	Scup		
	Freq	%Freq	%Cum
< or = 6	85	7.1	7.1
7	39	3.3	10.4
8	61	5.1	15.5
9	103	8.6	24.1
10	153	12.8	37.0
11	138	11.6	48.5
12	173	14.5	63.1
13	141	11.8	74.9
14	130	10.9	85.8
15	80	6.7	92.5
16	46	3.9	96.4
17	27	2.3	98.6
18	7	0.6	99.2
19 or >	9	0.8	100.0
Total	1,192		

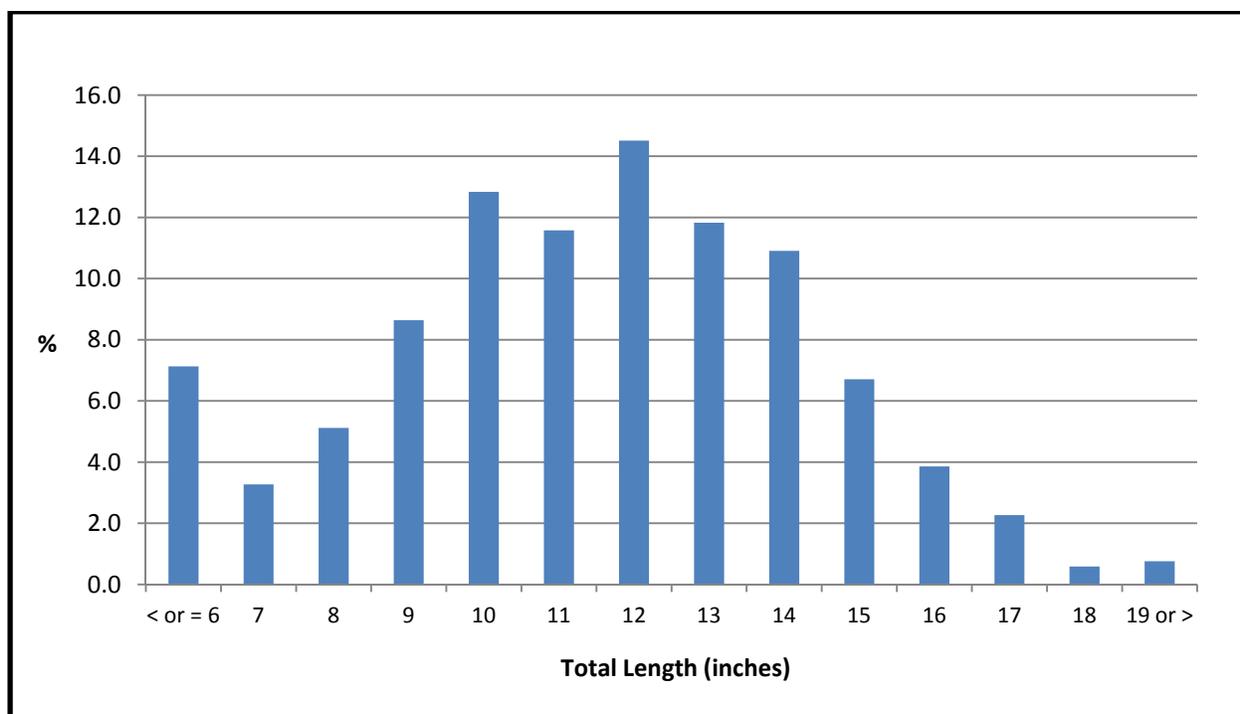


Table 1.6A: Tautog Length Frequency Distribution, 2012

Total Length (inches)	2012 Measurement Data		
	Tautog		
	Freq	%Freq	%Cum
< or = 7	18	2.0	2.0
8	14	1.6	3.6
9	15	1.7	5.2
10	48	5.4	10.6
11	58	6.5	17.1
12	74	8.3	25.4
13	97	10.9	36.3
14	84	9.4	45.7
15	84	9.4	55.1
16	86	9.6	64.7
17	100	11.2	75.9
18	74	8.3	84.2
19	51	5.7	89.9
20	54	6.0	96.0
21	19	2.1	98.1
22	7	0.8	98.9
23	4	0.4	99.3
24	4	0.4	99.8
25	2	0.2	100.0
Total	893		

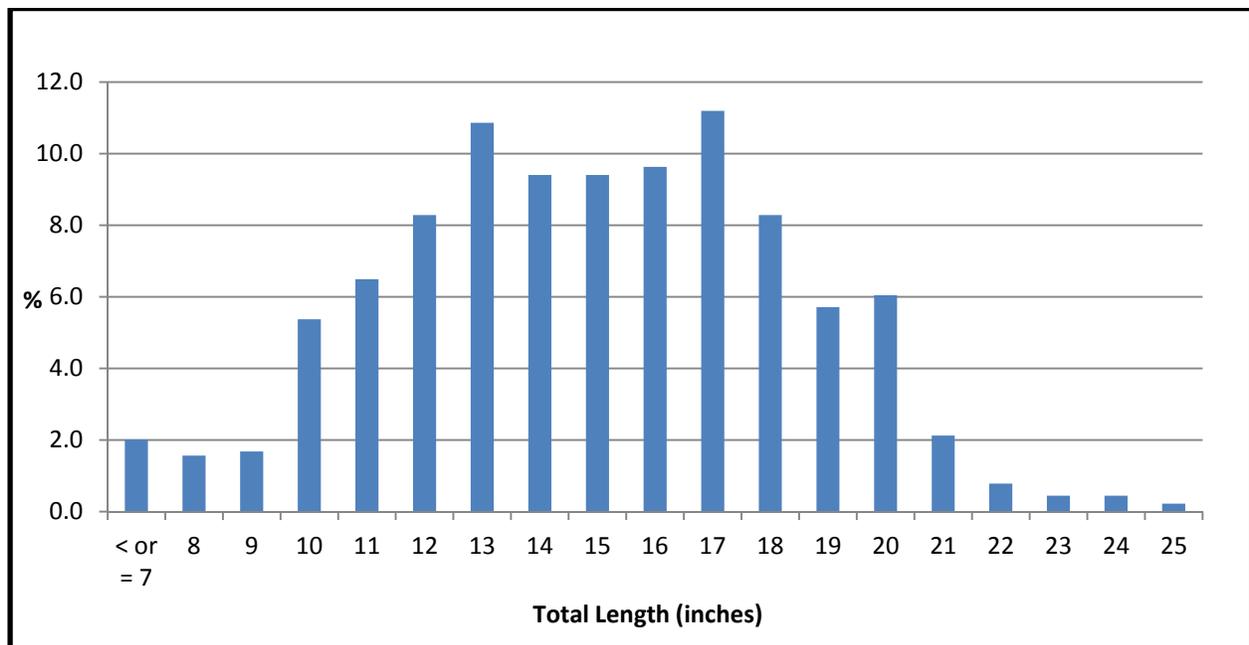
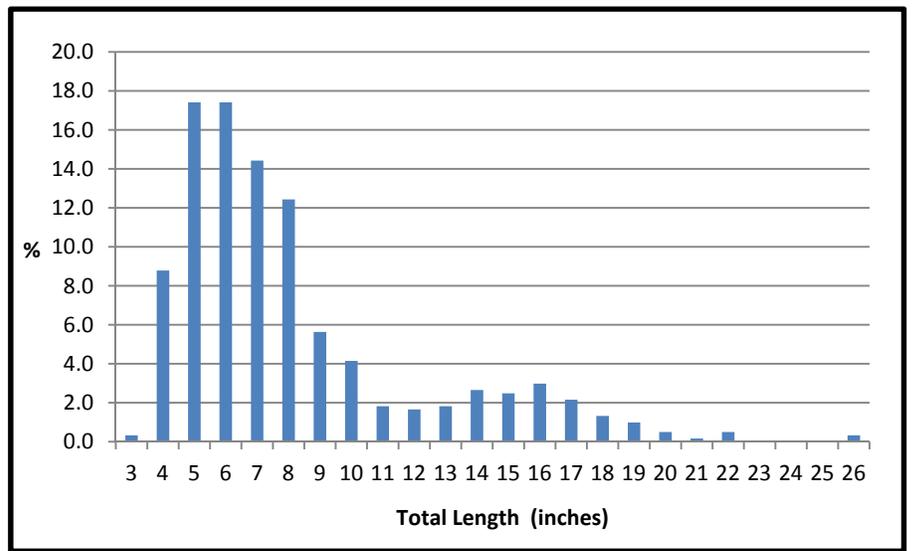


Table 1.7A: Black Sea Bass Length Frequency Distribution, 2012

Total Length (inches)	2012 Measurement Data Black Sea Bass		
	Freq	%Freq	%Cum
3	2	0.3	0.3
4	53	8.8	9.1
5	105	17.4	26.5
6	105	17.4	43.9
7	87	14.4	58.4
8	75	12.4	70.8
9	34	5.6	76.5
10	25	4.1	80.6
11	11	1.8	82.4
12	10	1.7	84.1
13	11	1.8	85.9
14	16	2.7	88.6
15	15	2.5	91.0
16	18	3.0	94.0
17	13	2.2	96.2
18	8	1.3	97.5
19	6	1.0	98.5
20	3	0.5	99.0
21	1	0.2	99.2
22	3	0.5	99.7
23	0	0.0	99.7
24	0	0.0	99.7
25	0	0.0	99.7
26	2	0.3	100.0
Total	603		



**Table 1.8A: Catch Trip Frequency Distribution
of Kept (Harvested) Fish for Selected Species, 2012**

Creeled (Harvested)			Striped Bass			Summer Flounder			Winter Flounder		
# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.
Bluefish (12 in. >)											
0	216	64.3%	0	363	81.4%	0	173	61.6%	0	9	45.0%
1	76	22.6%	1	69	15.5%	1	75	26.7%	1	4	20.0%
2	21	6.3%	2	14	3.1%	2	17	6.0%	2	7	35.0%
3	11	3.3%	Total	446	100%	3	12	4.3%	Total	20	100%
4	5	1.5%				4	1	0.4%			
5	1	0.3%				5	3	1.1%			
6	3	0.9%				Total	281	100%			
7	2	0.6%									
8	0	0.0%									
10	1	0.3%									
Total	336	100%									
Scup			Tautog			Black Sea Bass					
0	93	50.0%	0	26	28.9%	0	90	75.0%			
1	27	14.5%	1	14	15.6%	1	19	15.8%			
2	20	10.8%	2	25	27.8%	2	1	0.8%			
3	21	11.3%	3	17	18.9%	3	3	2.5%			
4	7	3.8%	4	8	8.9%	4	1	0.8%			
5	5	2.7%	Total	90	100%	5	3	2.5%			
6	3	1.6%				6	0	0.0%			
7	2	1.1%				7	1	0.8%			
8	4	2.2%				8	1	0.8%			
10	3	1.6%				15	1	0.8%			
17	1	0.5%				Total	120	100%			
Total	186	100%									

**Table 1.9A: Catch Trip Frequency Distribution
of Released Fish for Selected Species, 2012**

Released			Striped Bass			Summer Flounder			Winter Flounder		
# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.
0	90	26.8%	0	90	20.0%	0	29	10.3%	0	7	35.0%
1	98	29.2%	1	192	42.6%	1	88	31.3%	1	9	45.0%
2	50	14.9%	2	68	15.1%	2	57	20.3%	2	2	10.0%
3	31	9.2%	3	41	9.1%	3	40	14.2%	3	1	5.0%
4	11	3.3%	4	14	3.1%	4	22	7.8%	4	1	5.0%
5	15	4.5%	5	11	2.4%	5	18	6.4%	Total	20	100%
6	11	3.3%	6	9	2.0%	6	7	2.5%			
7	3	0.9%	7	7	1.6%	7	4	1.4%			
8	5	1.5%	8	6	1.3%	8	3	1.1%			
9	0	0.0%	9	1	0.2%	9	3	1.1%			
10	5	1.5%	10	0	0.0%	10	4	1.4%			
11	2	0.6%	11	5	1.1%	11	0	0.0%			
12	2	0.6%	12	2	0.4%	12	1	0.4%			
13	1	0.3%	13	0	0.0%	13	2	0.7%			
14	1	0.3%	14	1	0.2%	14	2	0.7%			
15	1	0.3%	15	1	0.2%	15	0	0.0%			
16	2	0.6%	16	1	0.2%	16	1	0.4%			
17	3	0.9%	18	1	0.2%	Total	281	100%			
18	1	0.3%	22	1	0.2%						
19	1	0.3%	Total	451	100%						
20	2	0.6%									
22	1	0.3%									
Total	336	100%									

**Table 1.9A: Catch Trip Frequency Distribution
of Released Fish for Selected Species, 2012 (Con't.)**

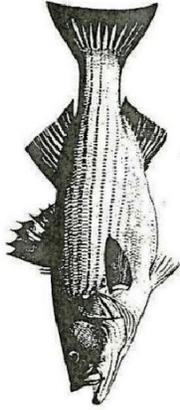
Released								
Scup			Tautog			Black Sea Bass		
# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.	# of Fish	# of Trips	% Distr.
0	33	17.7%	0	27	30.0%	0	14	11.9%
1	44	23.7%	1	17	18.9%	1	35	29.7%
2	30	16.1%	2	11	12.2%	2	10	8.5%
3	26	14.0%	3	7	7.8%	3	13	11.0%
4	11	5.9%	4	6	6.7%	4	11	9.3%
5	12	6.5%	5	2	2.2%	5	10	8.5%
6	12	6.5%	6	2	2.2%	6	6	5.1%
7	5	2.7%	7	0	0.0%	7	6	5.1%
8	3	1.6%	8	2	2.2%	8	1	0.8%
10	3	1.6%	9	1	1.1%	9	1	0.8%
12	1	0.5%	10	2	2.2%	10	7	5.9%
16	1	0.5%	12	4	4.4%	11	1	0.8%
20	1	0.5%	13	1	1.1%	13	1	0.8%
22	1	0.5%	14	1	1.1%	14	2	1.7%
30	1	0.5%	15	1	1.1%	Total	118	100%
45	1	0.5%	16	1	1.1%			
50	1	0.5%	17	2	2.2%			
Total	186	100%	20	1	1.1%			
			25	1	1.1%			
			70	1	1.1%			
			Total	90	100%			

APPENDIX 1.1A: Connecticut Volunteer Angler Logbook

FASTEN

CONNECTICUT VOLUNTEER ANGLER SURVEY

Rev. 6/96



YEAR

ANGLER CODE

Send Me More Logbooks

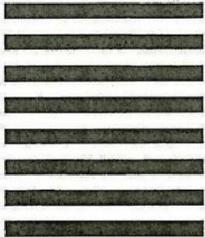
FASTEN



CT DEPT OF ENVIRONMENTAL PROTECTION
MARINE FISHERIES OFFICE
PO BOX 719
OLD LYME CT 06371-9973

POSTAGE WILL BE PAID BY ADDRESSEE

BUSINESS REPLY MAIL
FIRST CLASS MAIL PERMIT NO. 75 OLD LYME, CT



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

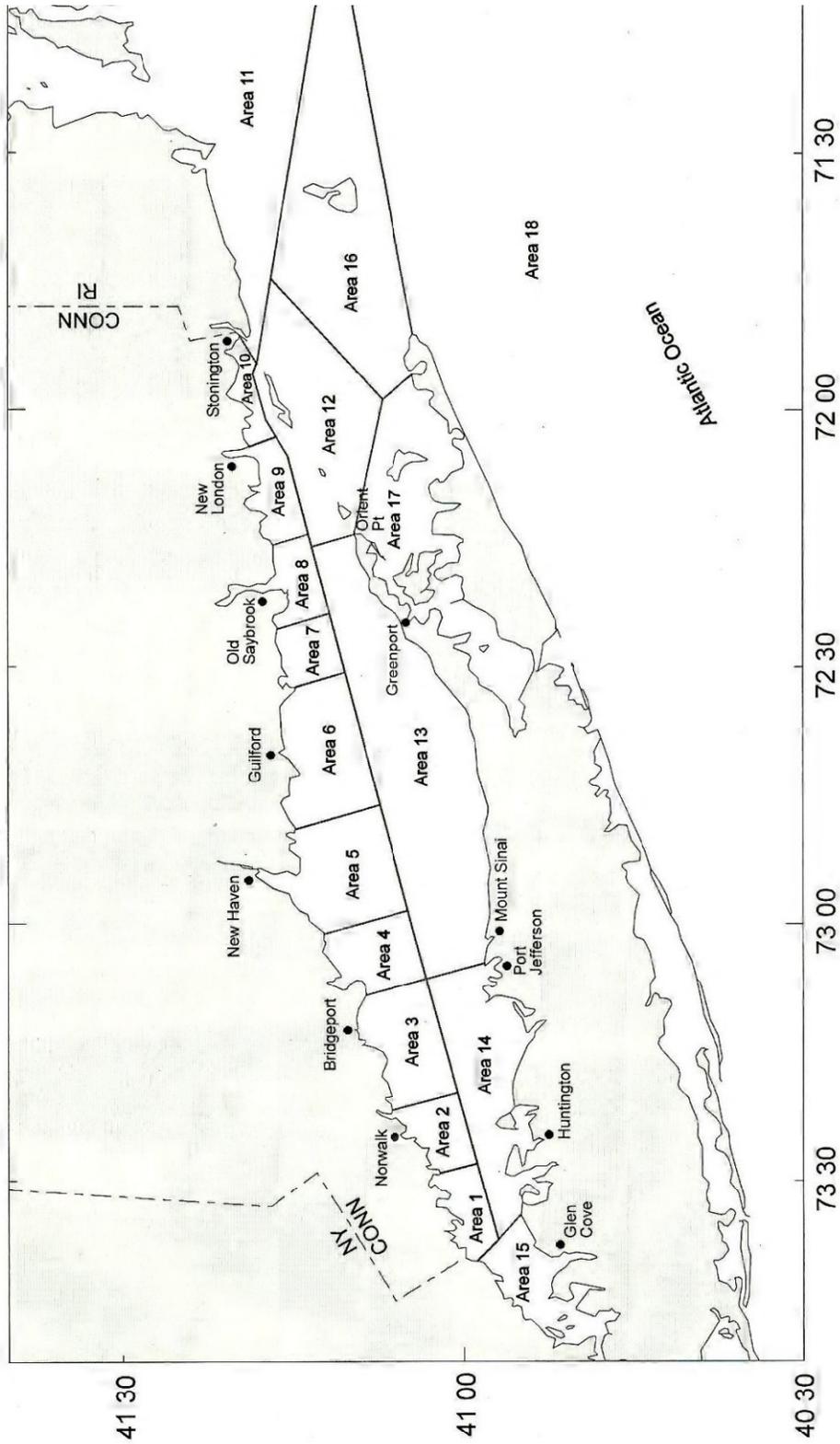


STATE OF CONNECTICUT
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
Fisheries Division
Marine Fisheries Office



FASTEN

Long Island Sound and Vicinity Fishing Area Chart



Connecticut Volunteer Angler Survey Instructions and Codes

Volunteer Angler Survey Logbook Instructions: Listed below are instructions for filling out the logbook. Upon logbook completion, tape the prepaid postage logbook shut and drop it off in the mail. All information is kept confidential. Once the information is entered in our computer system and error checked, the logbooks will be returned for your own records. If you any questions or comments regarding the survey, please contact **Rod MacLeod** at (860) 434-6043.

- (1) Please enter the month and day fishing trip took place.
- (2) Fishing start time in military time (Example: 11am = 1100, 1pm = 1300 hrs, 2pm = 1400, etc.).
- (3) Actual fishing time or limes wet to the nearest ½ hour. Do not include travel time.
- (4) Number of anglers in fishing party.
- (5) Areas fished most in descending order as described on the chart located on the inside cover of logbook. Also, if most of the fishing took place in a river please place a check mark in the box provided.
- (6) Check mark fishing mode.
- (7) Enter species code for 1st (primary) targeted species and 2nd (secondary) targeted species provided in the species code list below.
- (8) Number of anglers that caught fish.
- (9) Place a check mark if no fish were caught for the entire fishing party.

Catch Information: Catch information should include the total number of fish caught by the entire party. Enter the number of fish kept and released in the designated boxes. If you caught fish other than those in the pre-coded boxes, please refer to the species code list below and enter the code in the designated blank boxes. If you caught a fish not listed in the species code list, please write down the common name(s) in the blank box(es) provided.

Length Measurement Information: Please try to provide length measurement data on popular species caught including kept and released fish (exclude skates, cunners, etc). Fish must be measured from the tip of the snout to the end of the tail (total length). In case of large catches, try to measure your catch on a random basis. Measuring just large fish will not accurately reflect the actual size or age distribution of the population. When handling and measuring sub-legal sized fish, anglers should use their best judgement and experience to insure that those fish are returned to the water unharmed.

Species Code List:

01 Albacore	12 Cusk-eel	23 White Marlin	34 Smelt	45 Snapper Bluefish (≤12in.)
02 Alewife	13 Dogfish (all species)	24 Atlantic Menhaden	35 Spot	46 Yellowfin Tuna
03 Atlantic Salmon	14 Dolphin (Mahi-Mahi)	25 Pollock	36 Striped Bass	47 Bigeye Tuna
04 Blackfish (Tautog)	15 American Eel	26 Scup (Porgy)	37 Swordfish	48 Blue Marlin
05 Blowfish (Puffer)	16 Summer Flounder (Fluke)	27 Atlantic Sailfish	38 Oyster Toadfish	49 Blueback Herring
06 Bluefish (Adults > 12in.)	17 Goosefish (Monkfish)	28 Windownpane Flounder	39 Atlantic Tomcod	50 Hickory Shad
07 Atlantic Bonito	18 Haddock	29 Black Sea Bass	40 Bluefin Tuna	51 Little Tunny (False Albacore)
08 Brown Trout (Sea-Run)	19 Atlantic Herring	30 Scarobins (all species)	41 Weakfish	52 Skipjack Tuna
09 Butterfish	20 Spanish Mackerel	31 American Shad	42 Whiting (Silver Hake)	53 Atlantic Wolffish
10 Atlantic Cod	21 Hakes (Red, Spotted)	32 Sharks	43 White Perch	54 Northern Kingfish
11 Cunner	22 Atlantic Mackerel	33 Skates	44 Winter Flounder	55 Atlantic Croaker

Daily Fishing Trip Log

(1) Month	Day	(2) Military Time	(3) Hours Fished	(4) Number of Anglers in Party	(5) Areas Fished (See Map)			4Here if Fished in River
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<i>1st</i>	<i>2nd</i>	<i>3rd</i>	<input type="text"/>
(6) Mode of Fishing		(7) Target Species (See Code List)			(8) Number of Anglers that Caught Fish		(9) 4Here if No Fish were Caught	
Boat	<input type="text"/>	Shore	<input type="text"/>	1st	<input type="text"/>	2nd	<input type="text"/>	<input type="text"/>

Catch Information

Length Measurement Information

Species Name	Code	Number Kept	Number Released	Code	Length Data	4 if Released	Code	Length Data	4 if Released
Striped Bass	3 6	<input type="text"/>							
Bluefish (Adults)	0 6	<input type="text"/>							
Winter Flounder	4 4	<input type="text"/>							
Blackfish	0 4	<input type="text"/>							
Summer Flounder	1 6	<input type="text"/>							
Scup (Pogy)	2 6	<input type="text"/>							
		<input type="text"/>							
		<input type="text"/>							
		<input type="text"/>							
		<input type="text"/>							