



# 2012 Discard Estimation, Precision, and Sample Size Analyses for 14 Federally Managed Species Groups in the Northeast Region

by SE Wigley, J Blaylock, PJ Rago, and G Shield

# 2012 Discard Estimation, Precision, and Sample Size Analyses for 14 Federally Managed Species Groups in the Northeast Region

by SE Wigley<sup>1</sup>, J Blaylock<sup>2</sup>, PJ Rago<sup>1</sup>, and G Shield<sup>1</sup>

<sup>1</sup>National Oceanic Atmospheric Administration, National Marine Fisheries Service,  
Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA, 02543 USA

<sup>2</sup>Integrated Statistics, 16 Sumner St., Woods Hole, MA 02543 USA

**US DEPARTMENT OF COMMERCE**  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Northeast Fisheries Science Center  
Woods Hole, MA

August 2012

## Northeast Fisheries Science Center Reference Documents

**This series is a secondary scientific series** designed to assure the long-term documentation and to enable the timely transmission of research results by Center and/or non-Center researchers, where such results bear upon the research mission of the Center (see the outside back cover for the mission statement). These documents receive internal scientific review, and most receive copy editing. The National Marine Fisheries Service does not endorse any proprietary material, process, or product mentioned in these documents.

All documents issued in this series since April 2001, and several documents issued prior to that date, have been copublished in both paper and electronic versions. To access the electronic version of a document in this series, go to <http://www.nefsc.noaa.gov/nefsc/publications/>. The electronic version is available in PDF format to permit printing of a paper copy directly from the Internet. If you do not have Internet access, or if a desired document is one of the pre-April 2001 documents available only in the paper version, you can obtain a paper copy by contacting the senior Center author of the desired document. Refer to the title page of the document for the senior Center author's name and mailing address. If there is no Center author, or if there is corporate (*i.e.*, non-individualized) authorship, then contact the Center's Woods Hole Laboratory Library (166 Water St., Woods Hole, MA 02543-1026).

**Editorial Treatment:** To distribute this report quickly, it has not undergone the normal technical and copy editing by the Northeast Fisheries Science Center's (NEFSC's) Editorial Office as have most other issues in the NOAA Technical Memorandum NMFS-NE series. Other than the four covers and first two preliminary pages, all writing and editing have been performed by the authors listed within. This report was reviewed by the Stock Assessment Review Committee, a panel of assessment experts from the Center for Independent Experts (CIE), University of Miami.

**Information Quality Act Compliance:** In accordance with section 515 of Public Law 106-554, the Northeast Fisheries Science Center completed both technical and policy reviews for this report. These predissemination reviews are on file at the NEFSC Editorial Office.

This document may be cited as:

Wigley SE, Blaylock J, Rago PJ, Shield G. 2012. 2012 Discard estimation, precision, and sample size analyses for 14 federally managed species groups in the northeast region. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 12-17; 146 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <http://www.nefsc.noaa.gov/nefsc/publications/>

# TABLE OF CONTENTS

Table of Contents .....	i
List of Tables .....	ii
List of Figures .....	ii
List of Appendix Tables.....	iii
List of Acronyms .....	iv
Executive Summary .....	v
Background .....	1
Methods .....	1
Data Sources .....	1
Discard Estimation.....	3
Discard Reasons.....	3
Sample Size Analysis.....	4
Results.....	5
Discussion .....	8
Acknowledgements.....	9
References Cited .....	10
Appendix.....	131

## LIST OF TABLES

Table 1. List of the 14 fish and invertebrate species groups, with species group abbreviations in parentheses, and the species comprising these groups, corresponding to the 13 federal fishery management plans in the Northeast region.....	12
Table 2. Number of Northeast Fisheries Observer Program and Vessel Trip Report trips, by fleet and calendar quarter from July 2010 through June 2011.....	13
Table 3. Number of Northeast Fisheries Observer Program and Vessel Trip Report sea days, by fleet and calendar quarter from July 2010 through June 2011.....	14
Table 4A. Total catch, Vessel Trip Report landings, estimated discards and associated coefficient of variation for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011.....	15
Table 4B. Total catch, Vessel Trip Report landings, estimated discards and associated coefficient of variation for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011.....	43
Table 5. The number of sea days needed to achieve a 30% CV of the discard estimate for each the 14 fish and invertebrate species groups, the number of pilot sea days, and the maximum number of sea days needed for each fleet for fish and invertebrate species groups based on July 2010 through June 2011 data.....	89
Table 6. Number of sea days, trips, and percentage of trips needed to achieve a 30% CV of the discard estimate, by fleet and species group, based on July 2010 through June 2011 data.....	90

## LIST OF FIGURES

Figure 1A. Percentage of Vessel Trip Report landings and estimated discards and the percentage of estimated discards by fleet for each of the 14 species groups for July 2010 through June 2011.....	91
Figure 1B. Percentage of Vessel Trip Report landings and estimated discards and the percentage of estimated discards by fleet for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.....	98
Figure 2. Percentage of Vessel Trip Report landings and estimated discards and the percentage of estimated discards by FMP and non-FMP species groups for 26 selected fleets for July 2010 through June 2011.....	110
Figure 3. Results from the 2012 sample size analysis conducted for 16 selected fleets.....	123

## LIST OF APPENDIX TABLES

Appendix Table 1. Discard reason categories used in Appendix Tables 2A and 2B.....	134
Appendix Table 2A. Estimated discards and percentage by discard reason category for the 14 species groups for July 2010 through June 2011.....	135
Appendix Table 2B. Estimated discards and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.....	139
Appendix Table 3. Fleet abbreviations used in Table 6 and Figures 1A, 1B, and 3.....	146

## **LIST OF ACRONYMS**

CV = coefficient of variation

d/k = discard/kept

FMP = fishery management plan

MRIP = Marine Recreational Information Program

MRFSS = Marine Recreational Fisheries Statistical Survey

NEFOP = Northeast Fisheries Observer Program

NEFSC = Northeast Fisheries Science Center

NERO = Northeast Regional Office

NMFS = National Marine Fisheries Service

SBRM = Standardized Bycatch Reporting Methodology

VTR = Vessel Trip Report

## EXECUTIVE SUMMARY

This report describes the analysis of the expected coverage needed by at-sea observers for Northeast fisheries for the April 2012 through March 2013 period using the Standardized Bycatch Reporting Methodology. Refinements to the procedure for filtering the needed sea days have been made based on analyses conducted for the 2011 3-year Review Report. The sea days needed to achieve the precision-based performance standard (30% coefficient of variation of the discard estimate) were updated using July 2010 through June 2011 data. To monitor 14 federally managed fish and invertebrate species groups across 55 fleets, a total of 18,822 sea days are needed. The discards reported in this document may not necessarily correspond directly with the discard estimates derived for individual stock assessments due to differences in stratification and data. Hence, the discard estimates are not definitive, but indicative of where discarding is occurring among commercial fleets and for which species groups. Based upon this analysis, the predominant species groups discarded are skates and dogfish. Across all species groups examined, “No Market” is the reason reported for the majority of discards.



## BACKGROUND

The Standardized Bycatch Reporting Methodology (SBRM) Omnibus Amendment (NEFMC 2007; NMFS 2008) was vacated by the US District Court of the District of Columbia on September 15, 2011 and the regulations implementing the SBRM were removed by the National Marine Fisheries Service (NMFS) on December 29, 2011 (NMFS 2011). While an SBRM is not currently required, the need to allocate observer sea days to monitor fisheries prosecuted off the northeast coast of the US remains and thus an analysis to estimate the number of sea days needed by each fleet is needed.

The SBRM discard estimation methods described in Wigley et al. 2007 are still applicable. Refinements to the procedure for filtering the needed sea days have been made based on analyses conducted for the 2011 SBRM 3-year Review Report Part 2 (Wigley et al. forthcoming 2012).

This document presents the estimated discards and associated precision, and the number of sea days needed to obtain a 30% coefficient of variation (CV) on the discard estimates for the 14 species groups associated with federal fishery management plans (FMPs) in northeast fleets<sup>1</sup>. Additionally, discard reasons associated with the discarded species are summarized. This document differs from previous SBRM documents in that it does not include a sea day prioritization<sup>2</sup> and focuses on fish and invertebrate species groups; it does not include sea turtles.

## METHODS

### Data Sources

The data sets used include July 2010 through June 2011 data from the Northeast Fisheries Observer Program<sup>3</sup> (NEFOP) database, the Vessel Trip Report (VTR; including logbooks from the surfclam and ocean quahog fishery) database, the Northeast Fisheries Science Center (NEFSC) commercial landings database, and the NOAA Fisheries Marine Recreational Fisheries Statistics Survey<sup>4</sup> (MRFSS) database.

The NEFOP is a comprehensive, multi-purpose program that collects a broad range of data on all species that are encountered during a fishing trip as well as gear characteristics data, economic information, and biological samples (NEFOP, 2010). The NEFOP employs trained sea-going observers and monitors to collect these data that also include weight, by species and disposition (retained and discarded), of the entire catch. Fish and invertebrate species are recorded in weight. Conversion factors were applied to convert any dressed weight data to live weight equivalents.

For this analysis, only observed hauls from NEFOP trips with a “complete” sampling protocol were used. A “complete” sampling protocol includes obtaining species weights for both kept and discarded portions of all species in the catch. NEFOP training trips have been included

---

<sup>1</sup> “fleet” is synonymous with “fishing mode.”

<sup>2</sup> The Proposed 2012 Observer Sea Day Allocation (March 23, 2012) document is available on-line at: [http://www.nefsc.noaa.gov/fsb/SBRM/2012/Proposed\\_2012\\_Observer\\_Sea\\_Day\\_Allocation\\_3-23-2012\\_v3.pdf](http://www.nefsc.noaa.gov/fsb/SBRM/2012/Proposed_2012_Observer_Sea_Day_Allocation_3-23-2012_v3.pdf)

<sup>3</sup> A comparison of discard rates derived from observer and at-sea monitor data revealed there were generally no statistical differences in discard rates between the two data collection programs for the 14 fish species groups for four gear types (longline, large mesh otter trawl, large mesh gillnet and extra large mesh gillnet) where at-sea monitor data exist. See Northeast Fisheries Observer Program (2011) for more information on at-sea monitoring.

<sup>4</sup> Marine Recreational Fisheries Statistics Survey (MRFSS) was replaced with Marine Recreational Information Program (MRIP) in 2012.

in the analysis. Aborted trips, “set only” trips, and trips associated with a groundfish sentinel fishery (program code = 127) were excluded from this analysis. Additionally, hauls with no catch report and species hail weight with discard reason “039” (“previously discarded”) were excluded.

The same broad stratification scheme used in SBRM analyses was employed in this analysis, where trips were partitioned into fleets using six classification variables: calendar quarter, geographic region, gear type, mesh, access area, and trip category. Calendar quarter was based on landed date and used to capture seasonal variations in fishing activity and discard rates. Two broad geographical regions were defined: New England (NE) and Mid-Atlantic (MA) based on port of departure<sup>5</sup>; ports from Maine to Rhode Island constituted the NE region, and ports in states from Connecticut southward constituted the MA region. Gear type was based on Northeast gear codes (*negear*). Some gear codes were combined: sink, anchored, and drift gillnets, and single and paired mid-water trawls. Trips for which gear was unknown were excluded. Mesh size groups were formed for otter trawl and gillnet gear types. For otter trawls, two mesh groups were formed: small (mesh less than 5.5 inches) and large (5.5 inch mesh and greater). For gillnets, three mesh groups were formed: small (mesh less than 5.5 inches), large (mesh between 5.5 and 7.99 inches), and extra large (mesh 8 inches and greater). Two access area categories were formed: access area (AA) and open (OPEN). The sea scallop fishery was divided into General (GEN) and Limited (LIM) category trips. All other fisheries were combined into a category called “all.”

Stratification abbreviations used are given below.

Abbreviation	Definition
MA	Mid-Atlantic ports (CT and southward)
NE	New England ports (RI and northward)
sm	Small mesh (less than 5.5 inches)
lg	Large mesh (5.5 to 7.99 inches)
xlg	Extra large mesh (8 inches and greater)
LIM	Limited access category
GEN	General category
OPEN	Non-access area
AA	Access area

The VTR data are used as a basis for defining the sampling frame, since all federally permitted vessels are required to file a VTR for each fishing trip (See NMFS-Northeast Regional Office [http://www.nero.noaa.gov/ro/fso/vtr\\_inst.pdf](http://www.nero.noaa.gov/ro/fso/vtr_inst.pdf) ). These self-reported data<sup>6</sup> constitute the basis of the fishing activity of the commercial fleets. Because Dealer data do not contain mesh size and area fished information, the Dealer data<sup>7</sup> could not be used to expand discard ratios by

<sup>5</sup> Wigley et al. (2007) found that the majority (over 93%) of 2004 observed trips both originated and fished in the same region and exhibited the same general pattern as in the VTR data. An updated analysis using data collected during July 2007 through June 2011 found similar results.

<sup>6</sup> See Wigley et al. 2007 for more details on self-reported VTR data.

<sup>7</sup> The trip-based allocation of Dealer (CFDETT/SyyyyAA) data are conducted annually and were not available when the annual discard estimation and sample size analyses were conducted.

fleet for the annual analyses. The VTR data were used as a surrogate for Dealer data and were used to expand the NEFOP discard ratios to total discards. For this analysis, the commercial VTR trips [excluding NY state (non-federal) vessels] were used. Conversion factors were applied to convert various units of measure to pounds and all weight to live weight. VTR trip data were collapsed into fleets as defined above. Trips participating in the US/Canada access area, B-day category programs and other special access programs could not be identified in the VTR data. These trips have been grouped by the other stratification variables and have not been partitioned separately.

The clam fishery has a separate logbook system from the VTR logbook. The commercial clam logbook data were used to augment the VTR data for the clam dredge fishery. The commercial and recreational landings (in live weight) for the federally managed species were used only in sample size analysis.

A list of the 14 federally managed fish and invertebrate species groups analyzed, and the individual species comprising each species group, is given in Table 1. This analysis does not include sea turtles. Summaries of the data used, in terms of number of trips and number of sea days, by fleet, calendar quarter, and data source (NEFOP and VTR), are given in Tables 2 and 3, respectively.

## **Discard Estimation**

Total discards of each of the 14 federally managed species groups were estimated for the July 2010 through June 2011 time period using a combined discard/kept (d/k) ratio estimator (Cochran 1963), where  $d$  = discarded pounds of a given species group, and  $k$  = the kept pounds of all species. Total discards (in weight for fish) were derived by multiplying the estimated discard rate of each fleet by the corresponding fleet landings in the VTR database, and then summing over fleets.

Simple imputation methods were used to fill quarterly cells for which there were one or no observed trips. Data from adjoining strata were pooled to impute estimates for cells with zero or one trip. In this imputation only the temporal stratification, calendar quarter, was relaxed to half year (or annual) recognizing that seasonal variation can occur for some species. This simple imputation could not be applied to fleets where observer coverage was low or missing throughout the year (i.e., too few data to support the simple imputation approach). In these cases, imputed values were not used, and the fleet was designated as a fleet in need of pilot coverage. If some data were available, then discard estimates were derived, but these results were not used in sample size analyses.

The variances of the discard estimates were also derived. In this document, CV is defined as the ratio of the standard error of the total discards divided by the total discards. The appendix presents the equations used in the analysis.

For each species/species group and fleet, the landings from the VTR and clam logbook are presented to provide perspective for the discard estimates.

## **Discard Reasons**

For each species group and fleet, the fish dispositions associated with discarding (as reported by the at-sea observer) have been grouped into the following six discard reason categories: no market, regulation (size), regulation (quota), regulation (other), poor quality, and

other. The discard reason categories and the associated fish dispositions are summarized in Appendix Table 1. The discard reasons “No Market” and “Poor Quality” would be considered economic discards and not regulatory discards.

The observed (non-extrapolated) discards associated with each of the six discard reason categories were summed for each species group/species for the fleets where discards could be estimated. For individual fleets, the percentage of observed discards by discard reason category was derived by dividing the sum of the observed discards for each discard reason category by the sum of the total observed discards for each species group/species and fleet. The discard reason category percentages were taken from the observed discard reason category percentages. For the “Other fleets filtered out” (an aggregated fleet that represents fleets where the variance of the discard estimate was not used in the annual sample size analysis), the observed discard reason category percentages were then multiplied by the total estimated (extrapolated) discards for each species group/species and fleet to derive the estimated discards by discard reason category for each species group/species and fleet for each of the fleets associated with the aggregated fleet. For each “Other fleets filtered out,” the total estimated discards by discard reason category were summed over the fleets that comprise the fleet aggregation for each species group/species. The estimated discard reason category percentage was derived by dividing the estimated discards for each discard reason category by the sum of the total estimated discards for each species group/species and fleet.

## Sample Size Analysis

The sample size analysis (also referred to as sea day analysis) was conducted to estimate the number of baseline trips and sea days needed to monitor the 14 federally managed species groups in each fleet. As described in Wigley et al. 2007 (and given in the appendix), the number of trips and sea days needed to achieve a given precision level was based on the variance of the total discard estimate for a species group. Sample size (trips and sea days) associated with the precision standard for discard estimates (30% CV) were derived. The sample size analysis was performed using trips as the sampling unit, and then converting the number of trips to sea days by multiplying by the weighted mean trip length, where the weighting factor was the quarterly number of VTR trips. The percentage of trips was derived by dividing the number of trips needed by the number of VTR trips that occurred in the fleet.

When total discards could not be estimated due to little or no observer coverage (no data), or when total discards were zero (no variance), the sample size (number of trips) was determined using a pilot coverage level set to 2% of the quarterly VTR trips for a fleet, with a minimum of 3 trips per quarter (12 trips per year) and a maximum of 100 trips per quarter (400 trips per year). The 2% pilot coverage level<sup>8</sup> was the same as was used in SBRM analyses (Wigley et al. 2007; Wigley et al. 2011). The quarterly trips were then multiplied by the quarterly mean VTR trip length to derive quarterly sea days. The quarterly trips and quarterly sea days were then summed for annual number of trips and sea days. It is recognized that pilot coverage may result in too much coverage in cases where little or no observer coverage may actually be needed.

Some fleet/species combinations contribute very little to the total mortality or discard of the species, but may require significant resources to characterize the precision of the estimate.

---

<sup>8</sup> Pilot coverage is defined as a minimum level of observer coverage necessary to acquire bycatch information with which to calculate variance estimates that in turn can be used to further define the level of sampling needed (NMFS 2004).

For example, a high variance estimate for a rare event within a fleet would require high levels of sampling, even though the total discard in that fleet was unimportant with respect to either the total discard or total mortality on the resource. To address this, a modification of the filtering approach developed for SBRM was employed. Similar to the SBRM analyses (Wigley et al. 2007), importance filters were used to provide a standardized protocol to further refine the number of baseline sea days based on: (a) the importance of the discarded species relative to the total amount of discards by a fleet, and (b) the total fishing mortality due to the discards. In the SBRM analyses, the importance filter was comprised of three filters (i.e., unlikely cell filter, fraction of discard filter, and fraction of total mortality due to discards filter) that were applied simultaneously. However, based on an evaluation of the use of the unlikely filter over a three-year period, it was found that no substantive changes in the determination of sea days would have resulted had the unlikely filter been removed from the importance filter (Wigley et al. forthcoming 2012). Thus, in this analysis, all cells in the unlikely filter were set to 1 (all cells are likely).

The 2012 baseline sea days were filtered using a 95% cut-point in the discard filter, and a 98% cut-point for the total mortality filter due to discards. In other words, estimates of sea day coverage for a given species or species group were derived for those fleets where discards constituted 95% of the discard mortality and 98% of the total mortality.

To determine the number of sea days (referred to as the “2012 sea days needed”) and trips needed to achieve a 30% CV on the estimates of discards for each of the 14 species groups within a fleet, the maximum number of sea days for the 14 species groups (i.e., the maximum number of sea days in a row) was used. This ensures that all species groups will have a 30% CV or less. In the event that sea days for each species group within a fleet are filtered out, then the number of sea days for the fleet will be based on pilot coverage to maintain monitoring coverage for that fleet. If the fleet was designated as a pilot fleet, then pilot sea days were used. These fleets are indicated with a “P.” The fleets with sufficient data to estimate sample size are referred to as non-pilot fleets.

## RESULTS

There were 55 fleets identified during the July 2010 through June 2011 period (Tables 2 and 3). There were three new fleets compared to the 2011 sea day analysis (NEFSC 2011b, NEFSC and NERO 2011): MA large mesh Ruhle trawl (Row 13), NE small mesh Ruhle trawl (Row 14), and MA large mesh haddock separator trawl (Row 16). New fleets, those that have not been identified in previous analyses, have been identified with a plus (+).

Of the 55 fleets examined, 29 fleets had little or no observer data: 6 fleets had sparse observer data across all quarters, while 23 fleets were missing observer data in all quarterly cells. The fleets with no observer coverage were primarily pot and trap fisheries targeting particular species (e.g., lobster, crab, conch, shrimp, and hagfish). No discard estimation was performed for the 23 fleets with no observer coverage and they were designated as fleets in need of pilot coverage (Tables 2 and 3). The 6 fleets with sparse observer coverage were also designated as fleets in need of pilot coverage for the sample size analysis; however, discard estimation was performed using the sparse observer data. For the 26 remaining fleets (non-pilot fleets), estimates of discards and their associated variance were derived and used to determine the sample sizes needed for a 30% CV. Of the 26 fleets, there were 9 fleets (Rows 11, 15, 19, 22, 23, 24, 29, 31, and 35) where the simple imputation was applied.

Thus, for discard estimation and precision analysis, 23 fleets had no discard estimation and 32 fleets had discards estimated. For the sample size analysis, 26 fleets had sample sizes derived from the discard variances and 29 fleets had sample sizes based upon pilot coverage.

A total of 5,444 trips (14,174 days) was observed during July 2010 through July 2011. When these trips were stratified, some trips were partitioned between strata resulting in 5,558 trips (15,018 days; Tables 2 and 3) in the VTR. There appears to be minor misreporting of gear type associated with trips in the NE Ruhle trawl fleet (Row 15) and MA Mid-water trawl (Row 38; Tables 2 and 3; Quarter 3). For Ruhle trawl, the incidence of misreporting gear (bottom otter trawl versus Ruhle trawl) is less than in previous years.

The percentages of observed trips varied by fleet and calendar quarter. On an annual basis, the percentage of observed trips by fleet ranged between 0.1% (MA handline fleet, Row 3) to 72% (MA Mid-water trawl fleet, Row 38; Table 2). Over all fleets, the percentage of observed trips was 5.5%.

Annual VTR landings and estimated discards (live pounds) with associated precision are summarized for 53 fleets (Rows 1-19, 21-43, 45-55 and “Other fleets” with landings only) for each of the 14 species groups and the individual species that comprise those species groups (Tables 4A and 4B; Figures 1A and 1B). The landings associated with the “minor” fleets not uniquely identified in this analysis have been aggregated into a single fleet labeled “Other fleets.” Due to confidentiality rules, the landings associated with MA Floating Trap (Row 20) and MA Hagfish Pots and Traps (Row 44) have been combined with the landings of other minor fleets (labeled as “Other fleets”) that have not been not uniquely identified within this analysis. As a consequence, the fleet row numbers within Tables 4A and 4B are sequential but there are gaps in the row numbers. The landings associated with the various minor fleets aggregated into “Other fleets” generally contribute less than 0.5% of the total landings across all fleets for each of the 14 species groups (Table 4A). As mentioned above, there are 23 fleets (Rows 10, 13, 14, 20, 21, 25, 28, 40-55) that have no discard estimation due to no NEFOP coverage (dark shaded fleets in Tables 4A and 4B, with Rows 20 and 44 included in “Other fleets”). In Table 4A, the CVs associated with the cells (species group and fleet) that were not used in the sample size analysis (i.e. cells filtered out via the importance filter) are indicated in light shading. Precision of discards of individual species (Table 4B) were not used in the sample size analysis.

Based upon this analysis, over 71,000 mt (live wt) of discards of the 14 species groups occurred during the July 2010 through June 2011 period. The majority (77%) of the discards were comprised of three species groups: skates (49%), scallops (16%), and dogfish (12%); the remaining species groups comprised less than or equal to 5% (Table 4A).

The percentage of discards to total catch varied among the 14 species groups (Table 4A; Figure 1A) and individual species (Table 4B; Figure 1B). There was one species group (SAL) with zero discards (this species group is not presented in Figure 1A); two species groups (HERR and SCOQ) where discards were less than 1% total catch; three species groups (SCAL, SBM, and TILE) where percentages of discards ranged between 1% and 10% of total catch; three species groups (BLUE, FSB, and GFL) where discards ranged between 11% and 25% of total catch; and five species groups (MONK, RCRAB, SKATE, GFS, and DOG) where discards were greater than 26% of total catch. The species groups with the highest percentage of total discards relative to total catch were: skates (75%), dogfish (62%), and red crab (62%; Figure 1A). For individual species, most notable are the high percentages of discards to total catch of wolffish (99%) and ocean pout (99%) due to the no possession regulations for these two species.

The reasons for discarding varied among the 14 species groups (Appendix Table 2A) and individual species (Appendix Table 2B). Overall, for the 14 species groups, the majority (74%) of discards occurred due to “No Market,” “Regulation” (due to size, quota, and other), “Poor Quality,” and “Other” contributed 21%, 3%, and 1%, respectively (Appendix Table 2A).

The percentages of discard to total catch were also summarized by fleet for 26 fleets (Figure 2). Discards of one or more of the 14 species groups that were filtered out via the importance filter have been aggregated into a species group labeled “Other FMP.” Discards of non-federally managed species have been aggregated into a species group labeled “Non-FMP.” The percentages of discard to total catch varied by fleet (Figure 2). There was one fleet (Row 29) where discards were less than 1% of the total catch in the fleet; four fleets (Rows 4, 23, 38, and 39) where the percentages of discards ranged between 1% and 10%; 13 fleets (Rows 2, 7, 15, 19, 22, 24, 26, 27, 32, 33, 35, 36, and 37) where the percentages of discards ranged between 11% and 25% of total catch; five fleets (Rows 5, 8, 17, 31, and 34) where the percentages of discards ranged between 26% and 50% of the total catch; and three fleets where discards were greater than 50% of the total catch (Row 6, 11, and 16).

The number of species groups discarded within a fleet also varied among fleets. The majority of fleets (17 of the 26 fleets) were comprised of two or three discarded species groups. Eight of these fleets (Rows 2, 4, 15, 16, 31, 33, 35, and 38) had the “Other FMP” species group comprised the majority of the discards. This indicates that the majority of discards were filtered out via the importance filter. There were another five fleets (Rows 22, 29, 32, 34, and 39) where the “Non-FMP” species group comprised the majority of the discards. There was one fleet (Row 23) where discards were evenly split between with “Other FMP” and “Non-FMP” species groups. There were three fleets where two of the three discarded species groups were “Other FMP” and “Non-FMP” and the other was the dominant species group of skate, small mesh groundfish, and dogfish (Rows 11, 19, and 26 respectively).

The remaining fleets (9 of the 26 fleets) had between four and nine discarded species groups. The skate species group dominated the discards in five of these fleets (Rows 6, 8, 17, 24, and 27) while “Non-FMP” species group dominated the discards in two fleets (Rows 36 and 37). Two fleets (Rows 5 and 7) had a mix of discarded species groups.

The dominant “Non-FMP” species in the scallop dredge fleets (Rows 32, 33, 34, 35, and 36) were: sand dollar, sponge, and starfish. Menhaden and jellyfish were the dominant “Non-FMP” species in the MA small mesh gillnet fleet (Row 22). “Fish, not known” was the dominant species in the NE purse seine fleet (Row 29).

The precision of the discard estimates varied by species group and fleet (Tables 4A and 4B). Of the 14 species groups, 11 species groups had an overall CV that was less than 30%, two species groups (BLUE and SCOQ) had an overall CV that was greater than 30% CV, and one species group (SAL) had zero discards and consequently no CV. The discards of four species groups (BLUE, HERR, SCOQ, and TILE) were filtered out in all fleets indicating the discards of these species groups were a minor component of the total catch of these species (Table 4A; Figure 1A).

The numbers of sea days needed for each species group and fleet, as well of the number of sea days needed for the fleet (referred to as “2012 Sea Days Needed”), are summarized in Table 5. A total of 18,822 days are needed for all fleets. As mentioned previously, 29 fleets had insufficient observer information to estimate discards and the sea days for these fleets have sea days based on pilot coverage. The number of sea days needed associated with fleets with the pilot coverage designation was 1,638 days (9% of 18,822; Table 5). There are 10 fleets where the

sea days for all species groups were filtered out via the importance filter and pilot days was used to maintain some coverage (Rows 2, 4, 15, 16, 22, 23, 29, 31, 35, and 38; Table 5). The sea days needed associated with these fleets was 377 days (2% of 18,822; Table 5). The sea days needed for the remaining 16 fleets (16,807 days representing 89% of the total sea days needed) were derived using the variance of the discard estimate (Tables 5). Of the 16,807 days, 12,661 days (75%) were associated with three fleets (Rows 5, 6, and 8).

The sample size (in terms of number of sea days, number of trips, and percentage of trips based upon the VTR trips in July 2010 through June 2011) needed to achieve a 30% CV of the discard estimate in these 16 fleets is given in Table 6. The relationship between sample size and precision, over a range of sample sizes, is shown in Figure 3 for species groups and fleets. If the precision standard (30% CV) was relaxed for the red crab species group in three fleets (Rows 5, 6, and 8) and the penultimate (next largest) value was used in each of the three fleets, then the total number of sea days needed across all fleets would be 7,827 days (a 42% decrease from the 18,822 days). Using the penultimate value, the expected achieved precision of red crab discards in Rows 5, 6, and 8 would be 92% CV, 140% CV, and 72% CV respectively.

## DISCUSSION

A broad stratification was used to support the deployment of observers on commercial fishing trips among various fleets using attributes known prior to the trip departure. As discussed in previous discard estimation analyses (Wigley et al. 2011), species-specific stock assessment discard estimation may differ from this report due to differences in stratification and data used [calendar year versus 12-month (July to June) time period; area fished versus region (port of departure); and VTR landings versus Dealer landings]. Region, based on port of departure, was used for the deployment of observers. It is recognized that area fished would provide a better stratification for discard estimation. It is expected, however, that estimates would be in the same order of magnitude. The discard estimates presented here are not definitive estimates, but rather are indicative of where discarding occurred among the commercial fleets for the 14 federally managed species groups.

We have assumed 100% discard mortality, i.e. we do not account for potential survival of organisms returned to the water. When comparing discard estimates from this study with those from stock assessments, it is usefully to note that survival ratios are applied in stock assessments for spiny dogfish, summer flounder, southern New England and Gulf of Maine stocks of winter flounder, and southern New England yellowtail flounder.

These analyses have used VTR data. Dealer (*CFDERS*yyyy) data do not contain mesh or area fished information until the trip-based allocation is performed. The trip-based allocation of Dealer (*CFDETT*/SyyyyAA) data is conducted annually and was not available when this analysis was initiated. Given that the VTR landings estimates are usually less (VTR reports the good faith hauls) than the dealer records for a given fleet, the corresponding estimates of discards will also be underestimated. The magnitude of the underestimation will vary by fleet and year.

New fleets were added in response to VTR activity in the time period examined. The Ruhle Trawl (*negear* code 054) and Haddock Separator Trawl (*negear* code 057) were used by vessels departing from the MA region. These gear types are required in the US/Canada resource sharing area and their use is expected in both access and non-access areas to reduce discards of New England groundfish under sector management. Due to the low number of VTR trips reported for these fleets in the July 2010 through June 2011 period, the number of sea days



needed is lower than what may be realized. Additional outreach and education via permit holder letters to industry members have emphasized the proper use of these two gear codes.

There are several fleets with high sea day requirements (> 3,000 sea days). The Northeast Fisheries Observer Program data associated with the trips within these fleets were reviewed to rule out any data “irregularities.” The high coverage for New England and Mid-Atlantic otter trawl fleets (Rows 5, 6, and 8; Table 5) was due to high variability associated with red crab discards. In this analysis, as well as in the 2011 SBRM analysis (NEFSC 2011a; NEFSC 2011b; NEFSC and NERO 2011; Wigley et al. 2011), the high variability arises from observing some trips that are fishing in deep-water portions of statistical areas as well as observing other trips that are fishing in shallower portions of the same statistical areas. Red crabs were encountered during trips fishing in deep water. Although the discard reason reported for three fleets was “No Market” (Appendix Table 2A), these vessels do not generally have permits to land red crab, thus the red crabs must be discarded. Currently, the analysis does not stratify these fleets further to account for depth because statistical area is the finest spatial resolution that defines a subtrip within the Vessel Trip Report (a subtrip within the VTR is a unique gear, mesh, and statistical area). While depth is a data element in the VTR, depth is not always reported and there are few QA/QC checks on this data element.

Fish may be discarded for economic reasons (e.g., “No Market” or “Poor Quality”) or for regulatory reasons (size, quota, or other). When considering mechanisms to reduce discards, it may be useful to know why discarding is occurring. It is important to note that large discard percentages may be associated with a small quantity of discards. Additionally, it is important to note that for many species, the discards are associated with fleets that have been filtered out by the importance filter. Observers classify the discards by fish disposition based upon the NEFOP protocol (NEFOP 2010; NEFOP 2011) where the observer asks the captain/crew why species are being discarded. Thus, these data should be considered a form of self-reported data and as such these data are difficult to verify and should be interpreted cautiously.

This analysis does not address the coverage needed for individual sectors or multiple stock components of a species. The analytical basis for the allocation of future sea day coverage in this analysis is a specified level of precision (i.e., 30% CV) and an expectation that the pattern of fishing activity observed in the prior year will be similar to that in the upcoming year.

## **ACKNOWLEDGEMENTS**

We thank all the NEFOP observers for their diligent efforts to collect the data used in this report. We thank Jiachen Tang for her assistance with the figures. We thank our reviewers for their helpful comments on this report.

## REFERENCES CITED

Cochran WL. 1963. Sampling techniques. J. Wiley and Sons. New York.

National Marine Fisheries Service (NMFS). 2004. Evaluating bycatch: a national approach to standardized bycatch monitoring programs. U. S. Dep. Comm., NOAA Tech. Memo. NMFS-F/SPO-66, 108 p. On-line version,  
[http://www.nmfs.noaa.gov/by\\_catch/SPO\\_final\\_rev\\_12204.pdf](http://www.nmfs.noaa.gov/by_catch/SPO_final_rev_12204.pdf)

National Marine Fisheries Service (NMFS). 2008. Magnuson-Stevens Fishery Conservation and Management Act Provisions; Fisheries of the Northeastern United States; Northeast Region Standardized Bycatch Reporting Methodology Omnibus Amendment. Federal Register, Vol. 73, No. 18, Monday, January 28, 2008. p. 4736-4758. Available on-line at:  
<http://www.gpoaccess.gov/fr/retrieve.html>

National Marine Fisheries Service (NMFS). 2011. Fisheries of the northeastern United States; Removal of standardized bycatch reporting methodology regulations. Federal Register, Vol. 76, No. 250, Thursday, December 29, 2011. p. 81844 – 81850.  
<http://www.gpo.gov/fdsys/pkg/FR-2011-12-29/pdf/2011-33302.pdf>

New England Fishery Management Council (NEFMC), Mid-Atlantic Fishery Management Council and National Marine Fisheries Service. 2007. Northeast region standardized bycatch reporting methodology: An omnibus amendment to the fishery management plans of the New England and Mid-Atlantic Fishery Management Councils. June 2007. 642 p. Available on-line at:  
<http://www.nefmc.org/issues/sbrm/index.html>

Northeast Fisheries Science Center (NEFSC). 2011a. Standardized bycatch report methodology annual discard report 2011 (Section 1 and 2). Internal document presented to the NEFMC and MAFMC. 1135 p. Available on-line at:  
<http://www.nefsc.noaa.gov/fsb/SBRM/>

Northeast Fisheries Science Center (NEFSC). 2011b. Standardized bycatch report methodology sea day analysis and prioritization 2011. Internal document presented to the NEFMC and MAFMC on January 25, 2011. 25 p. Available on-line at:  
<http://www.nefsc.noaa.gov/fsb/SBRM/2011/2011-SBRM-Sea-Day-Analysis-Prioritization.pdf>

Northeast Fisheries Science Center (NEFSC) and Northeast Regional Office (NERO). 2011. Standardized bycatch reporting methodology proposed 2011 observer sea day allocation consultation and prioritization process response to comments. April 1, 2011. Internal document presented to the Northeast Regional Coordinating Committee. 16p. Available on-line at:  
[http://www.nefsc.noaa.gov/femad/fsb/SBRM/2011/2011\\_Re-Prioritization\\_and\\_Response\\_to\\_Comments\\_04012011.pdf](http://www.nefsc.noaa.gov/femad/fsb/SBRM/2011/2011_Re-Prioritization_and_Response_to_Comments_04012011.pdf)

- Northeast Fisheries Observer Program (NEFOP). 2010. Fisheries observer program manual 2010. Northeast Fisheries Science Center, Woods Hole, MA 02543. 442 p. Available on-line at:  
[http://www.nefsc.noaa.gov/fsb/manuals/2010/NEFOPM\\_010110\\_Bookmarks\\_Compressed.pdf](http://www.nefsc.noaa.gov/fsb/manuals/2010/NEFOPM_010110_Bookmarks_Compressed.pdf)
- Northeast Fisheries Observer Program (NEFOP). 2011. At-sea monitoring program manual. Northeast Fisheries Science Center, Woods Hole, MA 02543. 502 p. Available on-line at:  
[http://www.nefsc.noaa.gov/fsb/manuals/2011/ASM\\_program\\_manual\\_0611.pdf](http://www.nefsc.noaa.gov/fsb/manuals/2011/ASM_program_manual_0611.pdf)
- Wigley SE, Blaylock J, Rago PJ, Murray KT, Nies TA, Seagraves RJ, Potts D, Drew K. Forthcoming 2012. Standardized bycatch reporting methodology 3-year review report 2011- part 2. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 238 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026 or online at <http://nefsc.noaa.gov/publications/>.
- Wigley SE, Blaylock J, Rago PJ, Tang J, Haas HL, Shield G. 2011. Standardized bycatch reporting methodology 3-year review report 2011- part 1. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 11-09; 285 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <http://www.nefsc.noaa.gov/publications/crd/crd1109/>
- Wigley SE, Rago PJ, Sosebee KA, Palka DL. 2007. The analytic component to the standardized bycatch reporting methodology omnibus amendment: sampling design and estimation of precision and accuracy (2nd edition). U.S. Dep. Commer., Northeast Fish. Sci. Cent. Ref. Doc. 07-09; 156 p. Available on-line:  
<http://www.nefsc.noaa.gov/publications/crd/crd0709/index.htm>

**Table 1. List of the 14 fish and invertebrate species groups (in bold), with species group abbreviations in parentheses, and the species comprising these groups, corresponding to the 13 federal fishery management plans in the Northeast region.**

<b>ATLANTIC SALMON (SAL)</b>
<b>BLUEFISH (BLUE)</b>
<b>FLUKE - SCUP - BLACK SEA BASS (FSB)</b>
Black Sea Bass
Fluke
Scup
<b>HERRING, ATLANTIC (HERR)</b>
<b>LARGE MESH GROUND FISH (GFL)</b>
American Plaice
Atlantic Cod
Atlantic Halibut
Atlantic Wolffish
Haddock
Ocean Pout
Pollock
Redfish
White Hake
Windowpane Flounder
Winter Flounder
Witch Flounder
Yellowtail Flounder
<b>MONKFISH (MONK)</b>
<b>RED CRAB (RCRAB)</b>
<b>SEA SCALLOP (SCAL)</b>
<b>SKATE COMPLEX (SKATE)</b>
Barndoor Skate
Cleannose Skate
Little Skate
Rosette Skate
Smooth Skate
Thorny Skate
Winter Skate
<b>SMALL MESH GROUND FISH (GFS)</b>
Offshore Hake
Red Hake
Silver Hake
<b>SPINY DOGFISH (DOG)</b>
<b>SQUID - BUTTERFISH - MACKEREL (SBM)</b>
Atlantic Mackerel
Butterfish
Illex Squid
Loligo Squid
<b>SURFCLAM - OCEAN QUAHOG (SCOQ)</b>
Surfclam
Ocean Quahog
<b>TILEFISH (TILE)</b>

**Table 2. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) from July 2010 through June 2011. “P” indicates fleets with “pilot” designation.**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	NEFOP					VTR					Pilot
						Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	
1	Longline	OPEN	all	MA	all	.	.	.	1	1	50	32	43	37	162	P
2	Longline	OPEN	all	NE	all	83	29	46	30	188	429	86	166	186	867	
3	Hand Line	OPEN	all	MA	all	.	1	.	1	2	1,885	786	123	963	3,757	P
4	Hand Line	OPEN	all	NE	all	46	10	24	7	87	1,763	241	57	491	2,552	
5	Otter Trawl	OPEN	all	MA	sm	56	48	53	57	214	1,156	799	582	831	3,368	
6	Otter Trawl	OPEN	all	MA	lg	63	24	41	28	156	1,799	1,335	1,234	1,901	6,269	
7	Otter Trawl	OPEN	all	NE	sm	86	72	40	60	258	1,208	825	544	1,063	3,640	
8	Otter Trawl	OPEN	all	NE	lg	341	319	402	376	1,438	2,217	1,560	1,559	1,962	7,298	
9	Scallop Trawl	AA	GEN	MA	all	6	1	.	1	8	53	.	2	13	68	P
10	Scallop Trawl	AA	LIM	MA	all	.	.	.	.	.	1	2	4	1	8	P
11	Scallop Trawl	OPEN	GEN	MA	all	10	3	2	.	15	94	32	35	213	374	
12	Scallop Trawl	OPEN	LIM	MA	all	.	.	1	.	1	4	6	11	2	23	P
13 +	Otter Trawl, Ruhle	OPEN	all	MA	lg	.	.	.	.	.	.	2	1	4	7	P
14 +	Otter Trawl, Ruhle	OPEN	all	NE	sm	.	.	.	.	.	.	1	.	3	4	P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	7	.	1	6	14	4	.	1	44	49	
16 +	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	.	.	3	3	6	.	.	4	6	10	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	31	26	14	50	121	61	77	35	84	257	
18	Shrimp Trawl	OPEN	all	MA	all	1	.	.	.	1	251	122	5	10	388	P
19	Shrimp Trawl	OPEN	all	NE	all	.	4	1	.	5	158	559	2,307	41	3,065	
20	Floating Trap	OPEN	all	MA	all	.	.	.	.	.	25	.	.	38	63	P
21	Floating Trap	OPEN	all	NE	all	.	.	.	.	.	40	.	.	35	75	P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	4	4	7	.	15	615	359	543	301	1,818	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	3	26	14	.	43	455	644	521	372	1,992	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	.	49	28	27	104	109	606	580	1,132	2,427	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	.	.	.	.	.	13	2	1	2	18	P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	655	384	250	269	1,558	2,579	1,075	706	1,293	5,653	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	372	206	52	145	775	1,113	718	275	1,119	3,225	
28	Purse Seine	OPEN	all	MA	all	.	.	.	.	.	160	5	1	82	248	P
29	Purse Seine	OPEN	all	NE	all	13	1	.	5	19	166	41	.	35	242	
30	Scallop Dredge	AA	GEN	MA	all	6	.	.	.	6	14	17	10	3	44	P
31	Scallop Dredge	AA	GEN	NE	all	18	7	1	.	26	62	13	2	.	77	
32	Scallop Dredge	AA	LIM	MA	all	20	7	12	18	57	116	43	60	44	263	
33	Scallop Dredge	AA	LIM	NE	all	34	13	8	8	63	86	27	23	25	161	
34	Scallop Dredge	OPEN	GEN	MA	all	12	5	11	15	43	945	657	732	1,094	3,428	
35	Scallop Dredge	OPEN	GEN	NE	all	6	4	.	18	28	617	520	1,026	994	3,157	
36	Scallop Dredge	OPEN	LIM	MA	all	17	11	6	27	61	357	208	259	468	1,292	
37	Scallop Dredge	OPEN	LIM	NE	all	18	14	8	40	80	495	245	201	394	1,335	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	1	.	4	.	5	.	.	7	.	7	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	65	42	27	26	160	96	122	51	59	328	
40	Pots and Traps, Fish	OPEN	all	MA	all	.	.	.	.	.	350	342	33	346	1,071	P
41	Pots and Traps, Fish	OPEN	all	NE	all	.	.	.	.	.	423	71	.	124	618	P
42	Pots and Traps, Conch	OPEN	all	MA	all	.	.	.	.	.	195	569	14	418	1,196	P
43	Pots and Traps, Conch	OPEN	all	NE	all	.	.	.	.	.	351	222	4	261	838	P
44	Pots and Traps, Hagfish	OPEN	all	MA	all	.	.	.	.	.	.	.	.	3	3	P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	.	.	.	.	.	43	6	8	18	75	P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	.	.	.	.	.	3	.	151	.	154	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	.	.	.	.	.	1,196	539	196	569	2,500	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	.	.	.	.	.	14,215	9,340	1,968	4,369	29,892	P
49	Pots and Traps, Crab	OPEN	all	MA	all	.	.	.	.	.	8	32	15	28	83	P
50	Pots and Traps, Crab	OPEN	all	NE	all	.	.	.	.	.	120	63	5	41	229	P
51	Beam Trawl	OPEN	all	MA	all	.	.	.	.	.	31	27	34	71	163	P
52	Beam Trawl	OPEN	all	NE	all	.	.	.	.	.	87	1	29	10	127	P
53	Dredge, Other	OPEN	all	MA	all	.	.	.	.	.	2	97	199	8	306	P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	.	.	.	.	.	785	641	258	213	1,897	P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	.	.	.	.	.	736	535	101	83	1,455	P
Total						1,974	1,310	1,056	1,218	5,558	37,741	24,252	14,726	21,907	98,626	

P= pilot coverage; + = new fleet in 2012; see text for fleet abbreviations.

**Table 3. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) sea days, by fleet and calendar quarter (Q) from July 2010 through June 2011. “P” indicates fleets with “pilot” designation.**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	NEFOP					VTR					Pilot
						Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	
1	Longline	OPEN	all	MA	all	.	.	.	1	1	235	198	208	244	885	P
2	Longline	OPEN	all	NE	all	105	60	56	46	267	497	143	202	271	1,113	
3	Hand Line	OPEN	all	MA	all	.	5	.	1	6	2,076	804	139	978	3,997	P
4	Hand Line	OPEN	all	NE	all	49	12	24	16	101	1,971	350	99	512	2,932	
5	Otter Trawl	OPEN	all	MA	sm	128	159	320	190	797	2,330	1,723	2,274	1,667	7,994	
6	Otter Trawl	OPEN	all	MA	lg	93	92	175	60	420	2,755	2,785	4,594	3,187	13,321	
7	Otter Trawl	OPEN	all	NE	sm	259	200	232	121	812	2,668	2,059	1,831	1,863	8,421	
8	Otter Trawl	OPEN	all	NE	lg	1,025	1,036	1,313	1,447	4,821	4,942	4,742	5,306	5,769	20,759	
9	Scallop Trawl	AA	GEN	MA	all	12	2	.	3	17	101	.	6	26	133	P
10	Scallop Trawl	AA	LIM	MA	all	.	.	.	.	.	7	18	35	8	68	P
11	Scallop Trawl	OPEN	GEN	MA	all	18	3	4	.	25	175	62	65	378	680	
12	Scallop Trawl	OPEN	LIM	MA	all	.	.	6	.	6	35	102	90	41	268	P
13 +	Otter Trawl, Ruhle	OPEN	all	MA	lg	.	.	.	.	.	.	2	1	4	7	P
14 +	Otter Trawl, Ruhle	OPEN	all	NE	sm	.	.	.	.	.	.	1	.	24	25	P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	54	.	5	51	110	26	.	5	358	389	
16 +	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	.	.	3	3	6	.	.	6	6	12	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	243	225	127	366	961	487	635	315	688	2,125	
18	Shrimp Trawl	OPEN	all	MA	all	5	.	.	.	5	1,333	836	87	105	2,361	P
19	Shrimp Trawl	OPEN	all	NE	all	.	4	1	.	5	160	574	2,332	52	3,118	
20	Floating Trap	OPEN	all	MA	all	.	.	.	.	.	25	.	.	38	63	P
21	Floating Trap	OPEN	all	NE	all	.	.	.	.	.	40	.	.	35	75	P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	4	4	7	.	15	685	373	548	374	1,980	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	3	27	14	.	44	492	678	566	430	2,166	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	.	59	47	37	143	114	781	822	1,287	3,004	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	.	.	.	.	.	13	2	10	3	28	P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	804	478	325	354	1,961	2,921	1,346	870	1,568	6,705	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	453	232	111	245	1,041	1,326	842	670	1,877	4,715	
28	Purse Seine	OPEN	all	MA	all	.	.	.	.	.	164	5	2	82	253	P
29	Purse Seine	OPEN	all	NE	all	31	2	.	15	48	395	101	.	85	581	
30	Scallop Dredge	AA	GEN	MA	all	11	.	.	.	11	32	42	27	9	110	P
31	Scallop Dredge	AA	GEN	NE	all	31	18	3	.	52	95	16	4	.	115	
32	Scallop Dredge	AA	LIM	MA	all	174	58	78	152	462	1,087	340	477	392	2,296	
33	Scallop Dredge	AA	LIM	NE	all	311	131	78	89	609	741	264	246	279	1,530	
34	Scallop Dredge	OPEN	GEN	MA	all	17	7	17	18	59	1,299	944	1,052	1,432	4,727	
35	Scallop Dredge	OPEN	GEN	NE	all	7	6	.	22	35	935	812	1,299	1,291	4,337	
36	Scallop Dredge	OPEN	LIM	MA	all	145	95	59	303	602	3,279	1,794	2,198	4,635	11,906	
37	Scallop Dredge	OPEN	LIM	NE	all	203	132	87	489	911	4,880	2,494	2,023	4,461	13,858	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	5	.	16	.	21	.	.	40	.	40	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	292	157	91	104	644	366	405	170	229	1,170	
40	Pots and Traps, Fish	OPEN	all	MA	all	.	.	.	.	.	362	356	39	363	1,120	P
41	Pots and Traps, Fish	OPEN	all	NE	all	.	.	.	.	.	423	71	.	125	619	P
42	Pots and Traps, Conch	OPEN	all	MA	all	.	.	.	.	.	196	570	15	419	1,200	P
43	Pots and Traps, Conch	OPEN	all	NE	all	.	.	.	.	.	351	230	12	261	854	P
44	Pots and Traps, Hagfish	OPEN	all	MA	all	.	.	.	.	.	.	.	.	3	3	P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	.	.	.	.	.	165	57	43	104	369	P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	.	.	.	.	.	3	.	151	.	154	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	.	.	.	.	.	1,476	734	300	732	3,242	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	.	.	.	.	.	16,554	11,350	3,508	6,044	37,456	P
49	Pots and Traps, Crab	OPEN	all	MA	all	.	.	.	.	.	8	32	15	28	83	P
50	Pots and Traps, Crab	OPEN	all	NE	all	.	.	.	.	.	212	190	68	160	630	P
51	Beam Trawl	OPEN	all	MA	all	.	.	.	.	.	82	84	97	128	391	P
52	Beam Trawl	OPEN	all	NE	all	.	.	.	.	.	94	1	29	21	145	P
53	Dredge, Other	OPEN	all	MA	all	.	.	.	.	.	19	115	199	14	347	P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	.	.	.	.	.	1,176	1,092	557	546	3,371	P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	.	.	.	.	.	776	642	166	132	1,717	P
Total						4,482	3,204	3,199	4,133	15,018	60,584	41,797	33,818	43,768	179,968	

**Table 4A. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: ATLANTIC SALMON***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	0	0	0		
6	Otter Trawl	OPEN	all	MA	lg	0	0	0		
7	Otter Trawl	OPEN	all	NE	sm	0	0	0		
8	Otter Trawl	OPEN	all	NE	lg	0	0	0		
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0		
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0		
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	0	0	0		
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: ATLANTIC SALMON***

33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0		
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0		
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						0	0	0		



**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: BLUEFISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	53	53	0		P
2	Longline	OPEN	all	NE	all	2,084	2,034	50	0.897	
3	Hand Line	OPEN	all	MA	all	89,237	89,237	0		P
4	Hand Line	OPEN	all	NE	all	80,664	76,855	3,809	0.454	
5	Otter Trawl	OPEN	all	MA	sm	228,440	202,337	26,103	0.556	
6	Otter Trawl	OPEN	all	MA	lg	135,441	126,463	8,978	0.471	
7	Otter Trawl	OPEN	all	NE	sm	262,663	160,908	101,755	1.228	
8	Otter Trawl	OPEN	all	NE	lg	97,532	62,771	34,761	0.622	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	500	500			P
11	Scallop Trawl	OPEN	GEN	MA	all	145	145	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	70	70	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,330	445	3,885	0.735	
18	Shrimp Trawl	OPEN	all	MA	all	162	162	0		P
19	Shrimp Trawl	OPEN	all	NE	all	640	640	0		
21	Floating Trap	OPEN	all	NE	all	3,421	3,421			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	748,869	714,437	34,432	0.603	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,320,752	1,201,723	119,029	0.682	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	22,892	15,593	7,299	0.306	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	525	525			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	132,813	128,424	4,389	0.145	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	51,800	21,596	30,204	0.232	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	4	0	4	0.939	
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	18	18	0		

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species Group: BLUEFISH**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	353	0	353	0.786	
37	Scallop Dredge	OPEN	LIM	NE	all	76	0	76	1.038	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	244	0	244	0.356	
40	Pots and Traps, Fish	OPEN	all	MA	all	1,470	1,470			P
41	Pots and Traps, Fish	OPEN	all	NE	all	44	44			P
42	Pots and Traps, Conch	OPEN	all	MA	all	42	42			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	17	17			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	72	72			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	9,633	9,633			P
52	Beam Trawl	OPEN	all	NE	all	39	39			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						26,585	26,585			
TOTAL						3,221,630	2,846,259	375,371	0.408	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: FLUKE - SCUP - BLACK SEA BASS***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	9,586	9,586	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	274,188	274,188	0		P
4	Hand Line	OPEN	all	NE	all	40,891	40,891	0		
5	Otter Trawl	OPEN	all	MA	sm	4,870,770	3,781,875	1,088,895	0.302	
6	Otter Trawl	OPEN	all	MA	lg	14,143,686	13,102,065	1,041,621	0.216	
7	Otter Trawl	OPEN	all	NE	sm	3,292,244	2,460,146	832,098	0.270	
8	Otter Trawl	OPEN	all	NE	lg	4,084,969	3,459,194	625,775	0.122	
9	Scallop Trawl	AA	GEN	MA	all	2,165	1,000	1,165	0.338	P
10	Scallop Trawl	AA	LIM	MA	all	19,583	19,583			P
11	Scallop Trawl	OPEN	GEN	MA	all	78,058	54,333	23,725	0.522	
12	Scallop Trawl	OPEN	LIM	MA	all	47,525	46,221	1,304	0.000	P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	1,865	1,865			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	1	1			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	669	318	351	0.470	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	445	429	16	0.537	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	17,572	730	16,842	0.302	
18	Shrimp Trawl	OPEN	all	MA	all	2,455	2,455	0		P
19	Shrimp Trawl	OPEN	all	NE	all	10,125	9,735	390	0.185	
21	Floating Trap	OPEN	all	NE	all	147,815	147,815			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	2,765	1,998	767	0.581	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	16,931	16,247	684	0.729	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	36,104	25,767	10,337	0.345	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	625	625			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	70,406	68,041	2,365	0.364	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	137,799	37,792	100,007	0.140	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	334	334	0		P
31	Scallop Dredge	AA	GEN	NE	all	69	0	69	0.396	
32	Scallop Dredge	AA	LIM	MA	all	104,493	8,667	95,826	0.226	
33	Scallop Dredge	AA	LIM	NE	all	93,086	0	93,086	0.158	
34	Scallop Dredge	OPEN	GEN	MA	all	124,425	30,294	94,131	0.748	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species Group: *FLUKE - SCUP - BLACK SEA BASS***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	14,303	0	14,303	0.635	
36	Scallop Dredge	OPEN	LIM	MA	all	531,347	29,161	502,186	0.193	
37	Scallop Dredge	OPEN	LIM	NE	all	838,985	185	838,800	0.255	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	7,478	0	7,478	1.103	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	16	0	16	0.461	
40	Pots and Traps, Fish	OPEN	all	MA	all	372,068	372,068			P
41	Pots and Traps, Fish	OPEN	all	NE	all	311,361	311,361			P
42	Pots and Traps, Conch	OPEN	all	MA	all	183	183			P
43	Pots and Traps, Conch	OPEN	all	NE	all	330	330			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	791	791			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	34,590	34,590			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	15,642	15,642			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	838	838			P
51	Beam Trawl	OPEN	all	MA	all	46,258	46,258			P
52	Beam Trawl	OPEN	all	NE	all	25,112	25,112			P
53	Dredge, Other	OPEN	all	MA	all	90	90			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	271	271			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						55,889	55,889			
TOTAL						29,887,199	24,494,964	5,392,235	0.097	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: HERRING, ATLANTIC***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	28	28	0		
3	Hand Line	OPEN	all	MA	all	58	58	0		P
4	Hand Line	OPEN	all	NE	all	49	49	0		
5	Otter Trawl	OPEN	all	MA	sm	587,539	525,168	62,371	0.444	
6	Otter Trawl	OPEN	all	MA	lg	11,928	4,652	7,276	1.212	
7	Otter Trawl	OPEN	all	NE	sm	10,047,331	9,890,924	156,407	0.337	
8	Otter Trawl	OPEN	all	NE	lg	22,662	3,415	19,247	0.213	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	33	0	33	1.890	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	400	400			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	559	0	559	0.756	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	2	0	2	0.787	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,129	0	1,129	0.209	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	641,550	614,020	27,530	0.988	
21	Floating Trap	OPEN	all	NE	all	412	412			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	5,170	5,170	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	192	192	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	76	76	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	380	380			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	4,954	373	4,581	0.305	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	612	300	312	0.255	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	21,542,761	21,514,860	27,901	1.094	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	8	8	0		

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species Group: HERRING, ATLANTIC**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	99	0	99	0.742	
37	Scallop Dredge	OPEN	LIM	NE	all	35	0	35	0.780	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	2,004,114	2,004,000	114	0.574	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	117,086,289	117,006,373	79,916	0.513	
40	Pots and Traps, Fish	OPEN	all	MA	all	1,800	1,800			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	1,495,914	1,495,914			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	630	630			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						138	138			
TOTAL						153,456,851	153,069,340	387,511	0.216	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: LARGE MESH GROUND FISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	208,634	11,623	197,011	0.000	P
2	Longline	OPEN	all	NE	all	1,013,974	946,295	67,679	0.132	
3	Hand Line	OPEN	all	MA	all	29,384	8,150	21,234	0.000	P
4	Hand Line	OPEN	all	NE	all	135,293	124,430	10,863	0.291	
5	Otter Trawl	OPEN	all	MA	sm	837,968	13,925	824,043	0.297	
6	Otter Trawl	OPEN	all	MA	lg	937,267	157,731	779,536	0.195	
7	Otter Trawl	OPEN	all	NE	sm	518,757	118,357	400,400	0.261	
8	Otter Trawl	OPEN	all	NE	lg	42,091,761	39,877,275	2,214,486	0.036	
9	Scallop Trawl	AA	GEN	MA	all	48	0	48	0.394	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	69,719	0	69,719	0.646	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	160	160			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	1,066,369	1,059,622	6,747	0.588	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	14,119	10,496	3,623	0.135	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	6,361,835	6,207,219	154,616	0.118	
18	Shrimp Trawl	OPEN	all	MA	all	795,226	268	794,958	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	207,183	295	206,888	0.470	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	3,373	1,445	1,928	1.969	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	822	367	455	0.490	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	4,473	3,953	520	0.326	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	2,931	2,931			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,684,208	7,376,489	307,719	0.072	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	655,801	605,427	50,374	0.181	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	61	0	61	0.247	P
31	Scallop Dredge	AA	GEN	NE	all	609	0	609	0.252	
32	Scallop Dredge	AA	LIM	MA	all	18,300	363	17,937	0.277	
33	Scallop Dredge	AA	LIM	NE	all	29,323	892	28,431	0.185	
34	Scallop Dredge	OPEN	GEN	MA	all	43,405	20	43,385	0.370	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: LARGE MESH GROUND FISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	71,354	23	71,331	0.539	
36	Scallop Dredge	OPEN	LIM	MA	all	216,570	852	215,718	0.198	
37	Scallop Dredge	OPEN	LIM	NE	all	847,387	5,401	841,986	0.104	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	1	0	1	0.857	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	61,217	55,987	5,230	0.227	
40	Pots and Traps, Fish	OPEN	all	MA	all	4,203	4,203			P
41	Pots and Traps, Fish	OPEN	all	NE	all	252	252			P
42	Pots and Traps, Conch	OPEN	all	MA	all	3,150	3,150			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	656	656			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,807	1,807			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	4,106	4,106			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						7,543	7,543			
TOTAL						63,949,248	56,611,713	7,337,535	0.048	



**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: MONKFISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	949	943	7	0.888	
3	Hand Line	OPEN	all	MA	all	3,463	3,463	0		P
4	Hand Line	OPEN	all	NE	all	25	25	0		
5	Otter Trawl	OPEN	all	MA	sm	262,396	96,970	165,426	0.281	
6	Otter Trawl	OPEN	all	MA	lg	447,227	246,200	201,027	0.210	
7	Otter Trawl	OPEN	all	NE	sm	145,738	108,535	37,203	0.287	
8	Otter Trawl	OPEN	all	NE	lg	5,345,394	4,711,328	634,066	0.101	
9	Scallop Trawl	AA	GEN	MA	all	1,285	157	1,128	0.250	P
10	Scallop Trawl	AA	LIM	MA	all	1,013	1,013			P
11	Scallop Trawl	OPEN	GEN	MA	all	4,589	676	3,914	0.413	
12	Scallop Trawl	OPEN	LIM	MA	all	506	506	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	27	27			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	25	25			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	652	469	183	0.266	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	66	66	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	46,196	41,879	4,317	0.168	
18	Shrimp Trawl	OPEN	all	MA	all	115,273	269	115,004	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	182	125	57	1.053	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	4,067	4,067	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	19,042	19,042	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	3,168,068	2,968,306	199,762	0.203	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	4,476	4,476			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	190,281	180,952	9,330	0.071	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	3,877,307	3,593,705	283,601	0.094	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	2,300	493	1,807	0.203	P
31	Scallop Dredge	AA	GEN	NE	all	1,017	0	1,017	0.219	
32	Scallop Dredge	AA	LIM	MA	all	209,599	21,401	188,197	0.216	
33	Scallop Dredge	AA	LIM	NE	all	196,868	18,319	178,549	0.144	
34	Scallop Dredge	OPEN	GEN	MA	all	90,424	47,983	42,442	0.348	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species Group: MONKFISH**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	29,471	8,186	21,285	0.544	
36	Scallop Dredge	OPEN	LIM	MA	all	1,865,862	168,313	1,697,549	0.221	
37	Scallop Dredge	OPEN	LIM	NE	all	1,919,990	312,774	1,607,216	0.155	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	272	0	272	0.282	
40	Pots and Traps, Fish	OPEN	all	MA	all	564	564			P
41	Pots and Traps, Fish	OPEN	all	NE	all	17	17			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	227	227			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	110	110			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	2,079	2,079			P
52	Beam Trawl	OPEN	all	NE	all	10	10			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	20,605	20,605			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	3,195	3,195			P
Other fleets						330	330			
TOTAL						17,981,186	12,587,830	5,393,356	0.086	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species Group: RED CRAB**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	335,300	0	335,300	0.971	
6	Otter Trawl	OPEN	all	MA	lg	222,747	0	222,747	1.405	
7	Otter Trawl	OPEN	all	NE	sm	750	0	750	1.291	
8	Otter Trawl	OPEN	all	NE	lg	318,214	0	318,214	0.291	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	53	0	53	0.323	
18	Shrimp Trawl	OPEN	all	MA	all	2,584,938	0	2,584,938	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	370	0	370	0.202	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	81	0	81	0.298	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: RED CRAB***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0		
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0		
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	1,400	1,400			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	2,285	2,285			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	2,138,429	2,138,429			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						5,604,567	2,142,114	3,462,453	0.133	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SEA SCALLOP***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	463	0	463	0.792	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	636,337	103,750	532,587	0.512	
6	Otter Trawl	OPEN	all	MA	lg	2,644,970	2,352,490	292,480	0.626	
7	Otter Trawl	OPEN	all	NE	sm	38,121	13,336	24,785	0.583	
8	Otter Trawl	OPEN	all	NE	lg	89,331	44,516	44,816	0.185	
9	Scallop Trawl	AA	GEN	MA	all	234,372	228,875	5,497	0.397	P
10	Scallop Trawl	AA	LIM	MA	all	232,574	232,574			P
11	Scallop Trawl	OPEN	GEN	MA	all	1,143,528	986,233	157,295	0.416	
12	Scallop Trawl	OPEN	LIM	MA	all	81,226	30,946	50,280	0.000	P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	25	25			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	20	0	20	0.916	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	7	0	7	0.512	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	5,078	392	4,686	0.280	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	106	0	106	0.674	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	489	8	480	0.638	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	149,940	149,940			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1,732	0	1,732	0.754	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	1,235	0	1,235	0.700	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	476,763	466,205	10,558	0.260	P
31	Scallop Dredge	AA	GEN	NE	all	365,090	256,445	108,645	0.185	
32	Scallop Dredge	AA	LIM	MA	all	24,051,111	23,381,156	669,956	0.244	
33	Scallop Dredge	AA	LIM	NE	all	22,503,246	20,841,843	1,661,403	0.182	
34	Scallop Dredge	OPEN	GEN	MA	all	13,619,011	12,333,798	1,285,213	0.507	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.**

***Species Group: SEA SCALLOP***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	9,997,595	9,592,338	405,257	0.289	
36	Scallop Dredge	OPEN	LIM	MA	all	167,812,239	164,954,002	2,858,237	0.225	
37	Scallop Dredge	OPEN	LIM	NE	all	249,854,484	232,526,675	17,327,809	0.231	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	8	8			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	48,037	48,037			P
52	Beam Trawl	OPEN	all	NE	all	15,785	15,785			P
53	Dredge, Other	OPEN	all	MA	all	360,689	360,689			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	1,034,378	1,034,378			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	538,518	538,518			P
Other fleets						1,101,543	1,101,543			
TOTAL						497,038,051	471,594,505	25,443,546	0.162	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SKATE COMPLEX***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	11,879	370	11,509	0.000	P
2	Longline	OPEN	all	NE	all	239,609	10,756	228,853	0.219	
3	Hand Line	OPEN	all	MA	all	8,580	8,580	0		P
4	Hand Line	OPEN	all	NE	all	249	174	75	0.870	
5	Otter Trawl	OPEN	all	MA	sm	4,596,262	229,350	4,366,912	0.263	
6	Otter Trawl	OPEN	all	MA	lg	13,112,884	2,065,203	11,047,681	0.170	
7	Otter Trawl	OPEN	all	NE	sm	1,855,210	269,428	1,585,782	0.282	
8	Otter Trawl	OPEN	all	NE	lg	39,215,287	10,675,996	28,539,292	0.069	
9	Scallop Trawl	AA	GEN	MA	all	2,852	0	2,852	0.330	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	1,209,464	18,955	1,190,509	0.366	
12	Scallop Trawl	OPEN	LIM	MA	all	208,815	0	208,815	0.000	P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	2,817	2,817			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	166,986	9,678	157,308	0.887	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	34,936	4,230	30,705	0.258	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,487,743	114,393	2,373,349	0.121	
18	Shrimp Trawl	OPEN	all	MA	all	57,369	0	57,369	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	851	0	851	0.951	
21	Floating Trap	OPEN	all	NE	all	45	45			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	23,818	23,818	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	104,970	96,077	8,893	0.532	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	4,099,717	2,999,305	1,100,411	0.221	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	8,301	8,301			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	796,287	568,411	227,875	0.087	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	10,763,896	8,028,634	2,735,262	0.089	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	1,273	0	1,273	0.266	P
31	Scallop Dredge	AA	GEN	NE	all	5,563	0	5,563	0.118	
32	Scallop Dredge	AA	LIM	MA	all	780,526	0	780,526	0.181	
33	Scallop Dredge	AA	LIM	NE	all	691,550	0	691,550	0.131	
34	Scallop Dredge	OPEN	GEN	MA	all	871,979	13,814	858,165	0.276	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SKATE COMPLEX***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	837,889	15	837,874	0.312	
36	Scallop Dredge	OPEN	LIM	MA	all	7,701,133	0	7,701,133	0.159	
37	Scallop Dredge	OPEN	LIM	NE	all	11,746,489	0	11,746,489	0.130	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	766	0	766	0.239	
40	Pots and Traps, Fish	OPEN	all	MA	all	16	16			P
41	Pots and Traps, Fish	OPEN	all	NE	all	5,559	5,559			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	29,308	29,308			P
52	Beam Trawl	OPEN	all	NE	all	57	57			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	105	105			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						1,000	1,000			
TOTAL						101,682,039	25,184,395	76,497,644	0.048	



**Table 4A continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SMALL MESH GROUND FISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	24	24	0		P
2	Longline	OPEN	all	NE	all	9,759	118	9,641	0.141	
3	Hand Line	OPEN	all	MA	all	2,490	2,490	0		P
4	Hand Line	OPEN	all	NE	all	65	65	0		
5	Otter Trawl	OPEN	all	MA	sm	7,744,537	5,828,237	1,916,300	0.311	
6	Otter Trawl	OPEN	all	MA	lg	467,565	252,777	214,788	1.050	
7	Otter Trawl	OPEN	all	NE	sm	13,833,698	10,680,062	3,153,636	0.258	
8	Otter Trawl	OPEN	all	NE	lg	515,781	288,349	227,432	0.071	
9	Scallop Trawl	AA	GEN	MA	all	19	0	19	0.679	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	15,244	4	15,240	0.738	
12	Scallop Trawl	OPEN	LIM	MA	all	186	0	186	0.000	P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	300	300			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	976	230	746	0.505	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	1	0	1	0.430	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	9,886	2	9,884	0.167	
18	Shrimp Trawl	OPEN	all	MA	all	968,524	0	968,524	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	977,113	27,890	949,223	0.463	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	599	599	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	5	5	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	17	14	3	0.851	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	18,214	8,099	10,115	0.075	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	2,061	1,060	1,001	0.210	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	34	0	34	0.259	P
31	Scallop Dredge	AA	GEN	NE	all	35	0	35	0.352	
32	Scallop Dredge	AA	LIM	MA	all	17,796	0	17,796	0.614	
33	Scallop Dredge	AA	LIM	NE	all	8,312	0	8,312	0.256	
34	Scallop Dredge	OPEN	GEN	MA	all	13,992	3,000	10,992	0.707	

**Table 4A continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SMALL MESH GROUND FISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	4,482	0	4,482	1.460	
36	Scallop Dredge	OPEN	LIM	MA	all	46,981	0	46,981	0.188	
37	Scallop Dredge	OPEN	LIM	NE	all	105,094	0	105,094	0.257	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	10,560	10,373	187	0.383	
40	Pots and Traps, Fish	OPEN	all	MA	all	2,075	2,075			P
41	Pots and Traps, Fish	OPEN	all	NE	all	10,072	10,072			P
42	Pots and Traps, Conch	OPEN	all	MA	all	10	10			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	18,927	18,927			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	5,371	5,371			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						40	40			
TOTAL						24,810,844	17,140,193	7,670,651	0.147	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SPINY DOGFISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	3,343	3,343	0		P
2	Longline	OPEN	all	NE	all	1,247,949	1,087,614	160,335	0.177	
3	Hand Line	OPEN	all	MA	all	8,215	8,215	0		P
4	Hand Line	OPEN	all	NE	all	240,736	199,812	40,924	0.273	
5	Otter Trawl	OPEN	all	MA	sm	4,649,829	612,700	4,037,129	0.237	
6	Otter Trawl	OPEN	all	MA	lg	5,644,030	1,138,666	4,505,364	0.301	
7	Otter Trawl	OPEN	all	NE	sm	2,187,077	397,606	1,789,471	0.430	
8	Otter Trawl	OPEN	all	NE	lg	3,721,470	254,057	3,467,413	0.065	
9	Scallop Trawl	AA	GEN	MA	all	288	0	288	0.340	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	87,810	6,000	81,810	1.117	
12	Scallop Trawl	OPEN	LIM	MA	all	134,327	0	134,327	0.000	P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	6,000	6,000			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	33,571	0	33,571	0.740	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	215,130	1,250	213,880	0.196	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	31,801	22,850	8,951	1.326	
21	Floating Trap	OPEN	all	NE	all	10	10			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	583,728	509,659	74,069	1.523	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,692,147	1,645,948	46,199	0.687	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	210,787	105,258	105,529	0.177	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	4,000	4,000			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,390,864	4,448,353	2,942,511	0.060	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	860,585	626,861	233,724	0.101	
28	Purse Seine	OPEN	all	MA	all	1,800	1,800			P
29	Purse Seine	OPEN	all	NE	all	3,445	0	3,445	1.198	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	10	0	10	0.450	
32	Scallop Dredge	AA	LIM	MA	all	31,468	0	31,468	0.340	
33	Scallop Dredge	AA	LIM	NE	all	22,072	0	22,072	0.187	
34	Scallop Dredge	OPEN	GEN	MA	all	3,520	2,090	1,430	0.528	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SPINY DOGFISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	468	0	468	1.538	
36	Scallop Dredge	OPEN	LIM	MA	all	137,627	0	137,627	0.317	
37	Scallop Dredge	OPEN	LIM	NE	all	211,272	0	211,272	0.232	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	2,511	0	2,511	0.190	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	219,300	7,326	211,974	0.300	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	3,045	3,045			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	28,000	28,000			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						54,704	54,704			
TOTAL						29,672,939	11,175,167	18,497,772	0.101	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SQUID - BUTTERFISH - MACKEREL***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	1,726	1,726	0		P
4	Hand Line	OPEN	all	NE	all	2,761	2,761	0		
5	Otter Trawl	OPEN	all	MA	sm	37,113,836	34,753,341	2,360,495	0.252	
6	Otter Trawl	OPEN	all	MA	lg	673,616	606,919	66,697	1.107	
7	Otter Trawl	OPEN	all	NE	sm	29,464,630	26,060,728	3,403,902	0.246	
8	Otter Trawl	OPEN	all	NE	lg	597,629	548,610	49,019	0.107	
9	Scallop Trawl	AA	GEN	MA	all	10	0	10	0.796	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	2,047	523	1,524	0.552	
12	Scallop Trawl	OPEN	LIM	MA	all	358	358	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	207	207			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	168,500	168,500			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	771	0	771	0.673	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,234	2,600	1,634	0.149	
18	Shrimp Trawl	OPEN	all	MA	all	180,853	45,710	135,143	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	73,967	71,250	2,717	0.467	
21	Floating Trap	OPEN	all	NE	all	31,125	31,125			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	14,486	14,373	113	0.606	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	389	389	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	3,040	2,544	496	0.505	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,534	1,485	2,049	0.167	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	552	401	151	0.465	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	2	0	2	1.193	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	7,713	7,208	505	0.245	
33	Scallop Dredge	AA	LIM	NE	all	609	0	609	0.274	
34	Scallop Dredge	OPEN	GEN	MA	all	2,251	2,002	249	0.691	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SQUID - BUTTERFISH - MACKEREL***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	831	0	831	0.929	
36	Scallop Dredge	OPEN	LIM	MA	all	27,450	21,152	6,298	0.277	
37	Scallop Dredge	OPEN	LIM	NE	all	2,118	0	2,118	0.452	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	47,147	47,132	15	1.086	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	412,600	402,323	10,277	0.615	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	457	457			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	79,500	79,500			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						4,512	4,512			
TOTAL						68,923,460	62,877,836	6,045,624	0.170	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species Group: SURFCLAM - OCEAN QUAHOG**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	5,321	0	5,321	0.679	
6	Otter Trawl	OPEN	all	MA	lg	37,222	0	37,222	0.978	
7	Otter Trawl	OPEN	all	NE	sm	0	0	0		
8	Otter Trawl	OPEN	all	NE	lg	1,269	0	1,269	0.559	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	780	0	780	0.807	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	19	0	19	0.519	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3	0	3	0.957	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	20	0	20	1.062	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	1,224	0	1,224	0.619	
33	Scallop Dredge	AA	LIM	NE	all	824	0	824	0.374	
34	Scallop Dredge	OPEN	GEN	MA	all	65,957	65,563	394	1.291	

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species Group: SURFCLAM - OCEAN QUAHOG***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	179,802	179,802	0		
36	Scallop Dredge	OPEN	LIM	MA	all	7,490	0	7,490	0.785	
37	Scallop Dredge	OPEN	LIM	NE	all	1,585	0	1,585	0.666	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	39,908	39,908			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	148,223,092	148,223,092			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	96,871,763	96,871,763			P
Other fleets						0	0			
TOTAL						245,436,279	245,380,128	56,151	0.661	



**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.**

***Species Group: TILEFISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	1,758,696	1,758,696	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	1,711	1,711	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	11,585	9,376	2,209	0.472	
6	Otter Trawl	OPEN	all	MA	lg	3,605	2,697	908	1.048	
7	Otter Trawl	OPEN	all	NE	sm	14,806	11,833	2,973	0.487	
8	Otter Trawl	OPEN	all	NE	lg	8,401	8,103	298	0.920	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	65	65			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	15	0	15	0.767	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	29	29	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	75	75	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	10	10	0		
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	8,440	4,439	4,001	0.247	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

**Table 4A, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for 14 fish and invertebrate species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species Group: TILEFISH**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0		
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0		
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	2	2			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	175	175			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	104	104			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						78	78			
TOTAL						1,807,798	1,797,393	10,405	0.218	

**Table 4B. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: BLACK SEA BASS**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	191	191	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	61,809	61,809	0		P
4	Hand Line	OPEN	all	NE	all	5,648	5,648	0		
5	Otter Trawl	OPEN	all	MA	sm	380,791	235,020	145,771	0.339	
6	Otter Trawl	OPEN	all	MA	lg	505,296	323,019	182,277	0.851	
7	Otter Trawl	OPEN	all	NE	sm	118,824	48,673	70,151	0.612	
8	Otter Trawl	OPEN	all	NE	lg	40,329	33,310	7,019	0.255	
9	Scallop Trawl	AA	GEN	MA	all	941	0	941	0.340	P
10	Scallop Trawl	AA	LIM	MA	all	333	333			P
11	Scallop Trawl	OPEN	GEN	MA	all	781	17	764	1.191	
12	Scallop Trawl	OPEN	LIM	MA	all	1,750	1,750	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	5	5			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	13	0	13	0.576	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	640	640	0		
21	Floating Trap	OPEN	all	NE	all	815	815			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	26	26	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	813	813	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	661	661	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	140	140			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	5,001	4,990	11	0.502	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	853	850	3	0.798	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	859	0	859	0.391	
33	Scallop Dredge	AA	LIM	NE	all	1,052	0	1,052	0.294	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: BLACK SEA BASS**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
34	Scallop Dredge	OPEN	GEN	MA	all	1,418	123	1,295	0.585	
35	Scallop Dredge	OPEN	GEN	NE	all	142	0	142	0.693	
36	Scallop Dredge	OPEN	LIM	MA	all	8,249	53	8,196	0.337	
37	Scallop Dredge	OPEN	LIM	NE	all	12,752	15	12,737	0.346	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	572	0	572	1.103	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	6	0	6	0.543	
40	Pots and Traps, Fish	OPEN	all	MA	all	355,259	355,259			P
41	Pots and Traps, Fish	OPEN	all	NE	all	50,413	50,413			P
42	Pots and Traps, Conch	OPEN	all	MA	all	145	145			P
43	Pots and Traps, Conch	OPEN	all	NE	all	310	310			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	53	53			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	27,871	27,871			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	8,543	8,543			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	575	575			P
51	Beam Trawl	OPEN	all	MA	all	1,538	1,538			P
52	Beam Trawl	OPEN	all	NE	all	37	37			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						1,896	1,896			
TOTAL						1,597,349	1,165,541	431,808	0.390	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: *FLUKE***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	9,395	9,395	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	111,878	111,878	0		P
4	Hand Line	OPEN	all	NE	all	19,590	19,590	0		
5	Otter Trawl	OPEN	all	MA	sm	1,075,637	614,546	461,091	0.248	
6	Otter Trawl	OPEN	all	MA	lg	11,221,557	10,607,722	613,835	0.215	
7	Otter Trawl	OPEN	all	NE	sm	808,359	687,410	120,949	0.261	
8	Otter Trawl	OPEN	all	NE	lg	2,619,318	2,044,953	574,365	0.128	
9	Scallop Trawl	AA	GEN	MA	all	1,224	1,000	224	0.329	P
10	Scallop Trawl	AA	LIM	MA	all	19,150	19,150			P
11	Scallop Trawl	OPEN	GEN	MA	all	75,621	52,954	22,667	0.550	
12	Scallop Trawl	OPEN	LIM	MA	all	45,725	44,421	1,304	0.000	P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	1,860	1,860			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	669	318	351	0.470	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	445	429	16	0.537	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	17,559	730	16,829	0.302	
18	Shrimp Trawl	OPEN	all	MA	all	2,455	2,455	0		P
19	Shrimp Trawl	OPEN	all	NE	all	1,000	1,000	0		
21	Floating Trap	OPEN	all	NE	all	1,566	1,566			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,048	281	767	0.581	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	14,992	14,308	684	0.729	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	35,252	24,940	10,312	0.346	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	31,469	29,119	2,350	0.365	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	134,367	34,364	100,003	0.140	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	334	334	0		P
31	Scallop Dredge	AA	GEN	NE	all	69	0	69	0.396	
32	Scallop Dredge	AA	LIM	MA	all	103,527	8,667	94,860	0.228	
33	Scallop Dredge	AA	LIM	NE	all	91,922	0	91,922	0.159	
34	Scallop Dredge	OPEN	GEN	MA	all	102,937	10,171	92,766	0.758	

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.

*Species: FLUKE*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	14,161	0	14,161	0.636	
36	Scallop Dredge	OPEN	LIM	MA	all	522,589	29,106	493,483	0.197	
37	Scallop Dredge	OPEN	LIM	NE	all	825,075	170	824,905	0.259	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	3	0	3	0.788	
40	Pots and Traps, Fish	OPEN	all	MA	all	410	410			P
41	Pots and Traps, Fish	OPEN	all	NE	all	1,680	1,680			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	41	41			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	87	87			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	44,035	44,035			P
52	Beam Trawl	OPEN	all	NE	all	21,254	21,254			P
53	Dredge, Other	OPEN	all	MA	all	90	90			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	271	271			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						5,658	5,658			
TOTAL						17,984,280	14,446,363	3,537,917	0.088	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: SCUP**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	100,501	100,501	0		P
4	Hand Line	OPEN	all	NE	all	15,653	15,653	0		
5	Otter Trawl	OPEN	all	MA	sm	3,414,343	2,932,309	482,034	0.461	
6	Otter Trawl	OPEN	all	MA	lg	2,416,833	2,171,324	245,509	0.466	
7	Otter Trawl	OPEN	all	NE	sm	2,365,062	1,724,063	640,999	0.282	
8	Otter Trawl	OPEN	all	NE	lg	1,425,322	1,380,931	44,391	0.430	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0	0.340	P
10	Scallop Trawl	AA	LIM	MA	all	100	100			P
11	Scallop Trawl	OPEN	GEN	MA	all	1,655	1,362	293	1.091	
12	Scallop Trawl	OPEN	LIM	MA	all	50	50	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	1	1			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0		
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	8,485	8,095	390	0.185	
21	Floating Trap	OPEN	all	NE	all	145,434	145,434			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,691	1,691	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,126	1,126	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	191	166	25	0.851	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	485	485			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	33,937	33,932	5	0.736	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	2,578	2,578	0		
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	107	0	107	0.710	
33	Scallop Dredge	AA	LIM	NE	all	112	0	112	0.681	
34	Scallop Dredge	OPEN	GEN	MA	all	20,070	20,000	70	0.593	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species: SCUP***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	509	2	507	0.521	
37	Scallop Dredge	OPEN	LIM	NE	all	1,157	0	1,157	0.478	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	6,905	0	6,905	1.103	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	7	0	7	0.543	
40	Pots and Traps, Fish	OPEN	all	MA	all	16,399	16,399			P
41	Pots and Traps, Fish	OPEN	all	NE	all	259,268	259,268			P
42	Pots and Traps, Conch	OPEN	all	MA	all	38	38			P
43	Pots and Traps, Conch	OPEN	all	NE	all	20	20			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	738	738			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	6,678	6,678			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	7,012	7,012			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	263	263			P
51	Beam Trawl	OPEN	all	MA	all	685	685			P
52	Beam Trawl	OPEN	all	NE	all	3,821	3,821			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						48,335	48,335			
TOTAL						10,305,570	8,883,060	1,422,510	0.217	



**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: AMERICAN PLAICE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	237	196	41	0.269	
3	Hand Line	OPEN	all	MA	all	54	54	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	759	0	759	0.946	
6	Otter Trawl	OPEN	all	MA	lg	1,903	1,865	38	0.928	
7	Otter Trawl	OPEN	all	NE	sm	77,687	1,797	75,890	0.499	
8	Otter Trawl	OPEN	all	NE	lg	3,117,034	2,759,681	357,353	0.053	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	2,938	2,650	288	0.977	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	35,623	28,122	7,501	0.163	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	139,623	25	139,598	0.601	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	28	28	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	200	200	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	5	5			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	19,787	12,879	6,908	0.080	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	3,347	2,964	383	0.241	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	4	0	4	0.616	
32	Scallop Dredge	AA	LIM	MA	all	66	0	66	0.597	
33	Scallop Dredge	AA	LIM	NE	all	12	0	12	0.569	
34	Scallop Dredge	OPEN	GEN	MA	all	32	0	32	0.793	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: AMERICAN PLAICE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	769	0	769	0.740	
36	Scallop Dredge	OPEN	LIM	MA	all	614	0	614	0.894	
37	Scallop Dredge	OPEN	LIM	NE	all	1,115	0	1,115	0.613	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	12	0	12	0.398	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	38	38			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						3,401,888	2,810,504	591,384	0.159	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: ATLANTIC COD**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	196,737	11,574	185,163	0.000	P
2	Longline	OPEN	all	NE	all	437,927	391,663	46,264	0.165	
3	Hand Line	OPEN	all	MA	all	28,704	7,470	21,234	0.000	P
4	Hand Line	OPEN	all	NE	all	102,810	92,254	10,556	0.286	
5	Otter Trawl	OPEN	all	MA	sm	1,776	851	925	0.511	
6	Otter Trawl	OPEN	all	MA	lg	60,433	46,610	13,823	0.766	
7	Otter Trawl	OPEN	all	NE	sm	14,449	6,656	7,793	0.428	
8	Otter Trawl	OPEN	all	NE	lg	8,465,309	8,143,083	322,226	0.078	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	785	0	785	1.663	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	35	35			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	23,028	22,007	1,021	0.835	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	8,323	7,927	396	0.562	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	345,605	327,015	18,590	0.145	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	130	130	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	3,047	1,213	1,834	2.070	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	21	21	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	558	122	436	0.371	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	2,911	2,911			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,052,849	2,958,863	93,986	0.115	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	298,276	279,153	19,123	0.127	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	105	0	105	0.873	
33	Scallop Dredge	AA	LIM	NE	all	335	0	335	0.359	
34	Scallop Dredge	OPEN	GEN	MA	all	741	0	741	0.588	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species: ATLANTIC COD***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	444	25	419	0.924	
37	Scallop Dredge	OPEN	LIM	NE	all	6,771	70	6,701	0.197	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	2,788	651	2,137	0.339	
40	Pots and Traps, Fish	OPEN	all	MA	all	3,905	3,905			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	255	255			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,525	1,525			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	17	17			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						80	80			
TOTAL						13,060,680	12,306,086	754,594	0.041	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: ATLANTIC HALIBUT**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	1,872	808	1,064	0.521	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	488	488	0		
5	Otter Trawl	OPEN	all	MA	sm	0	0	0		
6	Otter Trawl	OPEN	all	MA	lg	30	30	0		
7	Otter Trawl	OPEN	all	NE	sm	100	0	100	0.793	
8	Otter Trawl	OPEN	all	NE	lg	37,614	7,103	30,511	0.073	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	109	0	109	0.640	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,395	659	1,736	0.194	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	57	0	57	1.053	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	97	97	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	5,263	982	4,281	0.152	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	15,488	1,106	14,382	0.568	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.

*Species: ATLANTIC HALIBUT*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	49	0	49	0.914	
37	Scallop Dredge	OPEN	LIM	NE	all	308	0	308	0.772	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	57	57			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						63,927	11,330	52,597	0.162	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species: ATLANTIC WOLFFISH***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	1,777	4	1,773	0.202	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	204	0	204	1.031	
5	Otter Trawl	OPEN	all	MA	sm	0	0	0		
6	Otter Trawl	OPEN	all	MA	lg	0	0	0		
7	Otter Trawl	OPEN	all	NE	sm	0	0	0		
8	Otter Trawl	OPEN	all	NE	lg	52,322	409	51,913	0.092	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,154	0	1,154	0.407	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,243	8	7,235	0.118	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	1,749	0	1,749	0.236	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.

*Species: ATLANTIC WOLFFISH*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0		
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0		
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						64,449	421	64,028	0.077	



**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: HADDOCK**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	544,171	531,968	12,203	0.308	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	1,308	1,308	0		
5	Otter Trawl	OPEN	all	MA	sm	44,636	0	44,636	0.448	
6	Otter Trawl	OPEN	all	MA	lg	13	0	13	1.217	
7	Otter Trawl	OPEN	all	NE	sm	41,388	2,861	38,527	0.358	
8	Otter Trawl	OPEN	all	NE	lg	8,212,882	8,169,761	43,121	0.131	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	926,280	923,883	2,397	0.358	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,951,997	4,927,034	24,963	0.137	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	3,794	0	3,794	0.403	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	2,724	2,724	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	128,876	124,405	4,471	0.126	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	3,983	3,440	543	0.250	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	10	0	10	0.941	
33	Scallop Dredge	AA	LIM	NE	all	923	0	923	0.777	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: HADDOCK**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	122	0	122	0.889	
37	Scallop Dredge	OPEN	LIM	NE	all	1,564	0	1,564	0.582	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	56,231	54,916	1,315	0.313	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	459	459			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						7,089	7,089			
TOTAL						14,928,450	14,749,848	178,602	0.143	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: OCEAN POUT**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	11,848	0	11,848	0.000	P
2	Longline	OPEN	all	NE	all	3,735	10	3,725	0.264	
3	Hand Line	OPEN	all	MA	all	166	166	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	30,880	0	30,880	0.705	
6	Otter Trawl	OPEN	all	MA	lg	44,303	0	44,303	0.514	
7	Otter Trawl	OPEN	all	NE	sm	20,426	150	20,276	0.389	
8	Otter Trawl	OPEN	all	NE	lg	87,384	60	87,324	0.087	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	8,671	0	8,671	1.524	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	121	0	121	0.810	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	70	0	70	0.385	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	5,106	0	5,106	0.307	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	6	6	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	406	0	406	0.189	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	204	0	204	0.501	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	14	0	14	0.343	
32	Scallop Dredge	AA	LIM	MA	all	220	0	220	0.590	
33	Scallop Dredge	AA	LIM	NE	all	536	0	536	0.251	
34	Scallop Dredge	OPEN	GEN	MA	all	406	0	406	0.588	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

***Species: OCEAN POUT***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	1,508	0	1,508	0.406	
37	Scallop Dredge	OPEN	LIM	NE	all	7,771	0	7,771	0.263	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	11	0	11	0.790	
40	Pots and Traps, Fish	OPEN	all	MA	all	249	249			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	400	400			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						224,443	1,041	223,402	0.161	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: POLLOCK**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	4,832	4,723	109	0.345	
3	Hand Line	OPEN	all	MA	all	400	400	0		P
4	Hand Line	OPEN	all	NE	all	30,273	30,208	65	0.728	
5	Otter Trawl	OPEN	all	MA	sm	20	0	20	0.736	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0		
7	Otter Trawl	OPEN	all	NE	sm	4,085	3,841	244	0.478	
8	Otter Trawl	OPEN	all	NE	lg	7,312,322	7,253,773	58,549	0.151	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	11,936	11,878	58	0.641	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	437,126	430,624	6,502	0.329	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	1,134	0	1,134	0.417	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	20	20	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	24	24	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	15	15			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,570,387	3,441,229	129,158	0.125	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	234,819	226,030	8,789	0.216	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: POLLOCK**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0		
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0		
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	1,573	370	1,203	0.391	
40	Pots and Traps, Fish	OPEN	all	MA	all	39	39			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						11,609,006	11,403,174	205,832	0.091	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: REDFISH**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	2,875	2,733	142	0.347	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	119	82	37	0.942	
5	Otter Trawl	OPEN	all	MA	sm	4,392	10	4,382	0.571	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0		
7	Otter Trawl	OPEN	all	NE	sm	37,985	35,080	2,905	0.456	
8	Otter Trawl	OPEN	all	NE	lg	4,011,074	3,754,576	256,498	0.109	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	66,090	66,090	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	202,042	170,136	31,906	0.409	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	28,484	0	28,484	0.459	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	45	45	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	132,822	125,494	7,328	0.177	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	3,766	3,687	79	0.328	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	0	0	0		
33	Scallop Dredge	AA	LIM	NE	all	0	0	0		
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: REDFISH**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0		
37	Scallop Dredge	OPEN	LIM	NE	all	4	0	4	1.037	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	542	50	492	0.717	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						4,490,241	4,157,983	332,258	0.101	



**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: WHITE HAKE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	12,082	9,890	2,192	0.232	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	82	82	0		
5	Otter Trawl	OPEN	all	MA	sm	2,394	1,040	1,354	0.938	
6	Otter Trawl	OPEN	all	MA	lg	1,736	1,187	549	0.707	
7	Otter Trawl	OPEN	all	NE	sm	64,314	55,925	8,389	1.105	
8	Otter Trawl	OPEN	all	NE	lg	2,582,062	2,538,816	43,246	0.149	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	3,437	3,433	4	0.690	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	61,251	59,845	1,406	0.200	
18	Shrimp Trawl	OPEN	all	MA	all	268	268	0		P
19	Shrimp Trawl	OPEN	all	NE	all	90	90	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	454,197	430,826	23,371	0.175	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	45,319	43,389	1,930	0.254	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	44	0	44	0.364	P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	100	0	100	0.585	
33	Scallop Dredge	AA	LIM	NE	all	175	0	175	0.442	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.

*Species: WHITE HAKE*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	3,212	0	3,212	1.448	
37	Scallop Dredge	OPEN	LIM	NE	all	2,771	10	2,761	0.495	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	3,150	3,150			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	196	196			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						3,236,880	3,148,147	88,733	0.147	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: WINDOWPANE FLOUNDER**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	32	24	8	1.120	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	195,393	9,101	186,292	0.318	
6	Otter Trawl	OPEN	all	MA	lg	506,347	37,040	469,307	0.220	
7	Otter Trawl	OPEN	all	NE	sm	17,689	0	17,689	0.292	
8	Otter Trawl	OPEN	all	NE	lg	413,469	276	413,193	0.098	
9	Scallop Trawl	AA	GEN	MA	all	19	0	19	0.846	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	22,776	0	22,776	0.972	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	2,052	0	2,052	0.991	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	2,127	0	2,127	0.239	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	21,033	0	21,033	0.156	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	6,241	0	6,241	0.686	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	227	133	94	0.679	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	663	208	455	0.490	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	663	620	43	0.816	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1,844	150	1,694	0.168	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	240	0	240	0.354	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	8	0	8	0.136	P
31	Scallop Dredge	AA	GEN	NE	all	157	0	157	0.315	
32	Scallop Dredge	AA	LIM	MA	all	12,751	0	12,751	0.363	
33	Scallop Dredge	AA	LIM	NE	all	7,995	0	7,995	0.208	
34	Scallop Dredge	OPEN	GEN	MA	all	35,073	0	35,073	0.414	

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.

*Species: WINDOWPANE FLOUNDER*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	24,210	0	24,210	0.761	
36	Scallop Dredge	OPEN	LIM	MA	all	124,924	0	124,924	0.239	
37	Scallop Dredge	OPEN	LIM	NE	all	279,310	0	279,310	0.199	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	1	0	1	0.857	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	13	0	13	0.429	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	7	7			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						1,675,265	47,559	1,627,706	0.089	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: WINTER FLOUNDER**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	3,242	3,119	123	0.444	
3	Hand Line	OPEN	all	MA	all	60	60	0		P
4	Hand Line	OPEN	all	NE	all	8	8	0		
5	Otter Trawl	OPEN	all	MA	sm	297,988	2,898	295,090	0.492	
6	Otter Trawl	OPEN	all	MA	lg	196,769	12,313	184,456	0.304	
7	Otter Trawl	OPEN	all	NE	sm	157,589	7,615	149,974	0.318	
8	Otter Trawl	OPEN	all	NE	lg	3,581,933	3,382,764	199,169	0.081	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	16,887	0	16,887	0.667	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	6,145	6,126	19	0.871	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	471	0	471	0.204	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	151,325	144,179	7,146	0.450	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	11,337	0	11,337	0.557	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	50	50	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	168	168	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	59,219	50,336	8,883	0.111	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	4,914	3,062	1,852	0.660	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	257	0	257	0.437	
32	Scallop Dredge	AA	LIM	MA	all	1,558	20	1,538	0.337	
33	Scallop Dredge	AA	LIM	NE	all	12,323	0	12,323	0.224	
34	Scallop Dredge	OPEN	GEN	MA	all	2,768	0	2,768	0.642	

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.

*Species: WINTER FLOUNDER*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	11,293	7	11,286	0.516	
36	Scallop Dredge	OPEN	LIM	MA	all	15,430	0	15,430	0.283	
37	Scallop Dredge	OPEN	LIM	NE	all	323,989	1,192	322,797	0.179	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	35	0	35	0.429	
40	Pots and Traps, Fish	OPEN	all	MA	all	10	10			P
41	Pots and Traps, Fish	OPEN	all	NE	all	245	245			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	1	1			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	24	24			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	1,810	1,810			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						40	40			
TOTAL						4,857,891	3,616,047	1,241,844	0.140	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: WITCH FLOUNDER**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	212,170	25	212,145	0.426	
6	Otter Trawl	OPEN	all	MA	lg	31,671	908	30,763	1.047	
7	Otter Trawl	OPEN	all	NE	sm	27,589	4,034	23,555	0.416	
8	Otter Trawl	OPEN	all	NE	lg	1,559,952	1,436,420	123,532	0.062	
9	Scallop Trawl	AA	GEN	MA	all	29	0	29	0.340	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	50	0	50	1.890	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	652	606	46	0.618	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	26,710	23,325	3,385	0.267	
18	Shrimp Trawl	OPEN	all	MA	all	794,958	0	794,958	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	15,297	50	15,247	0.508	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	3	3	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	9,059	8,294	765	0.103	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	26,122	25,963	159	0.270	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	8	0	8	0.136	P
31	Scallop Dredge	AA	GEN	NE	all	4	0	4	0.917	
32	Scallop Dredge	AA	LIM	MA	all	1,108	0	1,108	0.494	
33	Scallop Dredge	AA	LIM	NE	all	974	0	974	0.407	
34	Scallop Dredge	OPEN	GEN	MA	all	376	0	376	0.674	

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.

*Species: WITCH FLOUNDER*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	321	0	321	0.736	
36	Scallop Dredge	OPEN	LIM	MA	all	7,933	0	7,933	0.313	
37	Scallop Dredge	OPEN	LIM	NE	all	11,895	0	11,895	0.306	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	7	0	7	0.386	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	15	15			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						4	4			
TOTAL						2,726,908	1,499,647	1,227,261	0.079	



**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: YELLOWTAIL FLOUNDER**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	49	49	0		P
2	Longline	OPEN	all	NE	all	1,191	1,157	34	0.594	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	0	0	0		
5	Otter Trawl	OPEN	all	MA	sm	47,559	0	47,559	0.694	
6	Otter Trawl	OPEN	all	MA	lg	94,061	57,778	36,283	0.645	
7	Otter Trawl	OPEN	all	NE	sm	55,455	398	55,057	0.312	
8	Otter Trawl	OPEN	all	NE	lg	2,658,403	2,430,553	227,850	0.088	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	20,550	0	20,550	0.619	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	125	125			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	23,581	22,949	632	0.837	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	3,127	2,569	558	0.295	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	120,468	96,280	24,188	0.170	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	995	0	995	0.996	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	64	64	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	59	19	40	0.763	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	242,257	223,023	19,234	0.099	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	17,574	16,633	941	0.346	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	172	0	172	0.215	
32	Scallop Dredge	AA	LIM	MA	all	2,383	343	2,040	0.483	
33	Scallop Dredge	AA	LIM	NE	all	6,049	892	5,157	0.272	
34	Scallop Dredge	OPEN	GEN	MA	all	4,009	20	3,989	0.269	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: YELLOWTAIL FLOUNDER**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	34,761	16	34,745	0.824	
36	Scallop Dredge	OPEN	LIM	MA	all	62,334	827	61,507	0.332	
37	Scallop Dredge	OPEN	LIM	NE	all	211,889	4,129	207,760	0.207	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	4	0	4	0.559	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	5	5			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	1,767	1,767			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						330	330			
TOTAL						3,609,221	2,859,926	749,295	0.100	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: OFFSHORE HAKE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	24	24	0		P
2	Longline	OPEN	all	NE	all	5	0	5	0.894	
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	45	45	0		
5	Otter Trawl	OPEN	all	MA	sm	32,878	31,816	1,062	0.483	
6	Otter Trawl	OPEN	all	MA	lg	11,256	1,243	10,013	1.405	
7	Otter Trawl	OPEN	all	NE	sm	157,526	151,547	5,979	0.467	
8	Otter Trawl	OPEN	all	NE	lg	3,756	1,367	2,389	0.372	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0		
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	16	0	16	0.639	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	6	6	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	39	5	34	0.413	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	0	0	0		
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	26	0	26	0.703	
33	Scallop Dredge	AA	LIM	NE	all	59	0	59	0.581	
34	Scallop Dredge	OPEN	GEN	MA	all	64	0	64	0.841	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: OFFSHORE HAKE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	3,925	0	3,925	0.909	
37	Scallop Dredge	OPEN	LIM	NE	all	777	0	777	0.926	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0		
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						210,403	186,053	24,350	0.609	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: RED HAKE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	9,615	12	9,603	0.140	
3	Hand Line	OPEN	all	MA	all	2,485	2,485	0		P
4	Hand Line	OPEN	all	NE	all	13	13	0		
5	Otter Trawl	OPEN	all	MA	sm	1,417,845	571,479	846,366	0.342	
6	Otter Trawl	OPEN	all	MA	lg	48,114	31,927	16,187	0.946	
7	Otter Trawl	OPEN	all	NE	sm	1,820,131	684,643	1,135,488	0.278	
8	Otter Trawl	OPEN	all	NE	lg	119,777	32,815	86,962	0.084	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0	0.340	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	2,195	0	2,195	0.600	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	142	0	142	0.244	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	5,112	0	5,112	0.215	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	36,715	1,300	35,415	0.333	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	350	350	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	5	2	3	0.851	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,152	988	2,164	0.079	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	386	245	141	0.328	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	8	0	8	0.381	
32	Scallop Dredge	AA	LIM	MA	all	16,871	0	16,871	0.643	
33	Scallop Dredge	AA	LIM	NE	all	6,212	0	6,212	0.331	
34	Scallop Dredge	OPEN	GEN	MA	all	3,361	0	3,361	0.610	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: RED HAKE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	4,262	0	4,262	1.538	
36	Scallop Dredge	OPEN	LIM	MA	all	25,392	0	25,392	0.232	
37	Scallop Dredge	OPEN	LIM	NE	all	59,591	0	59,591	0.376	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	13	0	13	0.539	
40	Pots and Traps, Fish	OPEN	all	MA	all	2,018	2,018			P
41	Pots and Traps, Fish	OPEN	all	NE	all	72	72			P
42	Pots and Traps, Conch	OPEN	all	MA	all	10	10			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	18,927	18,927			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	5,371	5,371			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						3,608,145	1,352,657	2,255,488	0.191	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: SILVER HAKE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	139	106	33	0.516	
3	Hand Line	OPEN	all	MA	all	5	5	0		P
4	Hand Line	OPEN	all	NE	all	7	7	0		
5	Otter Trawl	OPEN	all	MA	sm	6,293,813	5,224,942	1,068,871	0.329	
6	Otter Trawl	OPEN	all	MA	lg	408,196	219,607	188,589	1.043	
7	Otter Trawl	OPEN	all	NE	sm	11,856,041	9,843,872	2,012,169	0.271	
8	Otter Trawl	OPEN	all	NE	lg	392,247	254,167	138,080	0.084	
9	Scallop Trawl	AA	GEN	MA	all	19	0	19	0.684	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	13,049	4	13,045	0.776	
12	Scallop Trawl	OPEN	LIM	MA	all	186	0	186	0.000	P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	300	300			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	834	230	604	0.594	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	1	0	1	0.430	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,758	2	4,756	0.153	
18	Shrimp Trawl	OPEN	all	MA	all	968,524	0	968,524	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	940,398	26,590	913,808	0.469	
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	243	243	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	5	5	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	12	12	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	15,023	7,106	7,917	0.088	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	1,674	815	859	0.231	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	34	0	34	0.259	P
31	Scallop Dredge	AA	GEN	NE	all	27	0	27	0.459	
32	Scallop Dredge	AA	LIM	MA	all	899	0	899	0.241	
33	Scallop Dredge	AA	LIM	NE	all	2,041	0	2,041	0.205	
34	Scallop Dredge	OPEN	GEN	MA	all	10,568	3,000	7,568	0.760	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: SILVER HAKE**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	220	0	220	0.563	
36	Scallop Dredge	OPEN	LIM	MA	all	17,664	0	17,664	0.271	
37	Scallop Dredge	OPEN	LIM	NE	all	44,725	0	44,725	0.217	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	10,548	10,373	175	0.409	
40	Pots and Traps, Fish	OPEN	all	MA	all	57	57			P
41	Pots and Traps, Fish	OPEN	all	NE	all	10,000	10,000			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						40	40			
TOTAL						20,992,296	15,601,483	5,390,813	0.149	



**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: ATLANTIC MACKEREL**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	1,462	1,462	0		P
4	Hand Line	OPEN	all	NE	all	1,822	1,822	0		
5	Otter Trawl	OPEN	all	MA	sm	410,346	382,736	27,610	0.448	
6	Otter Trawl	OPEN	all	MA	lg	11,447	7,996	3,451	1.159	
7	Otter Trawl	OPEN	all	NE	sm	308,257	228,221	80,036	0.415	
8	Otter Trawl	OPEN	all	NE	lg	3,049	1,893	1,156	0.234	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0		
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	337	0	337	0.647	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	37	0	37	0.461	
18	Shrimp Trawl	OPEN	all	MA	all	0	0	0		P
19	Shrimp Trawl	OPEN	all	NE	all	638	25	613	0.646	
21	Floating Trap	OPEN	all	NE	all	29,357	29,357			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	5,241	5,241	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	279	279	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	2,913	2,432	481	0.520	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,418	1,438	1,980	0.172	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	476	401	75	0.331	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	2	0	2	0.933	
33	Scallop Dredge	AA	LIM	NE	all	22	0	22	0.497	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.**

**Species: ATLANTIC MACKEREL**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	26	0	26	0.703	
37	Scallop Dredge	OPEN	LIM	NE	all	1	0	1	1.030	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	47,132	47,132	0	1.103	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	412,191	402,103	10,088	0.626	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						1,238,454	1,112,538	125,916	0.288	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011 Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: BUTTERFISH**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	251	251	0		P
4	Hand Line	OPEN	all	NE	all	2	2	0		
5	Otter Trawl	OPEN	all	MA	sm	1,495,697	482,965	1,012,732	0.289	
6	Otter Trawl	OPEN	all	MA	lg	107,474	59,016	48,458	1.277	
7	Otter Trawl	OPEN	all	NE	sm	2,566,142	630,111	1,936,031	0.246	
8	Otter Trawl	OPEN	all	NE	lg	104,096	100,830	3,266	0.142	
9	Scallop Trawl	AA	GEN	MA	all	0	0	0		P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	1,451	3	1,448	0.581	
12	Scallop Trawl	OPEN	LIM	MA	all	19	19	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	4	0	4	0.651	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	126	0	126	0.315	
18	Shrimp Trawl	OPEN	all	MA	all	1,074	1,074	0		P
19	Shrimp Trawl	OPEN	all	NE	all	2,492	1,050	1,442	0.513	
21	Floating Trap	OPEN	all	NE	all	1,208	1,208			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	9,245	9,132	113	0.606	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	110	110	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	127	112	15	0.855	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	109	47	62	0.631	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	76	0	76	0.865	
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	2	0	2	1.193	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	53	8	45	0.737	
33	Scallop Dredge	AA	LIM	NE	all	153	0	153	0.771	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011** Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.

**Species: BUTTERFISH**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	71	0	71	0.522	
37	Scallop Dredge	OPEN	LIM	NE	all	157	0	157	0.594	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	15	0	15	1.103	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	278	220	58	0.440	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	90	90			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	3,670	3,670			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						89	89			
TOTAL						4,294,282	1,290,007	3,004,275	0.187	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**

**Species: ILLEX SQUID**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	0	0	0		P
4	Hand Line	OPEN	all	NE	all	1	1	0		
5	Otter Trawl	OPEN	all	MA	sm	26,362,878	25,134,844	1,228,034	0.296	
6	Otter Trawl	OPEN	all	MA	lg	4,270	748	3,522	1.405	
7	Otter Trawl	OPEN	all	NE	sm	14,578,134	13,487,820	1,090,314	0.331	
8	Otter Trawl	OPEN	all	NE	lg	265,418	225,381	40,037	0.126	
9	Scallop Trawl	AA	GEN	MA	all	7	0	7	0.809	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	9	0	9	0.756	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	166,500	166,500			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	406	0	406	0.712	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,220	0	1,220	0.184	
18	Shrimp Trawl	OPEN	all	MA	all	160,143	25,000	135,143	0.000	P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0		
21	Floating Trap	OPEN	all	NE	all	0	0			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	6	0	6	0.635	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	0	0	0		
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	37	0	37	0.407	
33	Scallop Dredge	AA	LIM	NE	all	24	0	24	0.477	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0		

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.

*Species: ILLEX SQUID*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	831	0	831	0.929	
36	Scallop Dredge	OPEN	LIM	MA	all	1,114	0	1,114	0.562	
37	Scallop Dredge	OPEN	LIM	NE	all	1,000	0	1,000	0.903	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	122	0	122	0.340	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	0	0			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						0	0			
TOTAL						41,542,119	39,040,294	2,501,825	0.205	

**Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. “P” indicates fleets with “pilot” designation.**  
**Species: *LOLIGO SQUID***

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
1	Longline	OPEN	all	MA	all	0	0	0		P
2	Longline	OPEN	all	NE	all	0	0	0		
3	Hand Line	OPEN	all	MA	all	13	13	0		P
4	Hand Line	OPEN	all	NE	all	936	936	0		
5	Otter Trawl	OPEN	all	MA	sm	8,844,914	8,752,796	92,118	0.421	
6	Otter Trawl	OPEN	all	MA	lg	550,178	538,919	11,259	0.634	
7	Otter Trawl	OPEN	all	NE	sm	11,980,896	11,714,576	266,320	0.316	
8	Otter Trawl	OPEN	all	NE	lg	224,990	220,500	4,490	0.231	
9	Scallop Trawl	AA	GEN	MA	all	3	0	3	0.772	P
10	Scallop Trawl	AA	LIM	MA	all	0	0			P
11	Scallop Trawl	OPEN	GEN	MA	all	587	520	67	0.792	
12	Scallop Trawl	OPEN	LIM	MA	all	339	339	0		P
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	207	207			P
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	2,000	2,000			P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	24	0	24	0.486	
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0		
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,850	2,600	250	0.227	
18	Shrimp Trawl	OPEN	all	MA	all	19,636	19,636	0		P
19	Shrimp Trawl	OPEN	all	NE	all	70,837	70,175	662	0.257	
21	Floating Trap	OPEN	all	NE	all	560	560			P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0		
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0		
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlrg	0	0	0		
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0			P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1	0	1	0.958	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlrg	0	0	0		
28	Purse Seine	OPEN	all	MA	all	0	0			P
29	Purse Seine	OPEN	all	NE	all	0	0	0		
30	Scallop Dredge	AA	GEN	MA	all	0	0	0		P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0		
32	Scallop Dredge	AA	LIM	MA	all	7,621	7,200	421	0.254	
33	Scallop Dredge	AA	LIM	NE	all	389	0	389	0.245	
34	Scallop Dredge	OPEN	GEN	MA	all	2,251	2,002	249	0.691	

Table 4B, continued. Total catch (live pounds), Vessel Trip Report landings (kept; live pounds), estimated discards (live pounds) and associated coefficient of variation (CV) for the 23 individual species that comprise the 14 species groups, by fleet for July 2010 through June 2011. Dark shading indicates fleets with no NEFOP trips in the annual analysis. Light shading indicates that the variance of the discard estimate was not used in the annual sample size analysis. Blank CV indicates either no discards or discards equal 0. "P" indicates fleets with "pilot" designation.

Species: *LOLIGO SQUID*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	Pilot
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0		
36	Scallop Dredge	OPEN	LIM	MA	all	26,240	21,152	5,088	0.325	
37	Scallop Dredge	OPEN	LIM	NE	all	945	0	945	0.324	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0		
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	9	0	9	0.732	
40	Pots and Traps, Fish	OPEN	all	MA	all	0	0			P
41	Pots and Traps, Fish	OPEN	all	NE	all	367	367			P
42	Pots and Traps, Conch	OPEN	all	MA	all	0	0			P
43	Pots and Traps, Conch	OPEN	all	NE	all	0	0			P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0			P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0			P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0			P
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0			P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0			P
51	Beam Trawl	OPEN	all	MA	all	75,830	75,830			P
52	Beam Trawl	OPEN	all	NE	all	0	0			P
53	Dredge, Other	OPEN	all	MA	all	0	0			P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	0	0			P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	0	0			P
Other fleets						4,423	4,423			
TOTAL						21,817,046	21,434,751	382,295	0.243	



**Table 5. The number of sea days needed to achieve a 30% CV of the discard estimate for each the 14 fish and invertebrate species groups, the number of pilot sea days, and the maximum number of sea days needed for each fleet (2012 Sea Days Needed) for fish and invertebrate species groups based on July 2010 through June 2011 data. Red font indicates basis for fleet sea days; species group abbreviation are given in Table 1.**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	BLUE	HERR	SAL	RCRAB	SCAL	SBM	MONK	GFL	GFS	SKATE	DOG	FSB	SCOQ	TILE	Pilot days	2012 Sea Days Needed	Pilot
1	Longline	OPEN	all	MA	all	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	P
2	Longline	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	
3	Hand Line	OPEN	all	MA	all	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	P
4	Hand Line	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	62	
5	Otter Trawl	OPEN	all	MA	sm	0	0	0	3,231	0	364	0	497	545	397	325	513	0	0	160	3,231	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0	5,551	0	0	164	141	0	107	333	173	0	0	266	5,551	
7	Otter Trawl	OPEN	all	NE	sm	0	0	0	0	0	411	0	461	451	531	1,151	489	0	0	168	1,151	
8	Otter Trawl	OPEN	all	NE	lg	0	0	0	3,879	0	0	568	76	280	261	229	788	0	0	415	3,879	
9	Scallop Trawl	AA	GEN	MA	all	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	P
10	Scallop Trawl	AA	LIM	MA	all	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0	0	0	0	0	0	0	32	0	0	0	0	25	32	
12	Scallop Trawl	OPEN	LIM	MA	all	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	
13 +	Otter Trawl, Ruhle	OPEN	all	MA	lg	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	P
14 +	Otter Trawl, Ruhle	OPEN	all	NE	sm	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	P
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	59	
16 +	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0	0	0	0	0	0	0	257	567	0	0	0	100	567	
18	Shrimp Trawl	OPEN	all	MA	all	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0	0	0	0	0	0	34	0	0	0	0	0	65	34	
20	Floating Trap	OPEN	all	MA	all	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	P
21	Floating Trap	OPEN	all	NE	all	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	43	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0	0	0	0	70	0	0	83	0	0	0	0	61	83	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0	0	0	0	0	0	0	0	97	0	0	0	134	97	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0	0	0	0	132	0	0	118	171	0	0	0	94	171	
28	Purse Seine	OPEN	all	MA	all	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	P
29	Purse Seine	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23	
30	Scallop Dredge	AA	GEN	MA	all	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14	
32	Scallop Dredge	AA	LIM	MA	all	0	0	0	0	0	0	282	0	0	0	0	0	0	0	102	282	
33	Scallop Dredge	AA	LIM	NE	all	0	0	0	0	0	0	189	0	0	0	0	0	0	0	121	189	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0	0	0	0	0	0	0	50	0	0	0	0	95	50	
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	87	
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0	0	0	0	312	0	0	164	0	0	0	0	238	312	
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0	0	500	0	234	107	0	163	505	607	0	0	277	607	
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	571	0	0	0	43	571	
40	Pots and Traps, Fish	OPEN	all	MA	all	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	P
41	Pots and Traps, Fish	OPEN	all	NE	all	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	P
42	Pots and Traps, Conch	OPEN	all	MA	all	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	P
43	Pots and Traps, Conch	OPEN	all	NE	all	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	P
44	Pots and Traps, Hagfish	OPEN	all	MA	all	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	429	429	429	429	429	429	429	429	429	429	429	429	429	429	429	429	P
49	Pots and Traps, Crab	OPEN	all	MA	all	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	P
50	Pots and Traps, Crab	OPEN	all	NE	all	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	P
51	Beam Trawl	OPEN	all	MA	all	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	P
52	Beam Trawl	OPEN	all	NE	all	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	P
53	Dredge, Other	OPEN	all	MA	all	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	P
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	P
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	P
Totals						1,638	1,638	1,638	14,299	2,138	2,413	3,589	2,920	2,948	3,801	5,587	4,208	1,638	1,638	4,379	18,822	

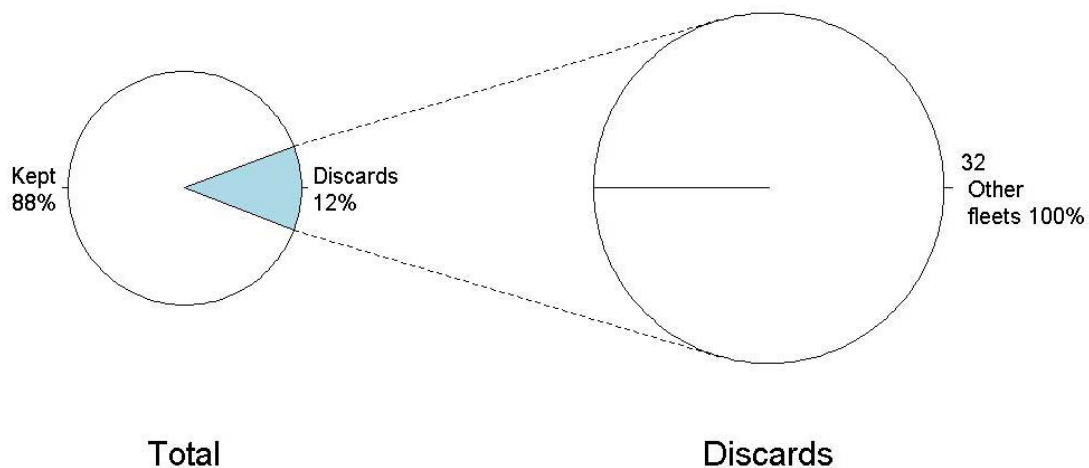
See supporting text for abbreviations; + indicates new fleet in 2012; "P" indicates fleets with "pilot" designation.

**Table 6. Number of sea days, trips, and percentage of trips (based upon previous industry activity) needed to achieve a 30% CV of the discard estimate, by fleet and species group, based on July 2010 through June 2011 data. See Table 1 and Appendix Table 3 for species group and fleet abbreviations, respectively.**

Row	FLEET	Species Group	Sea Days	Trips	% of Trips
5	OT sm MA	RCRAB	3,231	1,361	40
		GFS	545	230	7
		FSB	513	216	6
		GFL	497	209	6
		SKATE	397	167	5
		SBM	364	154	5
		DOG	325	137	4
6	OT lg MA	RCRAB	5,551	2,612	42
		DOG	333	157	3
		FSB	173	81	1
		MONK	164	77	1
		GFL	141	66	1
		SKATE	107	50	1
7	OT sm NE	DOG	1,151	498	14
		SKATE	531	230	6
		FSB	489	212	6
		GFL	461	199	5
		GFS	451	195	5
		SBM	411	177	5
8	OT lg NE	RCRAB	3,879	1,364	19
		FSB	788	277	4
		MONK	568	200	3
		GFS	280	98	1
		SKATE	261	92	1
		DOG	229	81	1
		GFL	76	27	<1
11	SCT OPEN GEN MA	SKATE	32	17	5
17	OTH lg NE	DOG	567	69	27
		SKATE	257	31	12
19	SHT NE	GFS	34	33	1
24	GN xlg MA	SKATE	83	67	3
		MONK	70	56	2
26	GN lg NE	DOG	97	82	1
27	GN xlg NE	DOG	171	117	4
		MONK	132	90	3
		SKATE	118	81	2
32	SCD AA LIM MA	MONK	282	32	12
33	SCD AA LIM NE	MONK	189	20	12
34	SCD OPEN GEN MA	SKATE	50	36	1
36	SCD OPEN LIM MA	MONK	312	34	3
		SKATE	164	18	1
37	SCD OPEN LIM NE	FSB	607	58	4
		DOG	505	49	4
		SCAL	500	48	4
		MONK	234	23	2
		SKATE	163	16	1
		GFL	107	10	1
39	MWT NE	DOG	571	160	49

Figure 1A. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups (except Atlantic Salmon) for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: BLUEFISH



## SPECIES: FLUKE - SCUP - BLACK SEA BASS

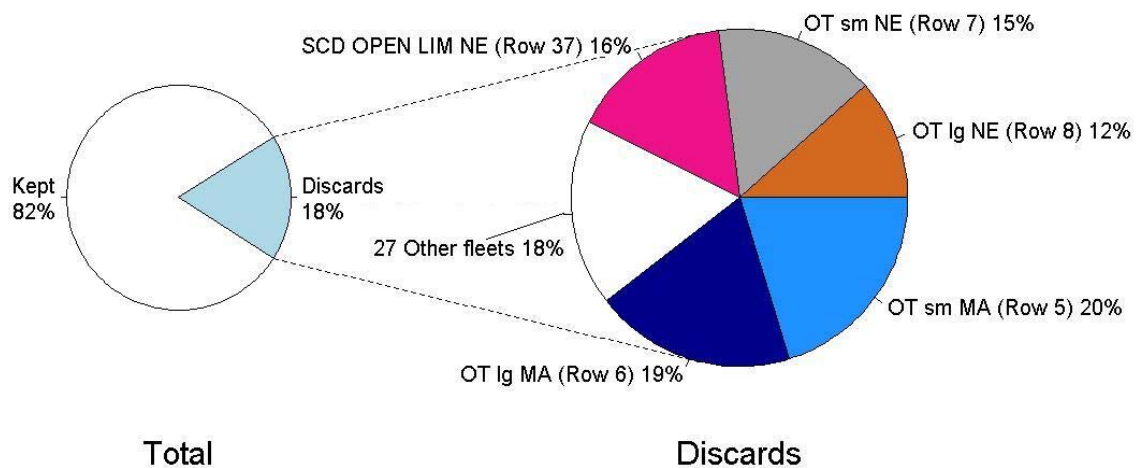
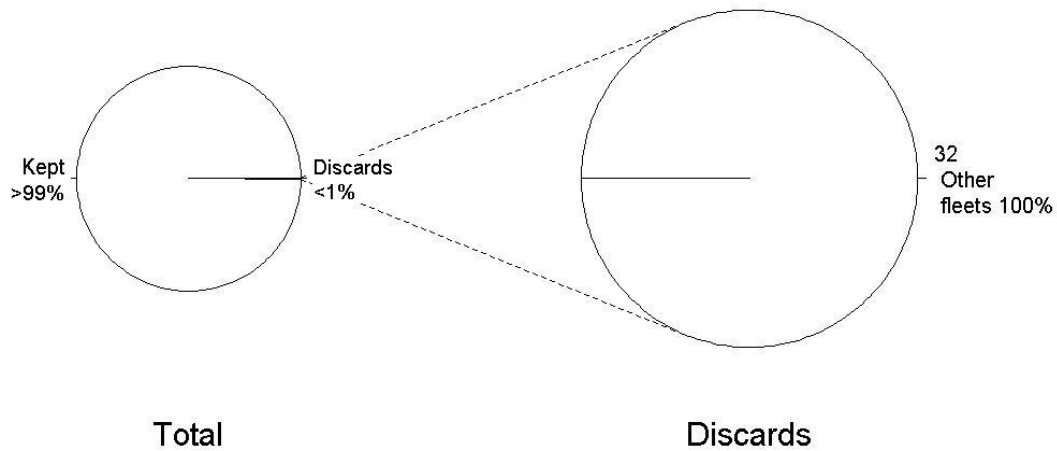


Figure 1A continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups (except Atlantic Salmon) for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: HERRING, ATLANTIC



## SPECIES: LARGE MESH GROUND FISH

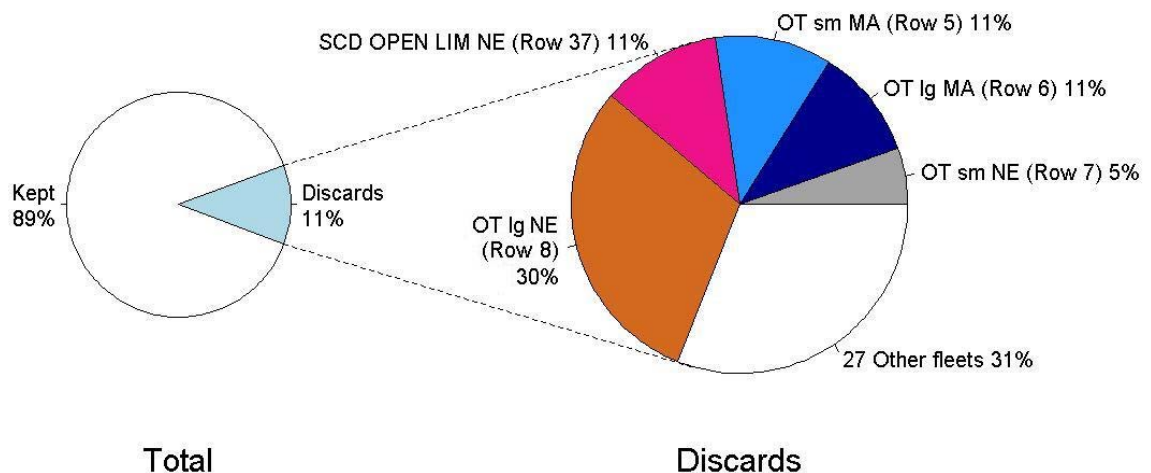
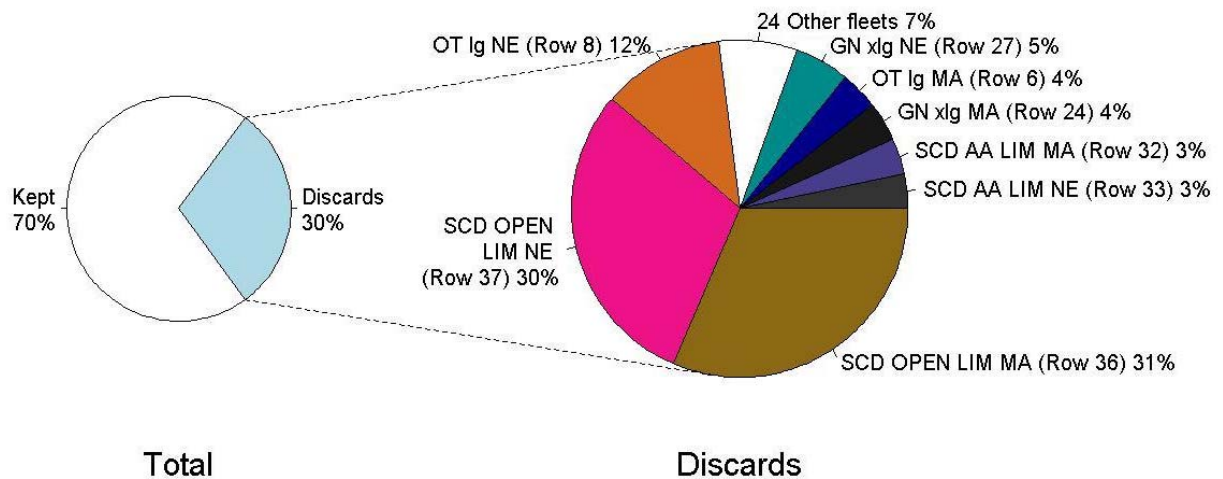


Figure 1A continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups (except Atlantic Salmon) for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: MONKFISH



## SPECIES: RED CRAB

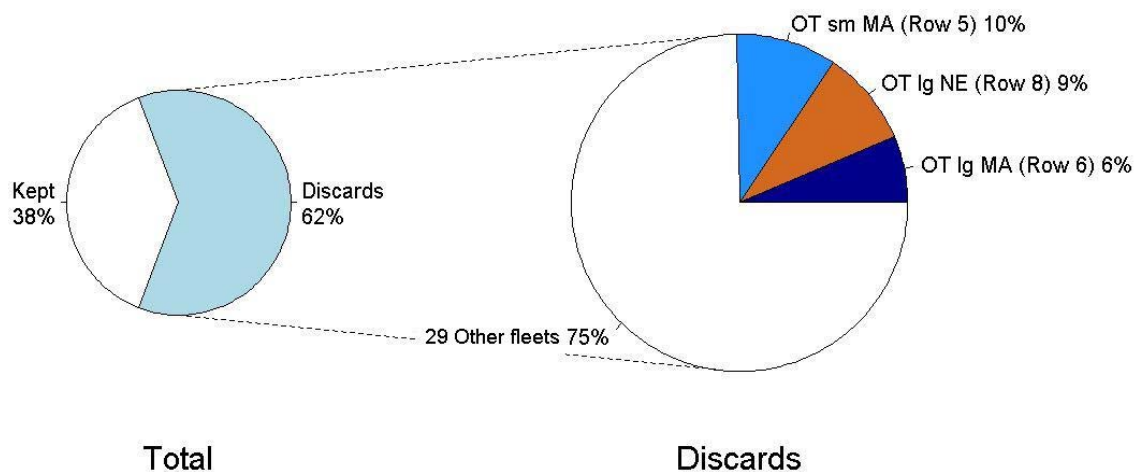
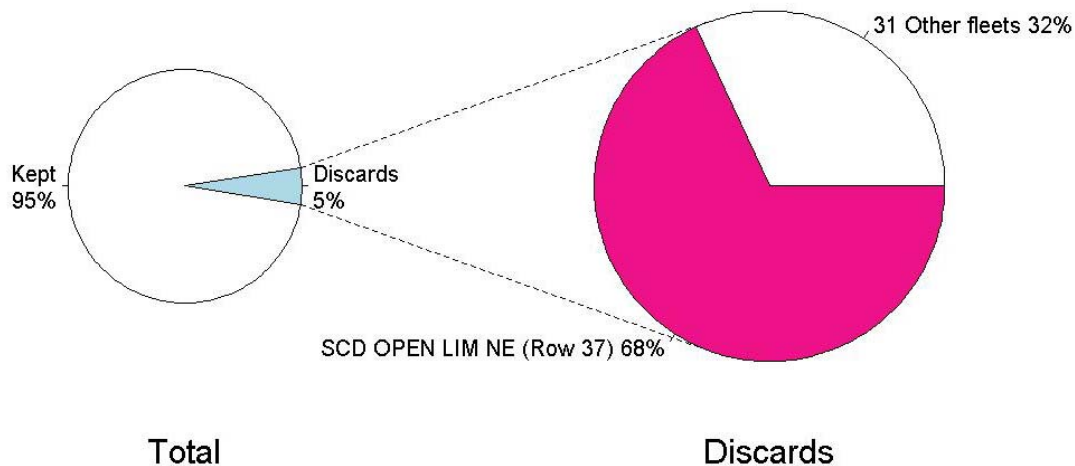


Figure 1A continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups (except Atlantic Salmon) for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: SEA SCALLOP



## SPECIES: SKATE COMPLEX

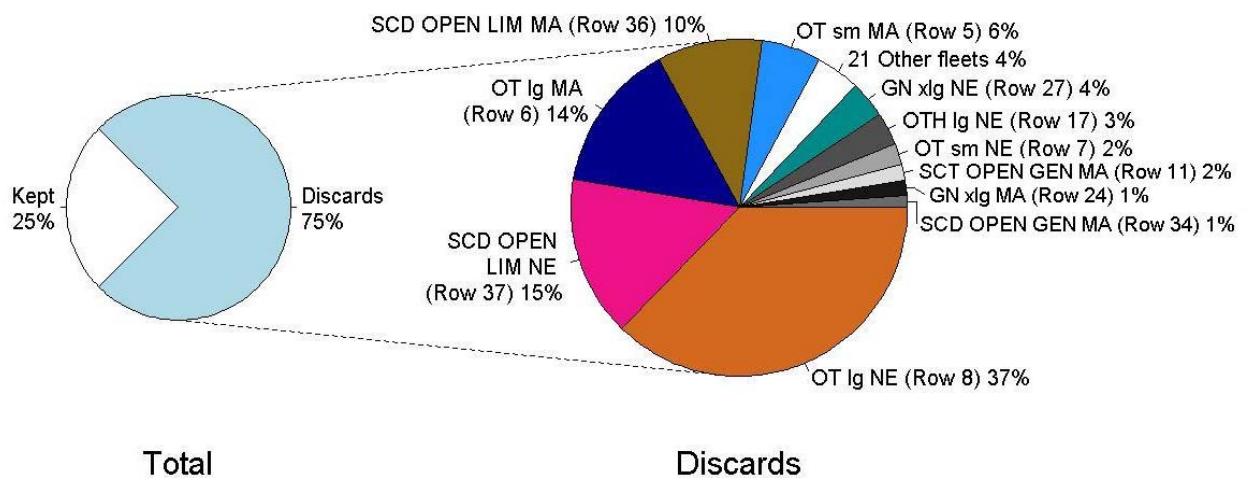
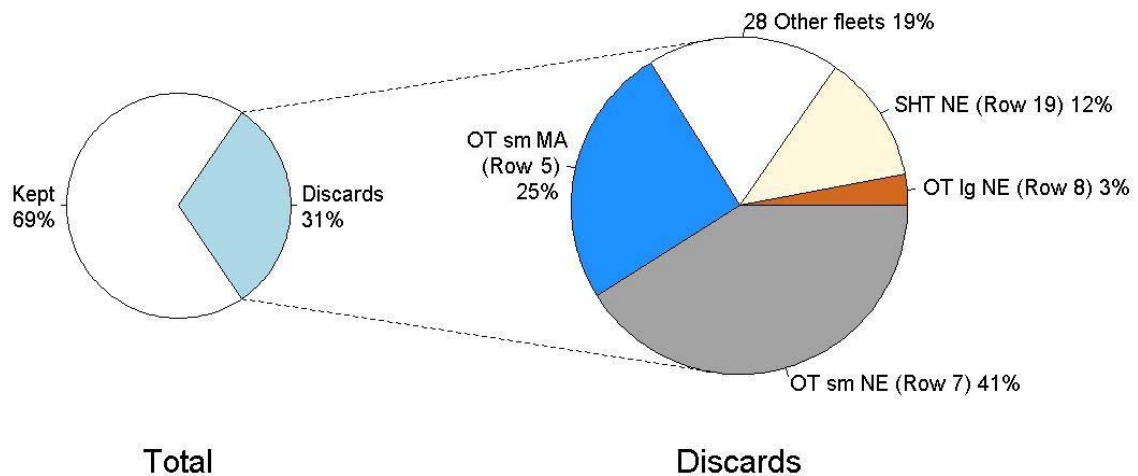


Figure 1A continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups (except Atlantic Salmon) for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: SMALL MESH GROUNDFISH



## SPECIES: SPINY DOGFISH

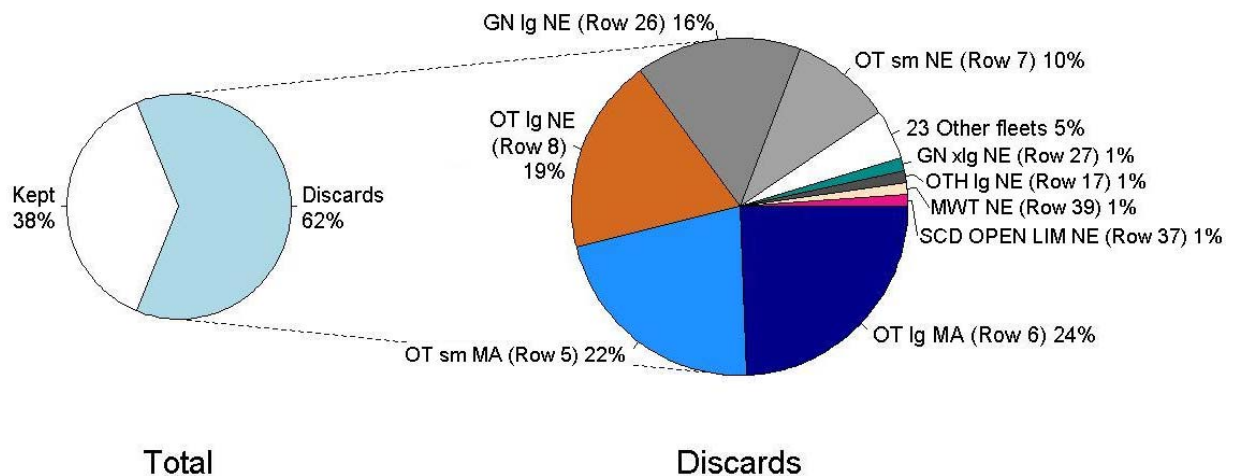
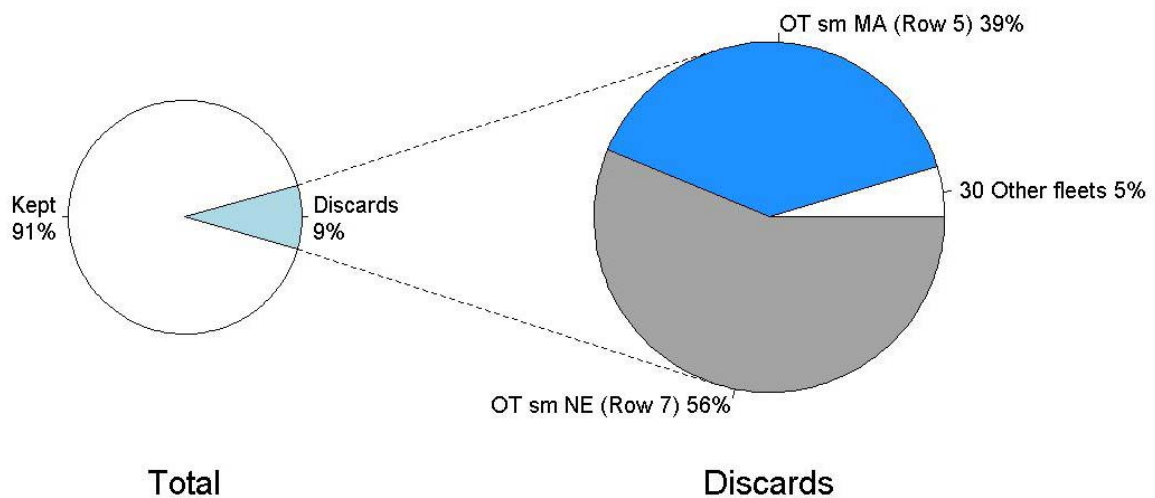


Figure 1A continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups (except Atlantic Salmon) for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: SQUID - BUTTERFISH - MACKEREL



## SPECIES: SURFCLAM - OCEAN QUAHOG

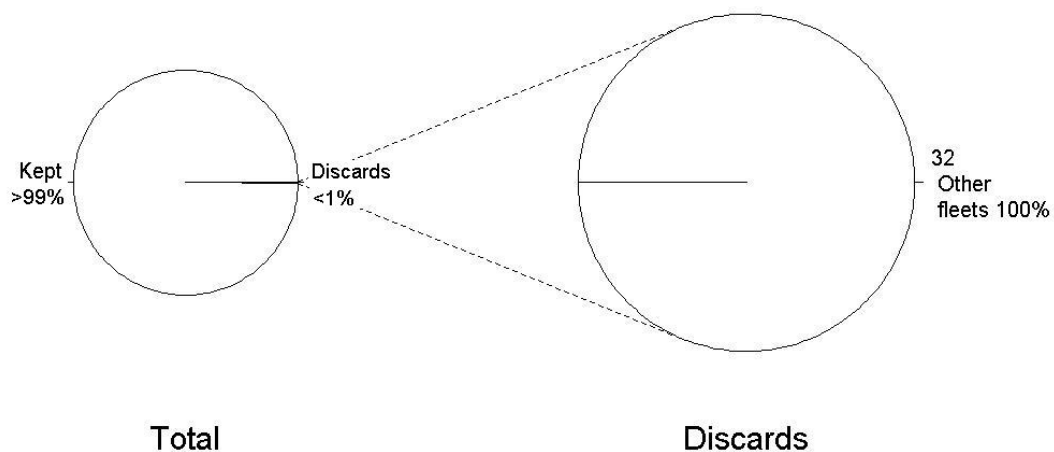




Figure 1A continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups (except Atlantic Salmon) for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: TILEFISH

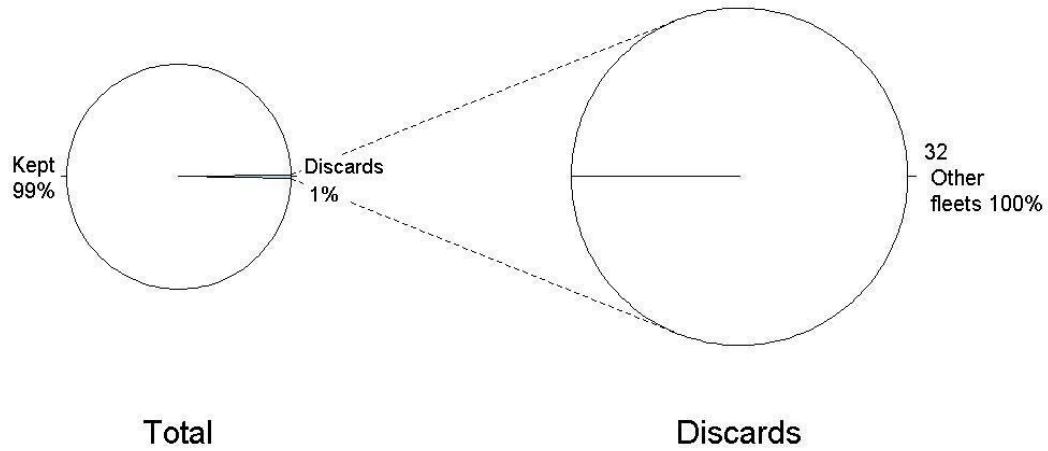
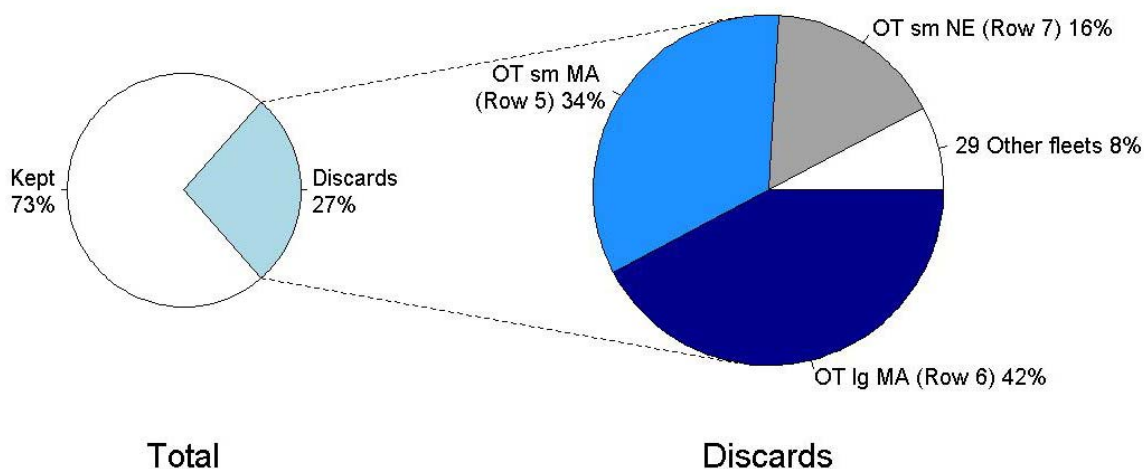


Figure 1B. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: BLACK SEA BASS



## SPECIES: FLUKE

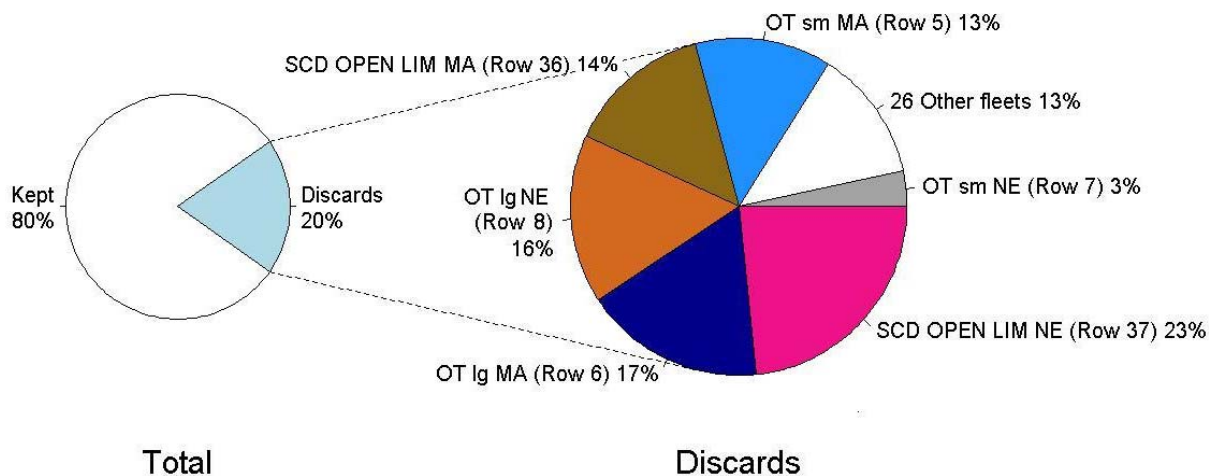
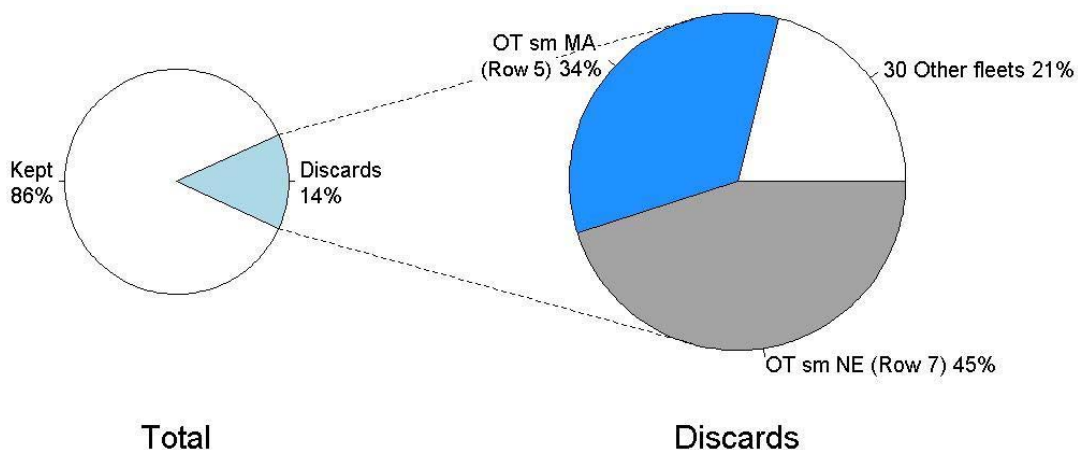


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: SCUP



## SPECIES: AMERICAN PLAICE

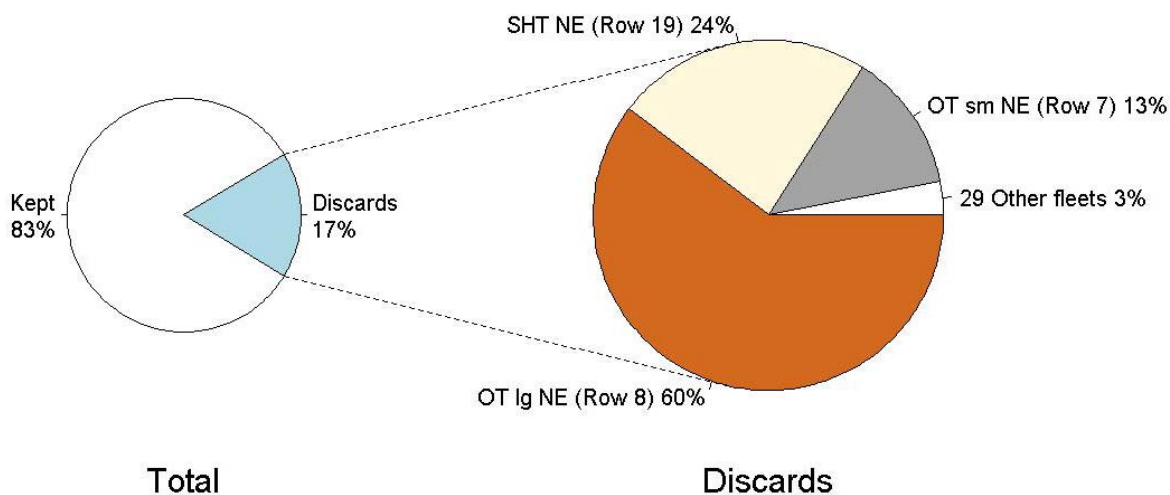
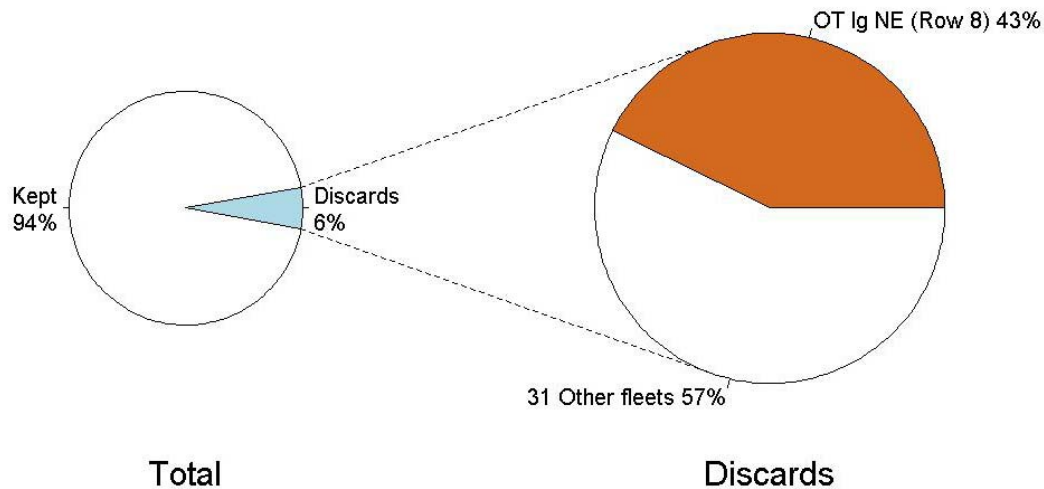


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: ATLANTIC COD



## SPECIES: ATLANTIC HALIBUT

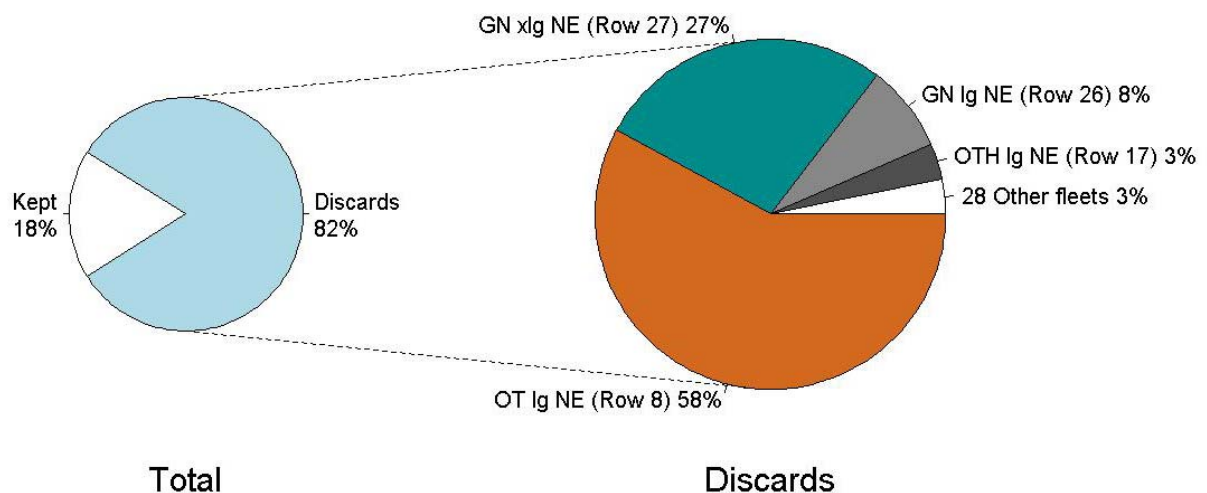
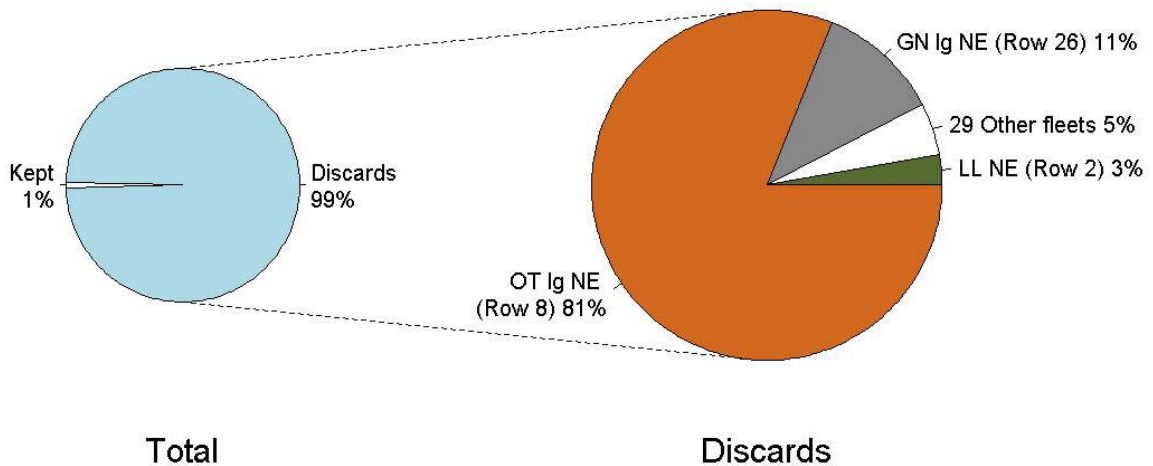


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: ATLANTIC WOLFFISH



## SPECIES: HADDOCK

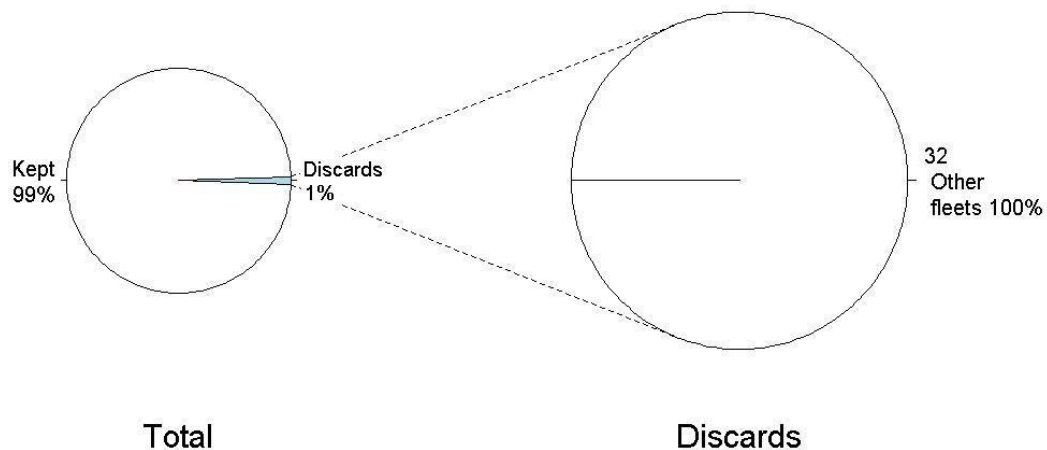
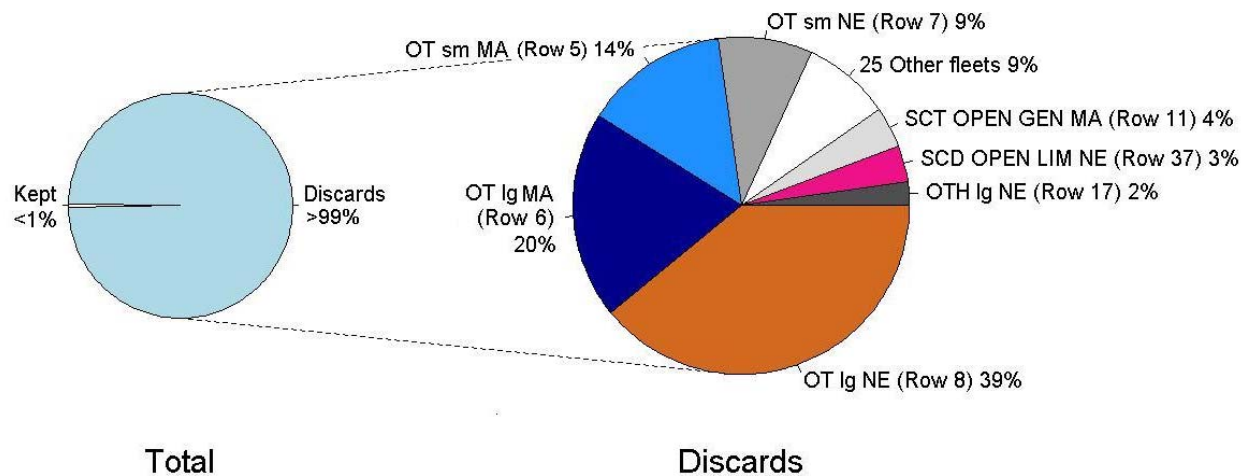


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: OCEAN POUT



## SPECIES: POLLOCK

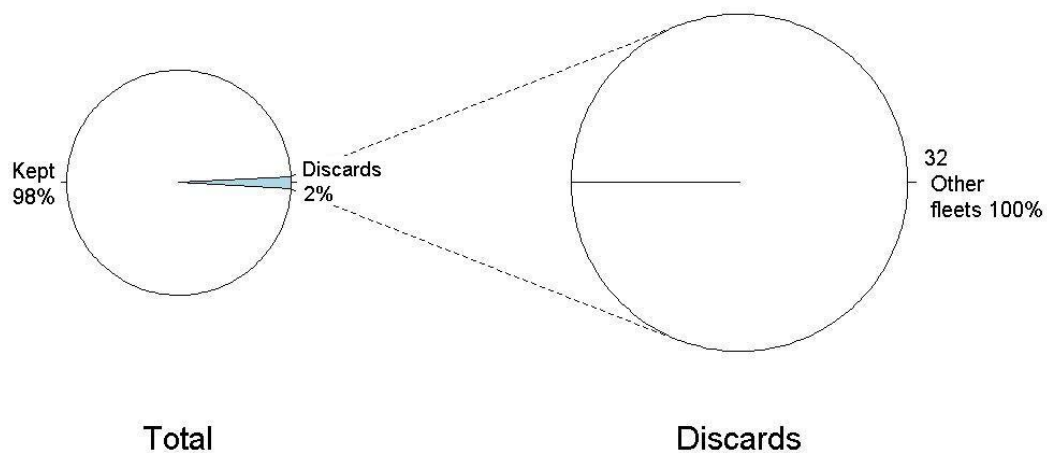
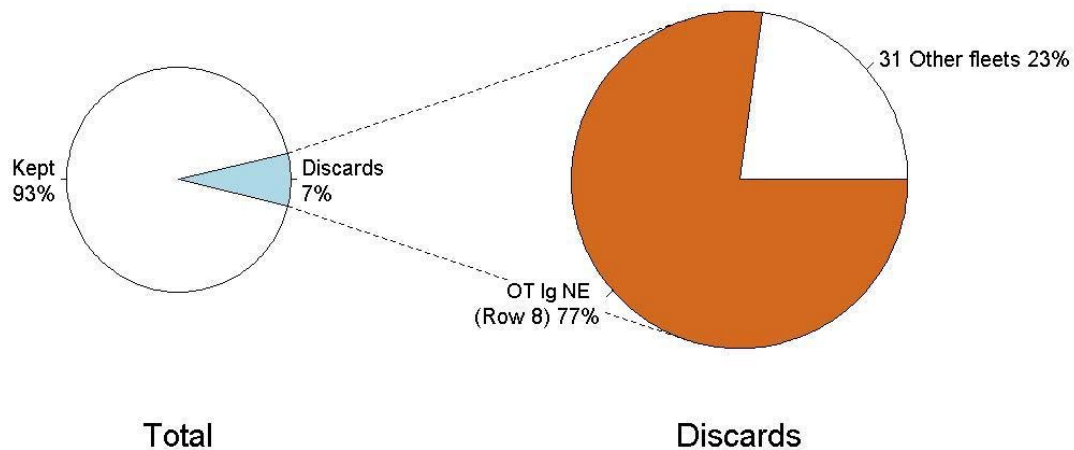


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: REDFISH



## SPECIES: WHITE HAKE

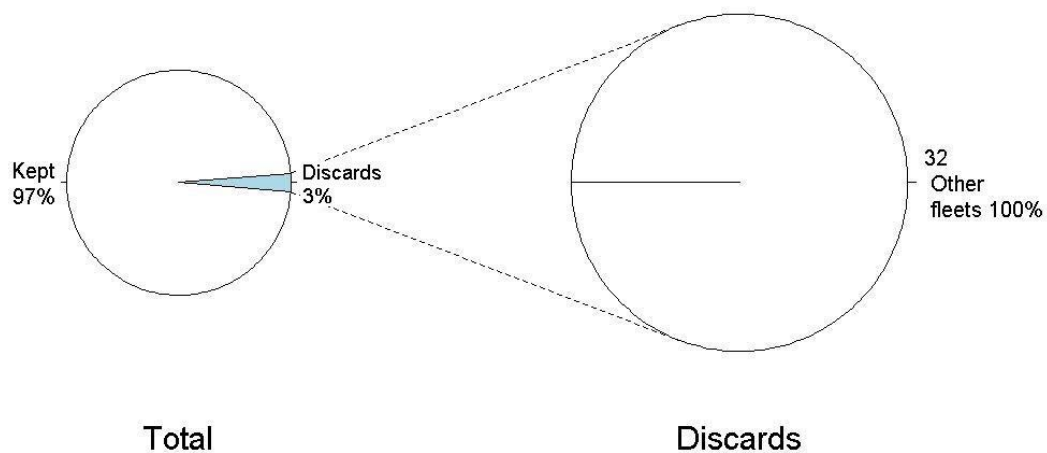
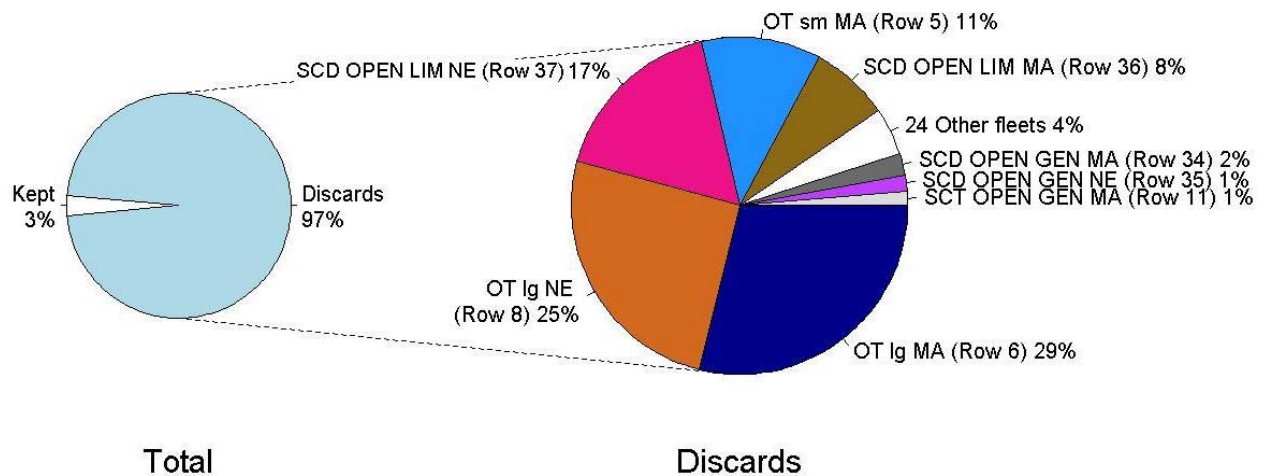


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: WINDOWPANE FLOUNDER



## SPECIES: WINTER FLOUNDER

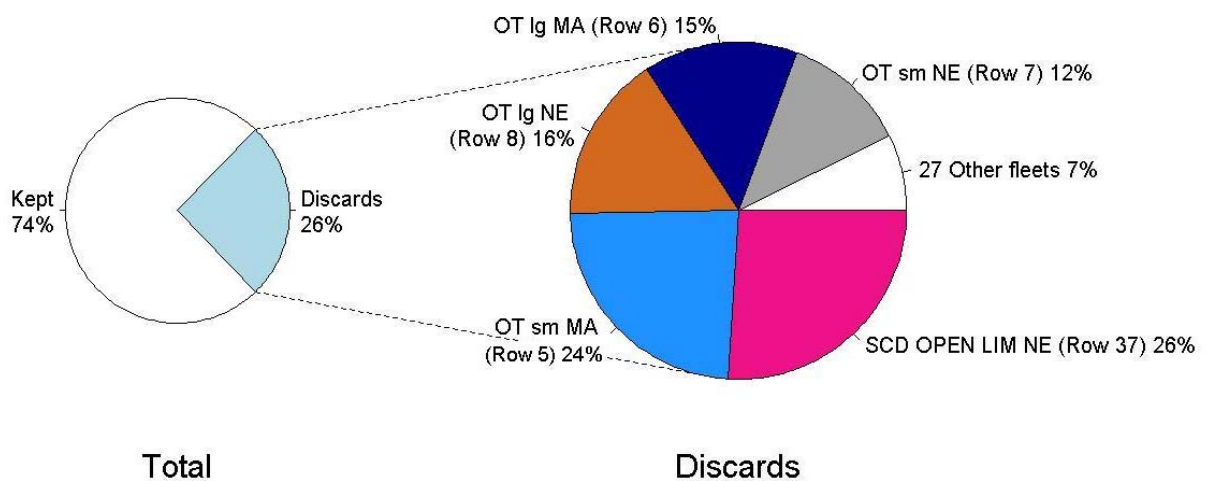
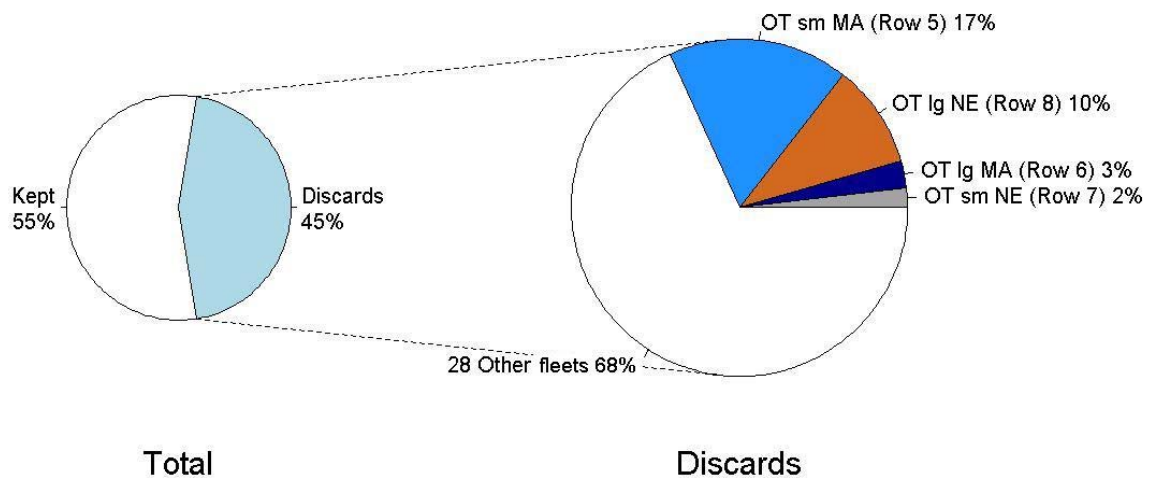




Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: WITCH FLOUNDER



## SPECIES: YELLOWTAIL FLOUNDER

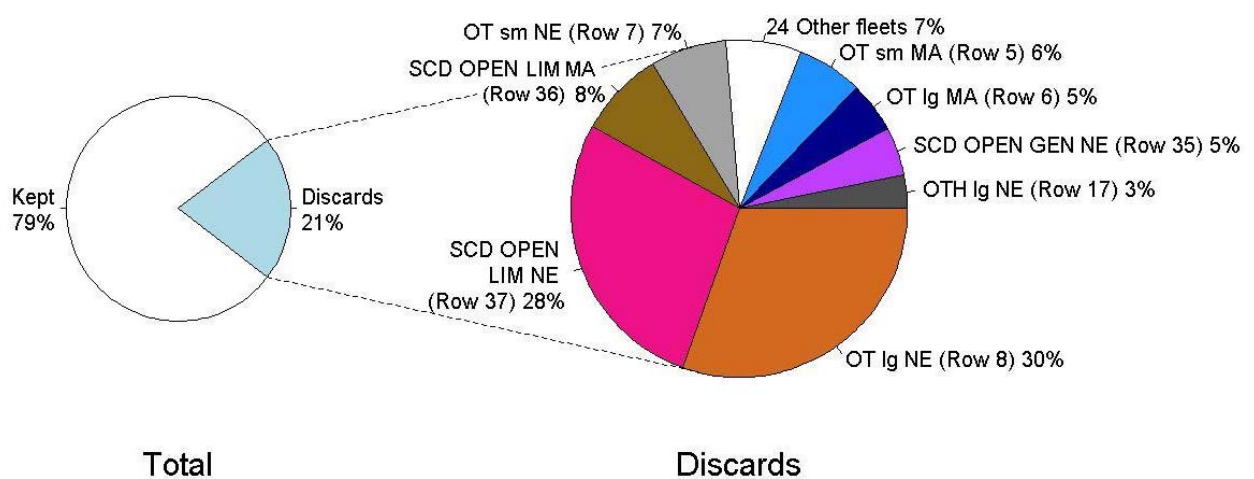
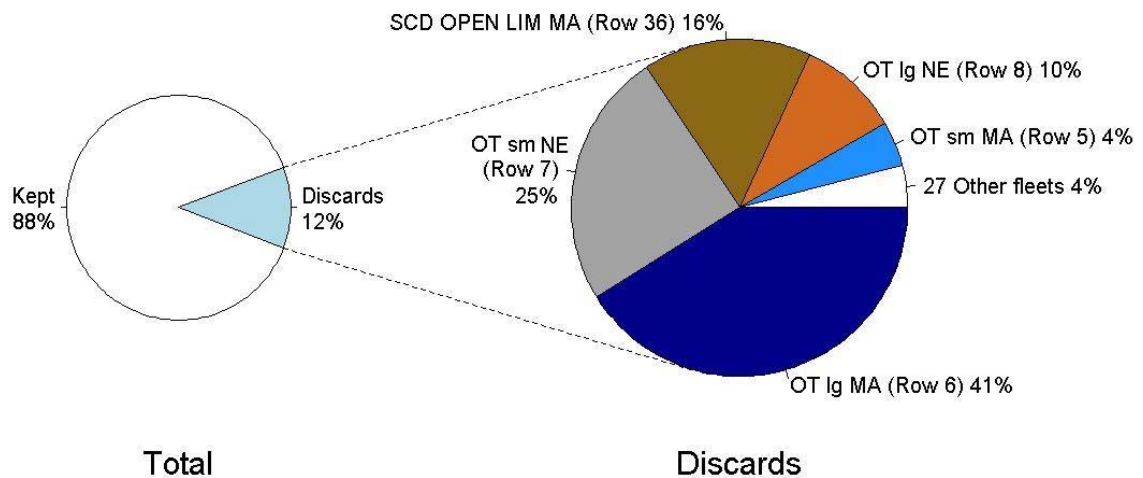


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: OFFSHORE HAKE



## SPECIES: RED HAKE

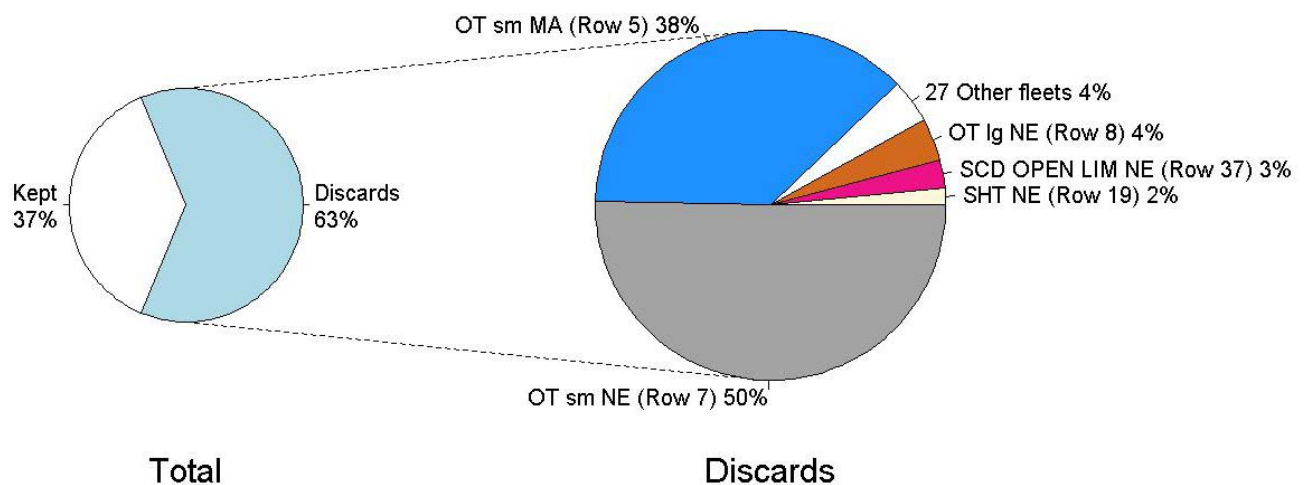
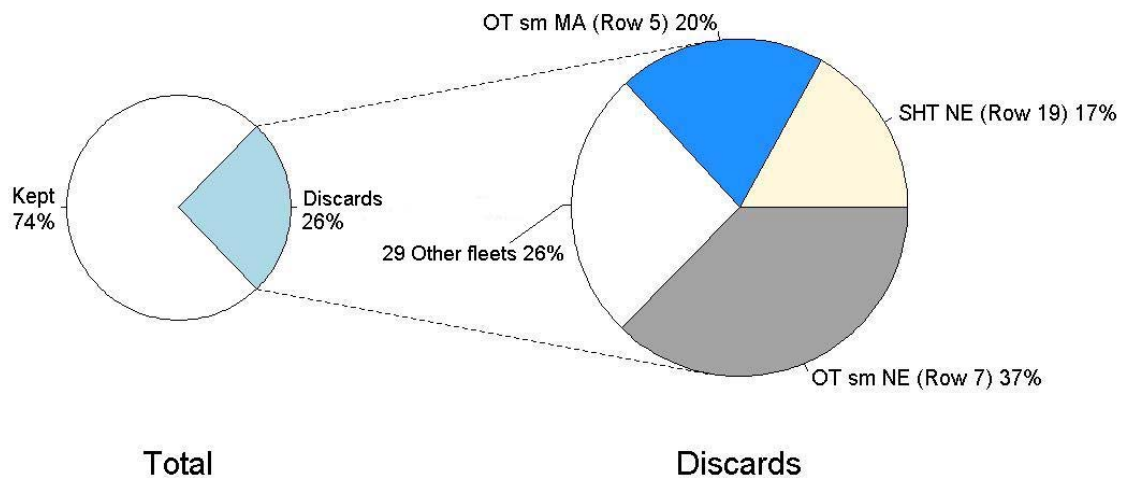


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: SILVER HAKE



## SPECIES: ATLANTIC MACKEREL

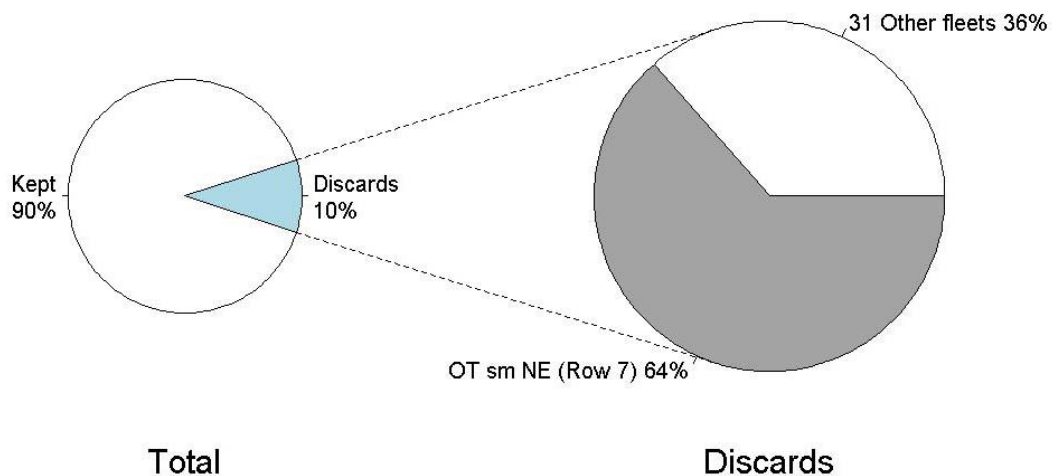
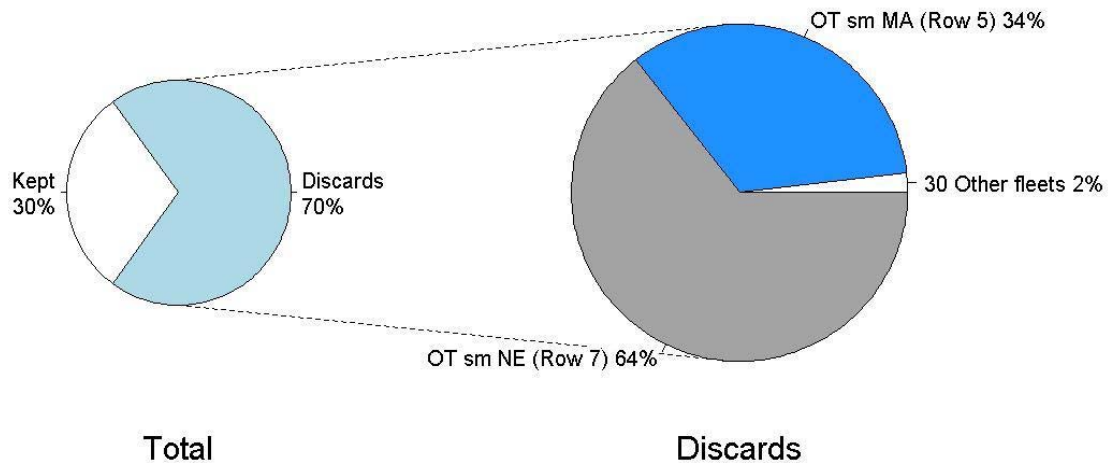


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: BUTTERFISH



## SPECIES: ILLEX SQUID

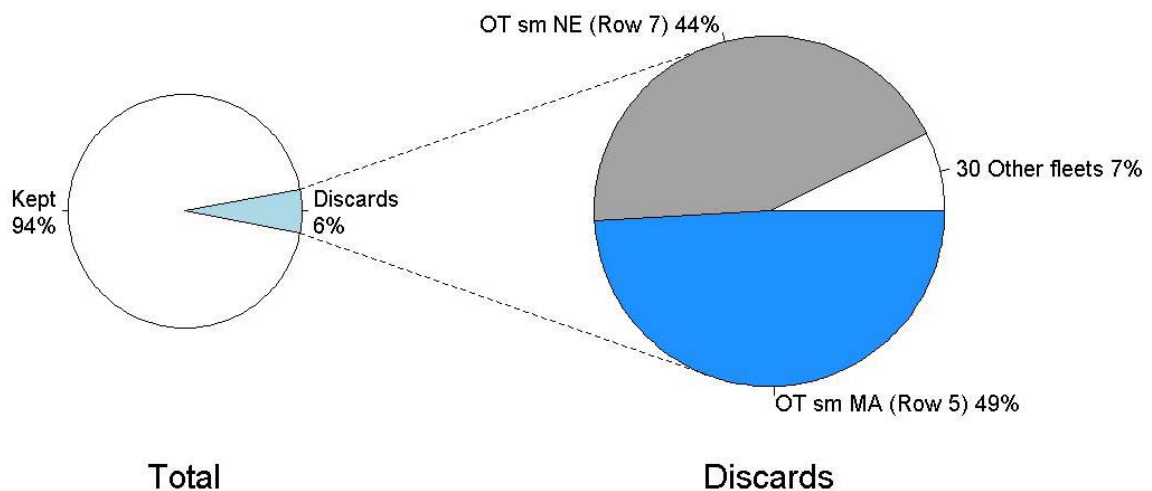


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011. See Appendix Table 3 for fleet abbreviations.

## SPECIES: LOLIGO SQUID

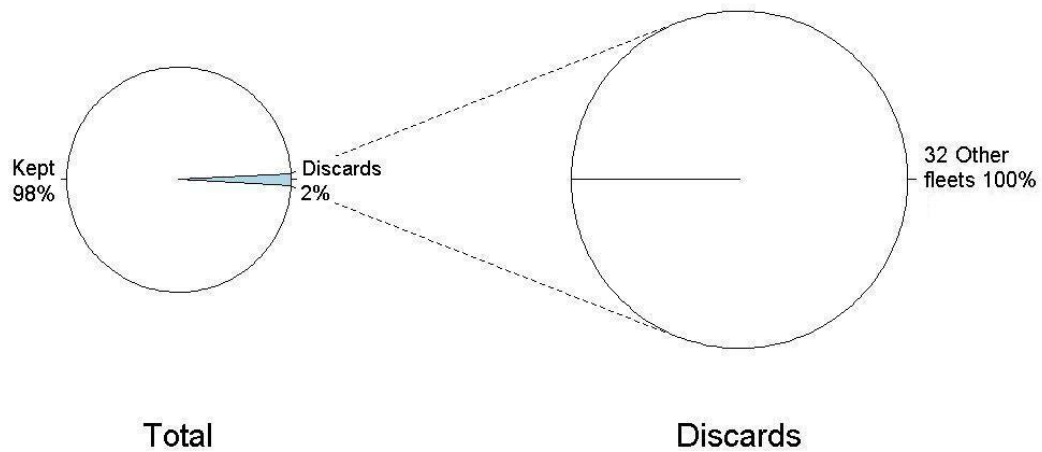
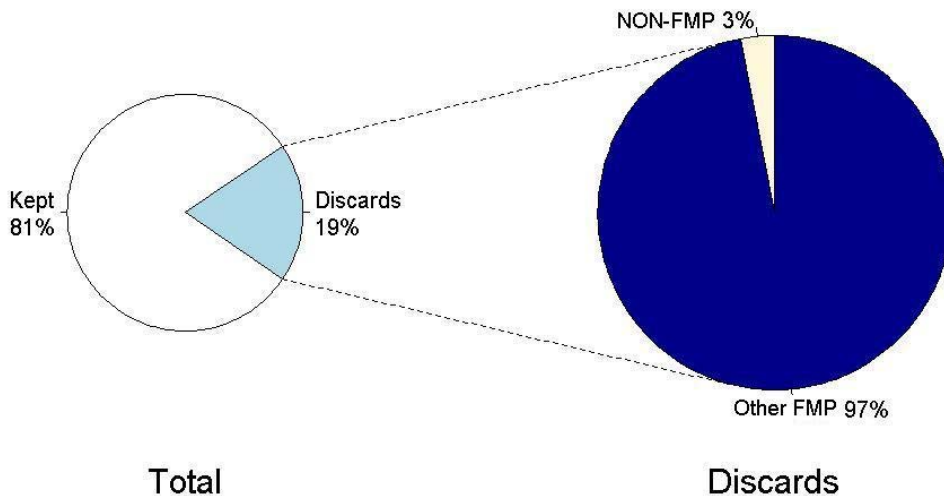


Figure 2. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”

*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Longline OPEN all NE all (Row 2)



## FLEET: Hand Line OPEN all NE all (Row 4)

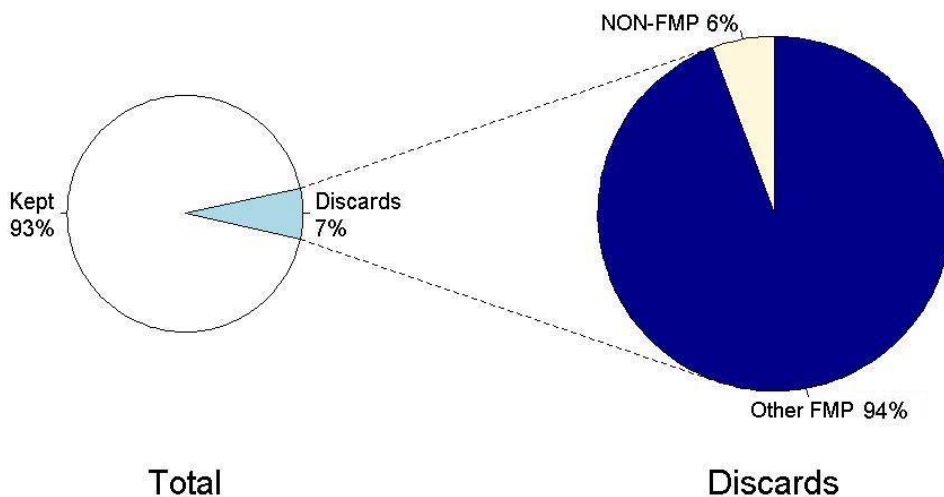
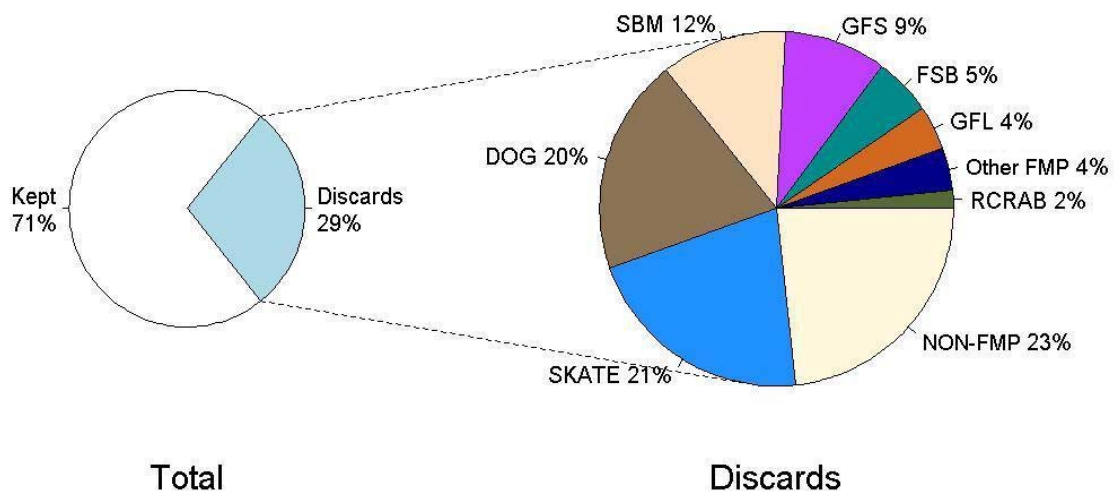


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Otter Trawl OPEN all MA sm (Row 5)



## FLEET: Otter Trawl OPEN all MA lg (Row 6)

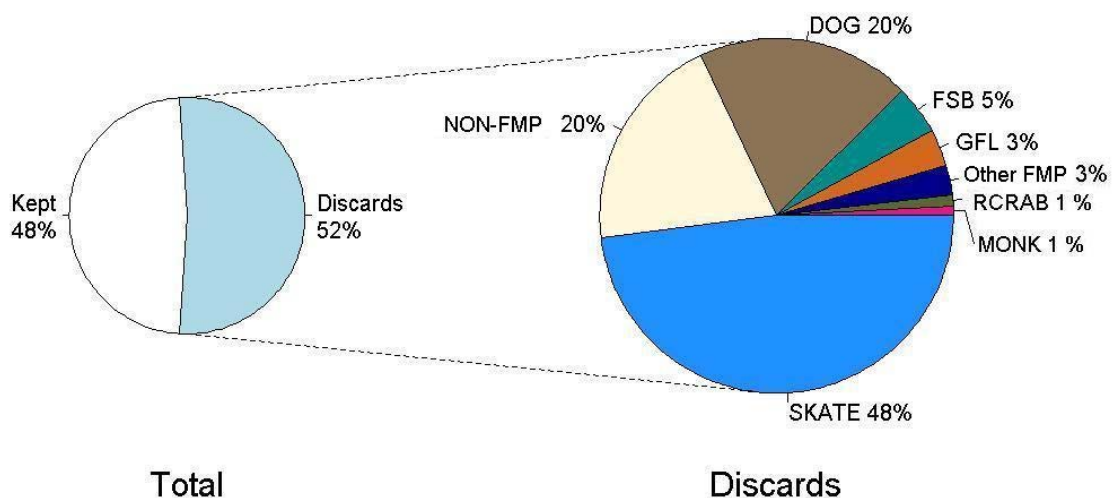
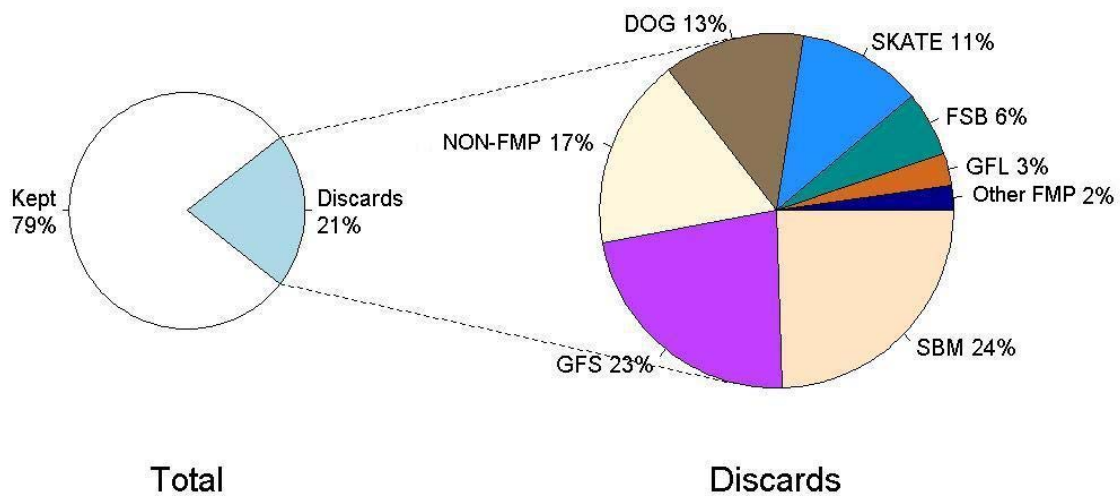


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Otter Trawl OPEN all NE sm (Row 7)



## FLEET: Otter Trawl OPEN all NE lg (Row 8)

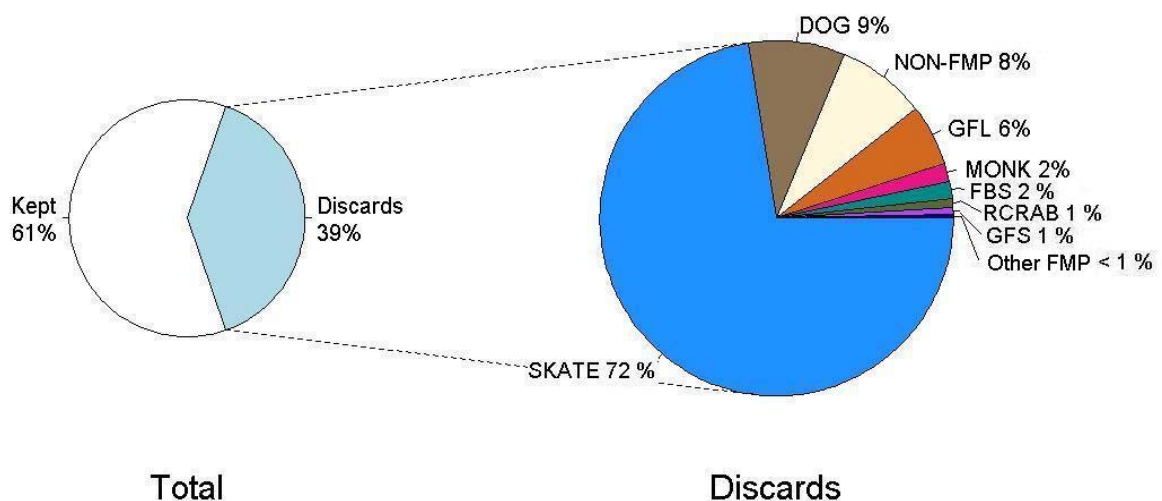
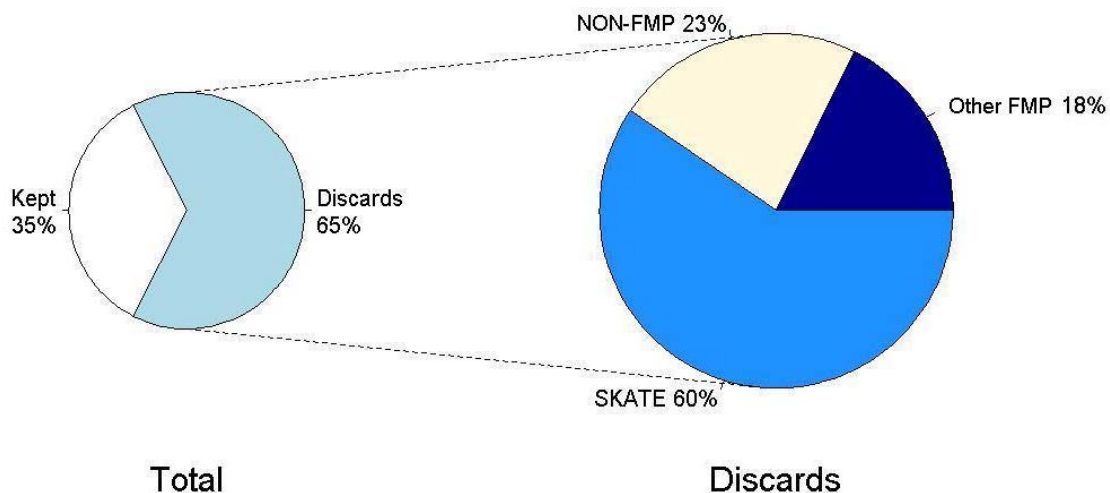




Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Scallop Trawl OPEN GEN MA all (Row 11)



## FLEET: Otter Trawl, Ruhle OPEN all NE Ig (Row 15)

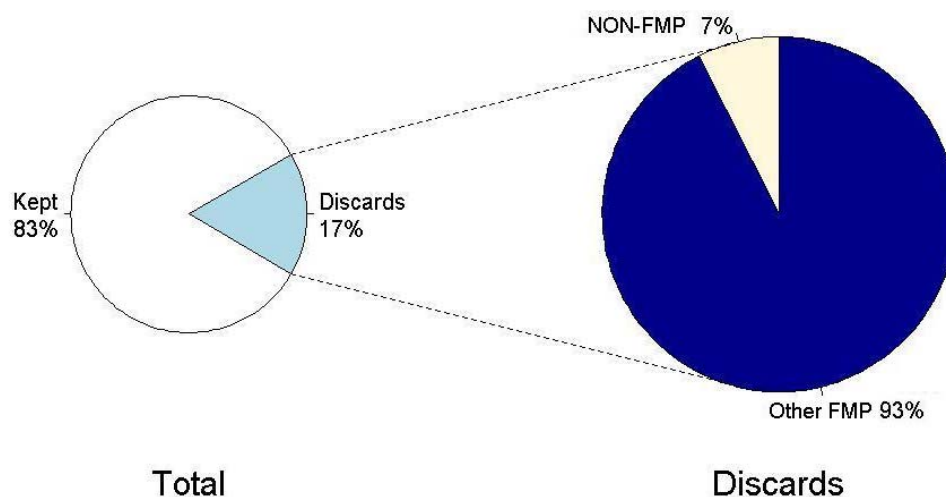
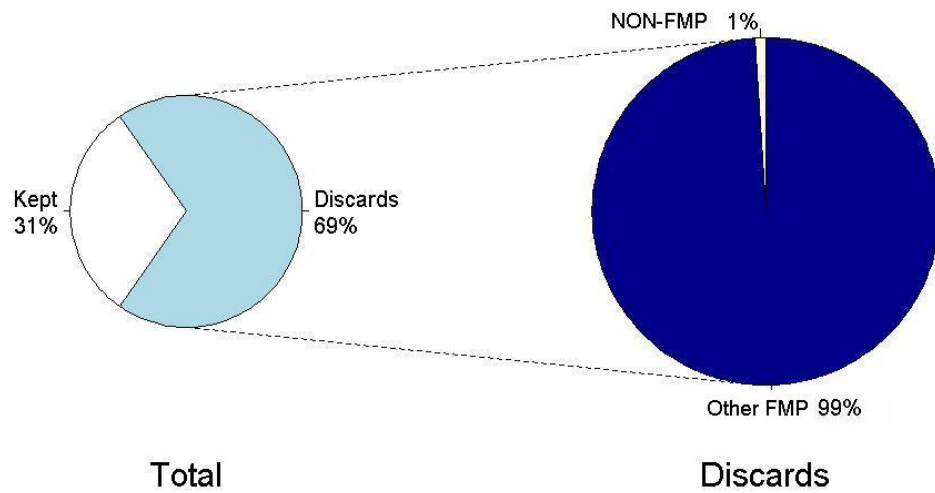


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Otter Trawl, Haddock Separator OPEN all MA Ig (Row 16)



## FLEET: Otter Trawl, Haddock Separator OPEN all NE Ig (Row 17)

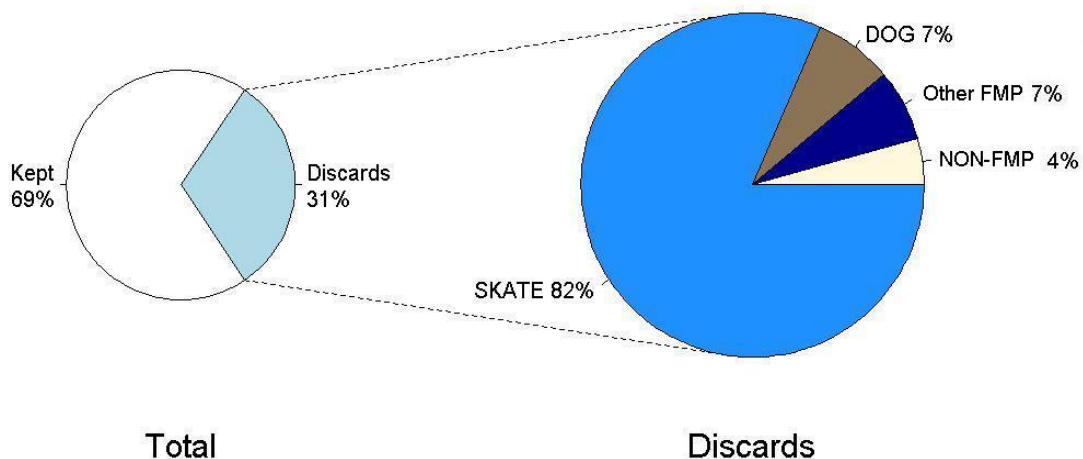
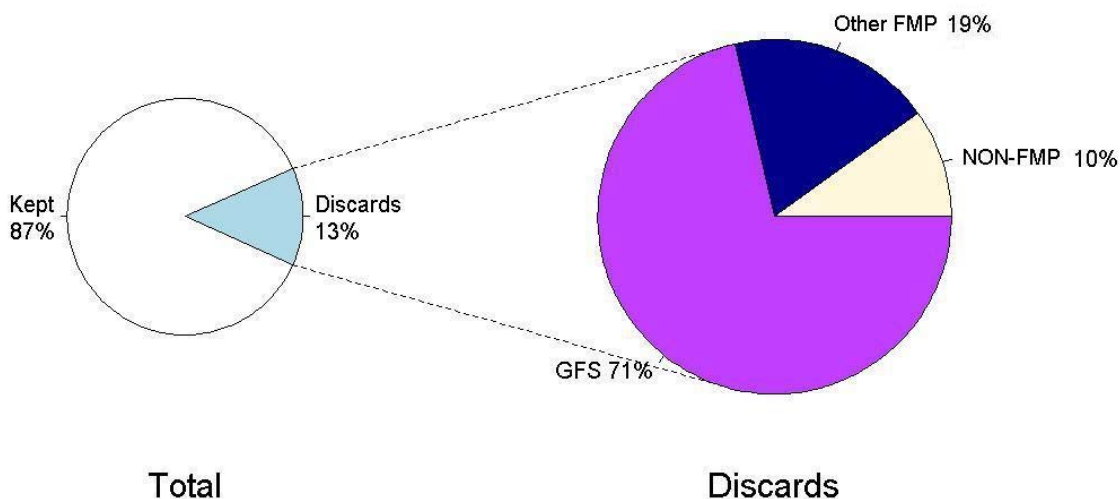


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Shrimp Trawl OPEN all NE all (Row 19)



## FLEET: Gillnet OPEN all MA sm (Row 22)

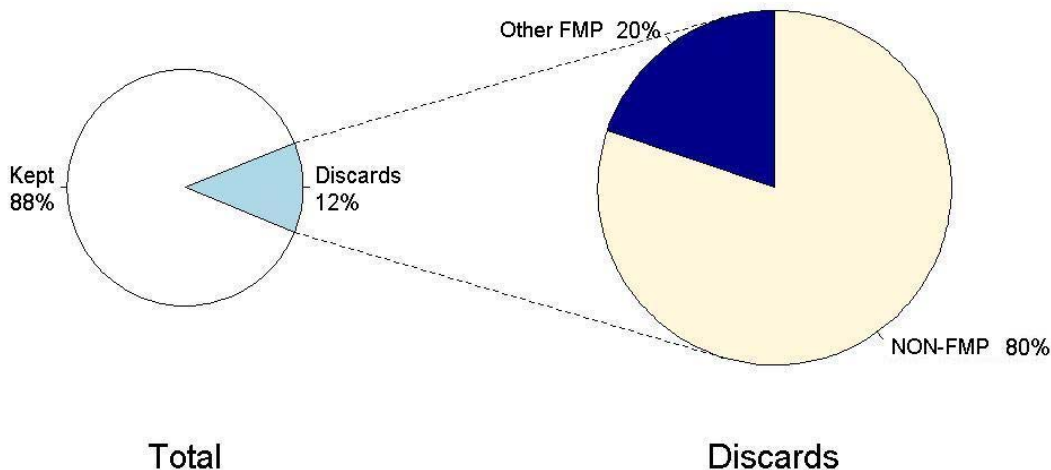
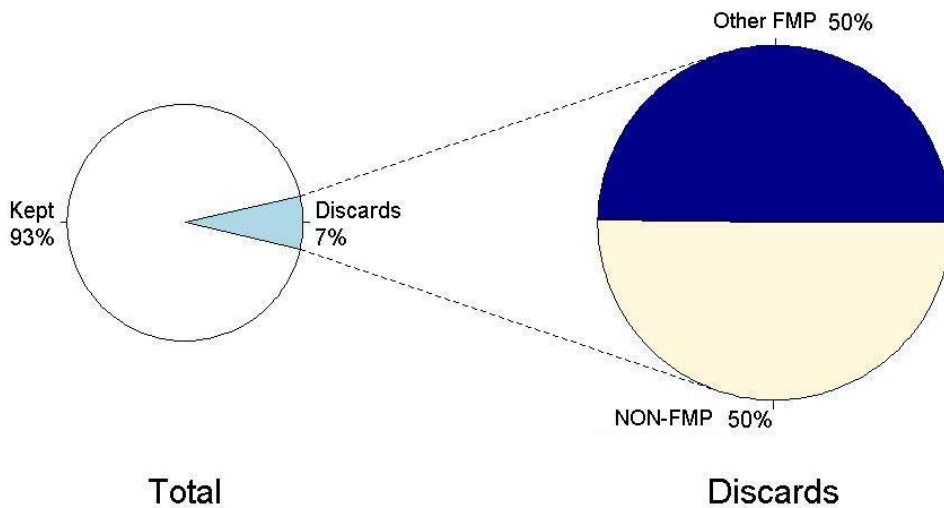


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Gillnet OPEN all MA lg (Row 23)



## FLEET: Gillnet OPEN all MA xlg (Row 24)

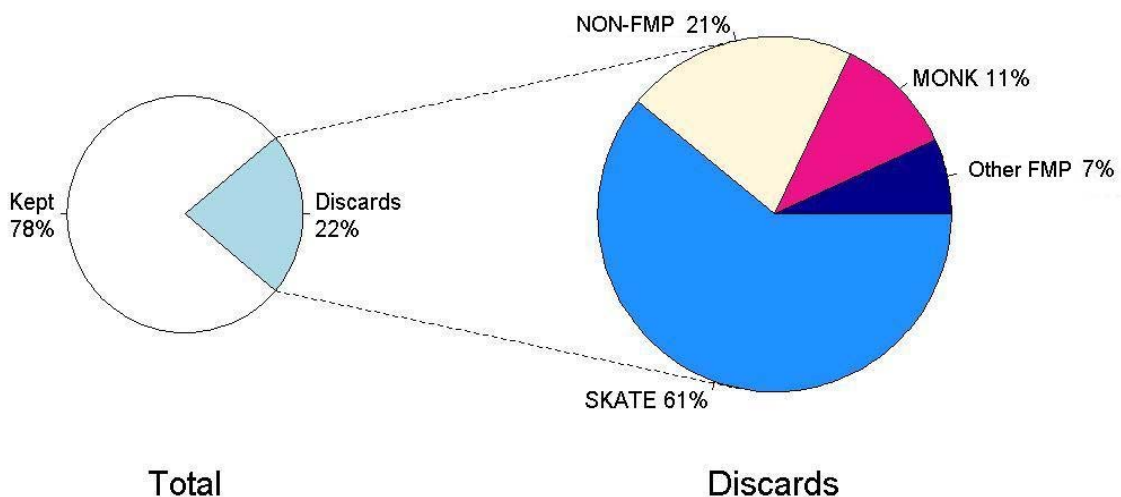
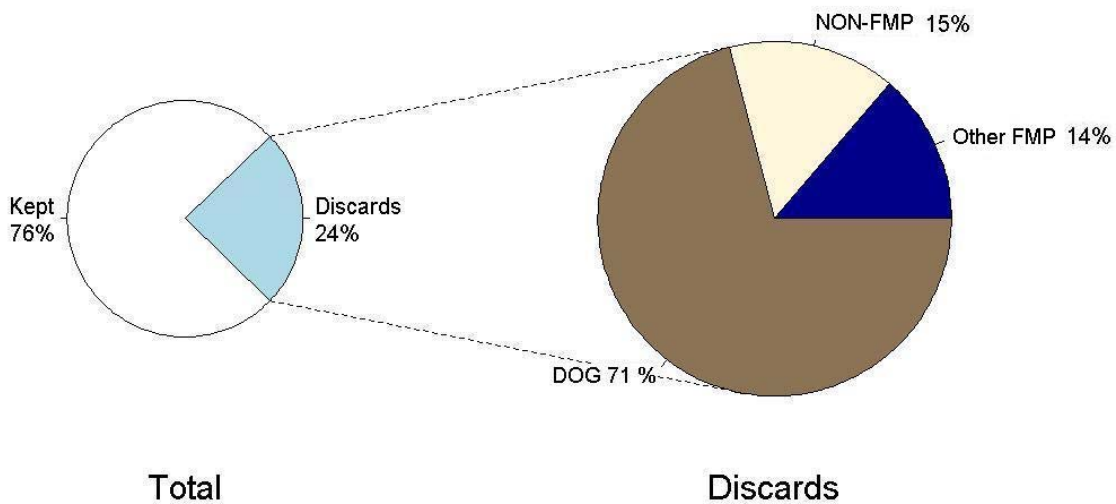


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Gillnet OPEN all NE lg (Row 26)



## FLEET: Gillnet OPEN all NE xlg (Row 27)

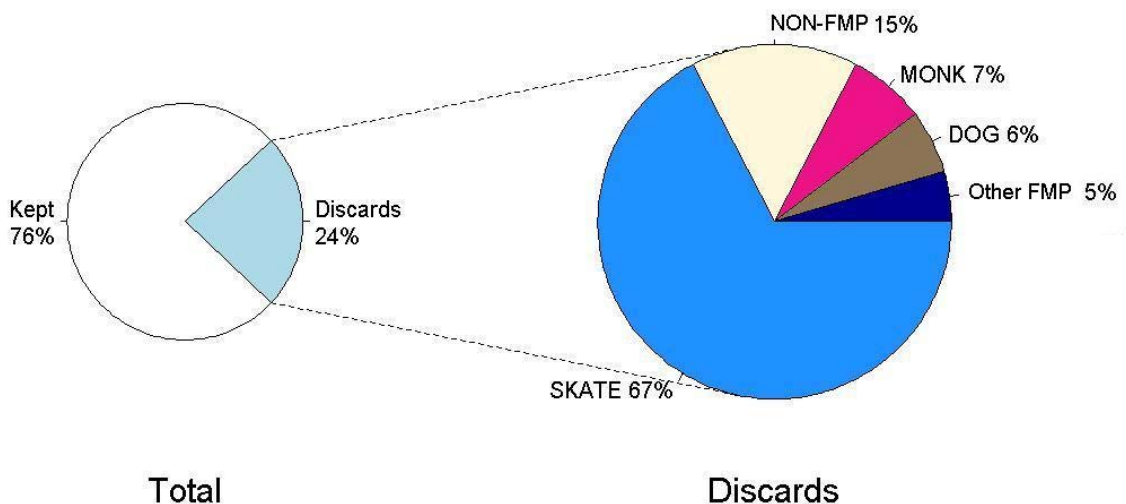
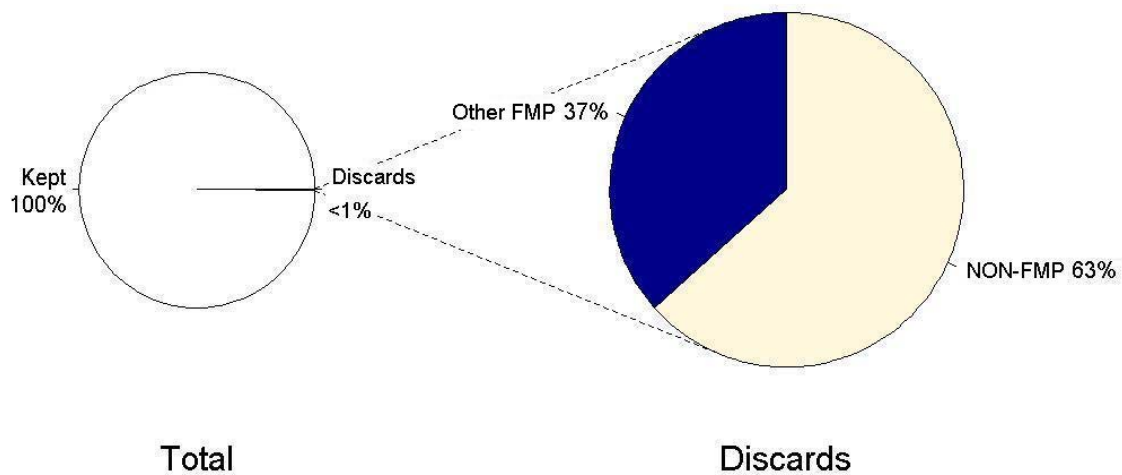


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Purse Seine OPEN all NE all (Row 29)



## FLEET: Scallop Dredge AA GEN NE all (Row 31)

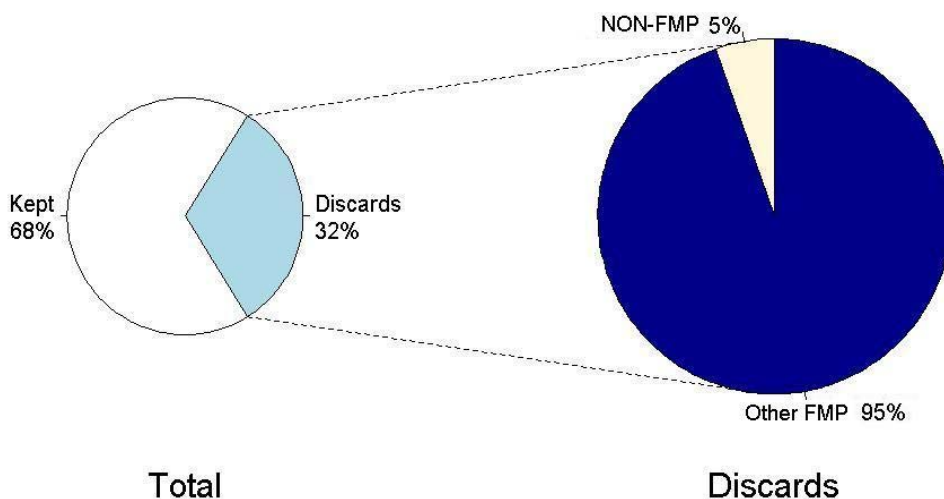
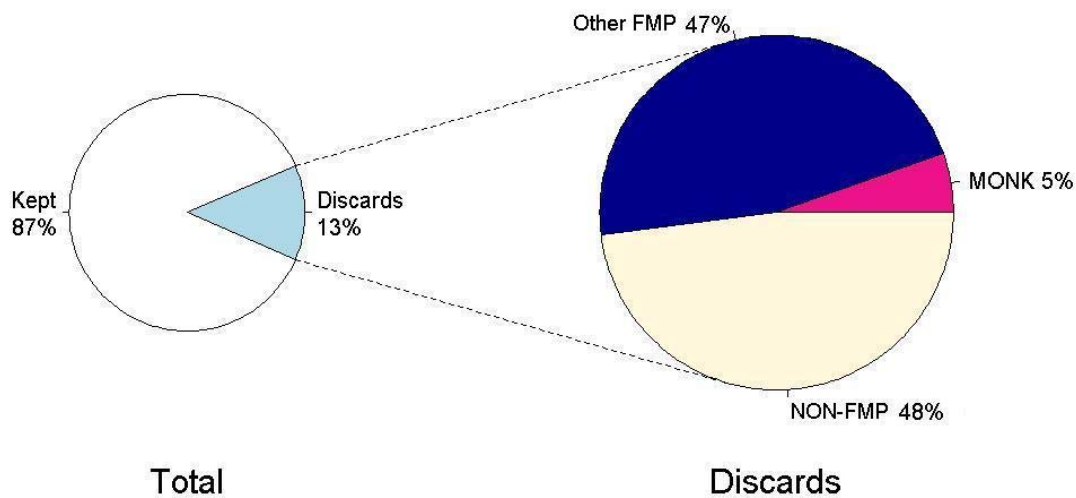


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Scallop Dredge AA LIM MA all (Row 32)



## FLEET: Scallop Dredge AA LIM NE all (Row 33)

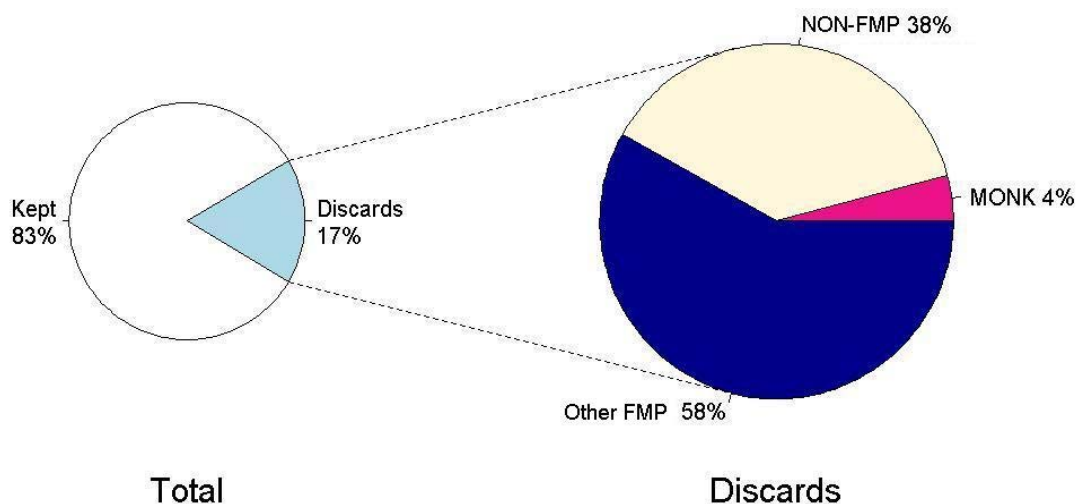
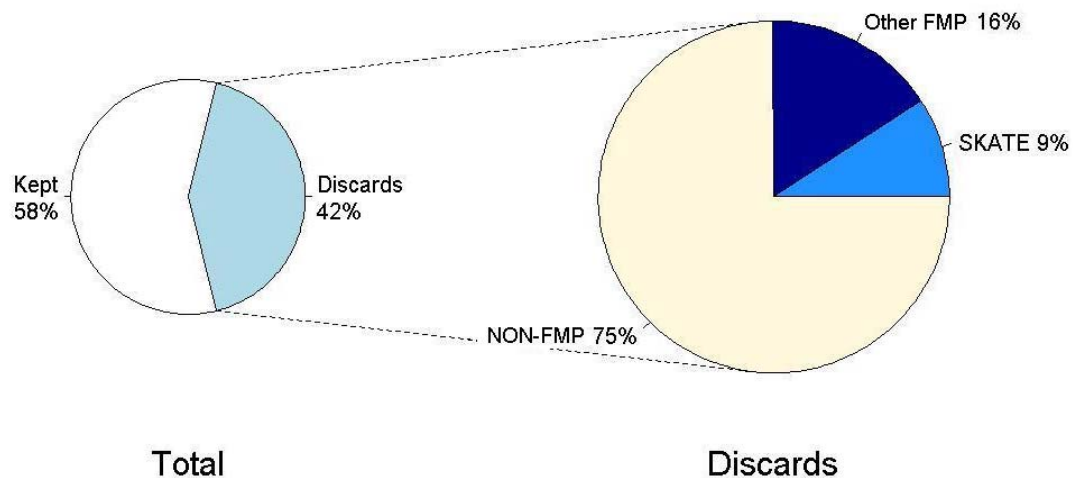




Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Scallop Dredge OPEN GEN MA all (Row 34)



## FLEET: Scallop Dredge OPEN GEN NE all (Row 35)

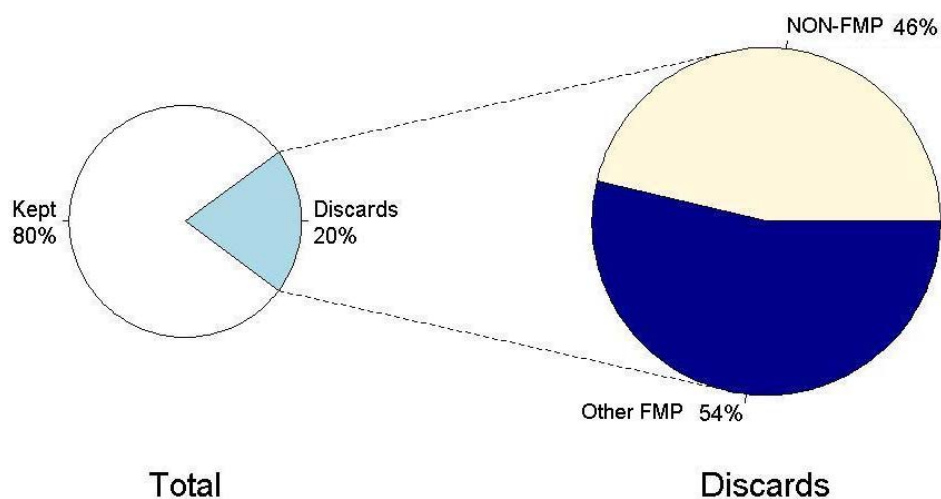
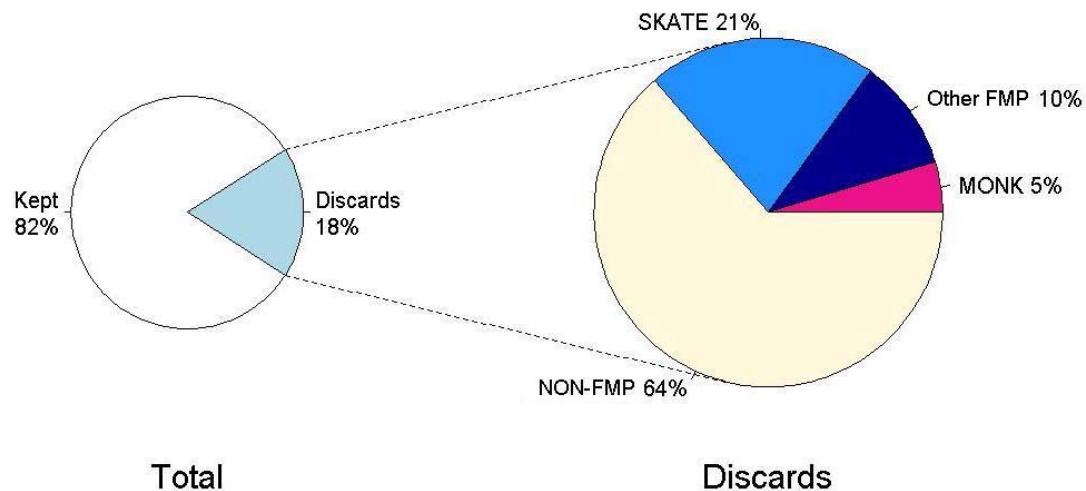




Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Scallop Dredge OPEN LIM MA all (Row 36)



## FLEET: Scallop Dredge OPEN LIM NE all (Row 37)

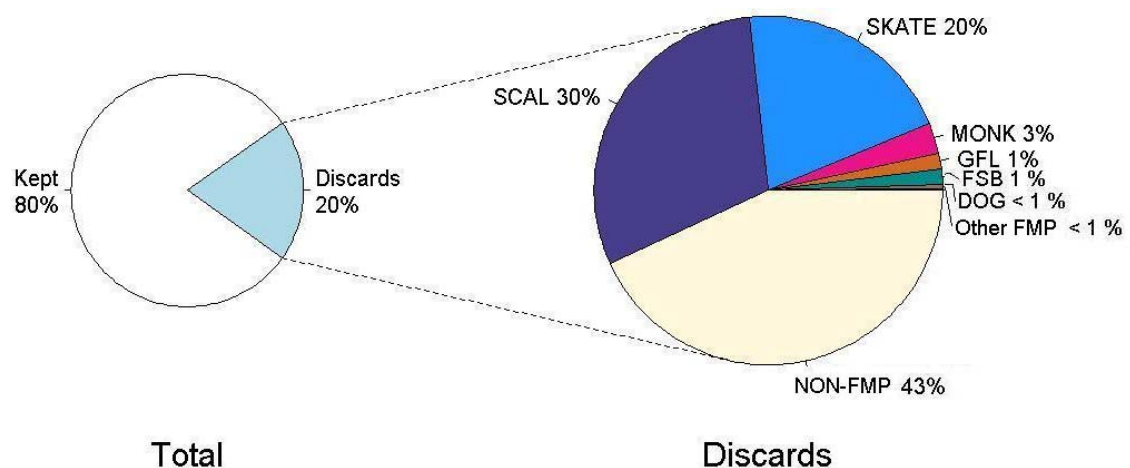
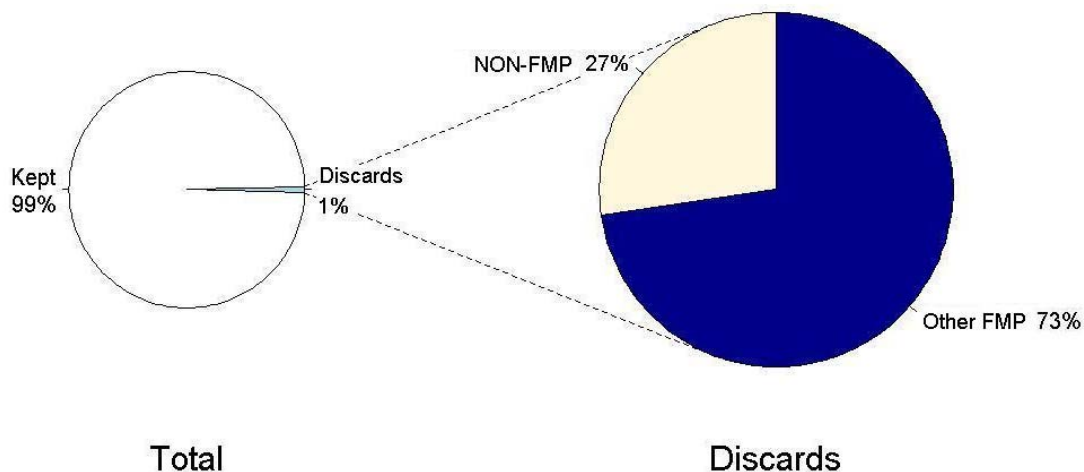
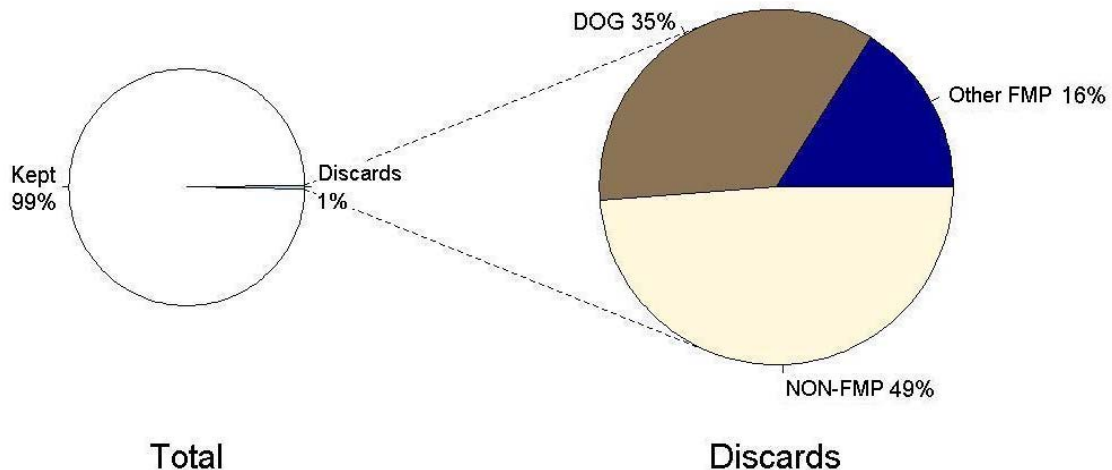


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by FMP and non-FMP species groups (Discards, right pie) for 26 selected fleets for July 2010 through June 2011. See Table 1 for species group abbreviations; FMP species groups that were filtered out through the importance filter have been aggregated and labeled “Other FMP” species groups; non-FMP species have been grouped and labeled “Non-FMP.”  
*Note: Selected fleets include Rows 2, 4-8, 11, 15-17, 19, 22-24, 26-27, 29, and 31-39; these represent fleets where discards were estimated in 2012.*

## FLEET: Mid-water Trawl OPEN all MA all (Row 38)



## FLEET: Mid-water Trawl OPEN all NE all (Row 39)



**Figure 3. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.**

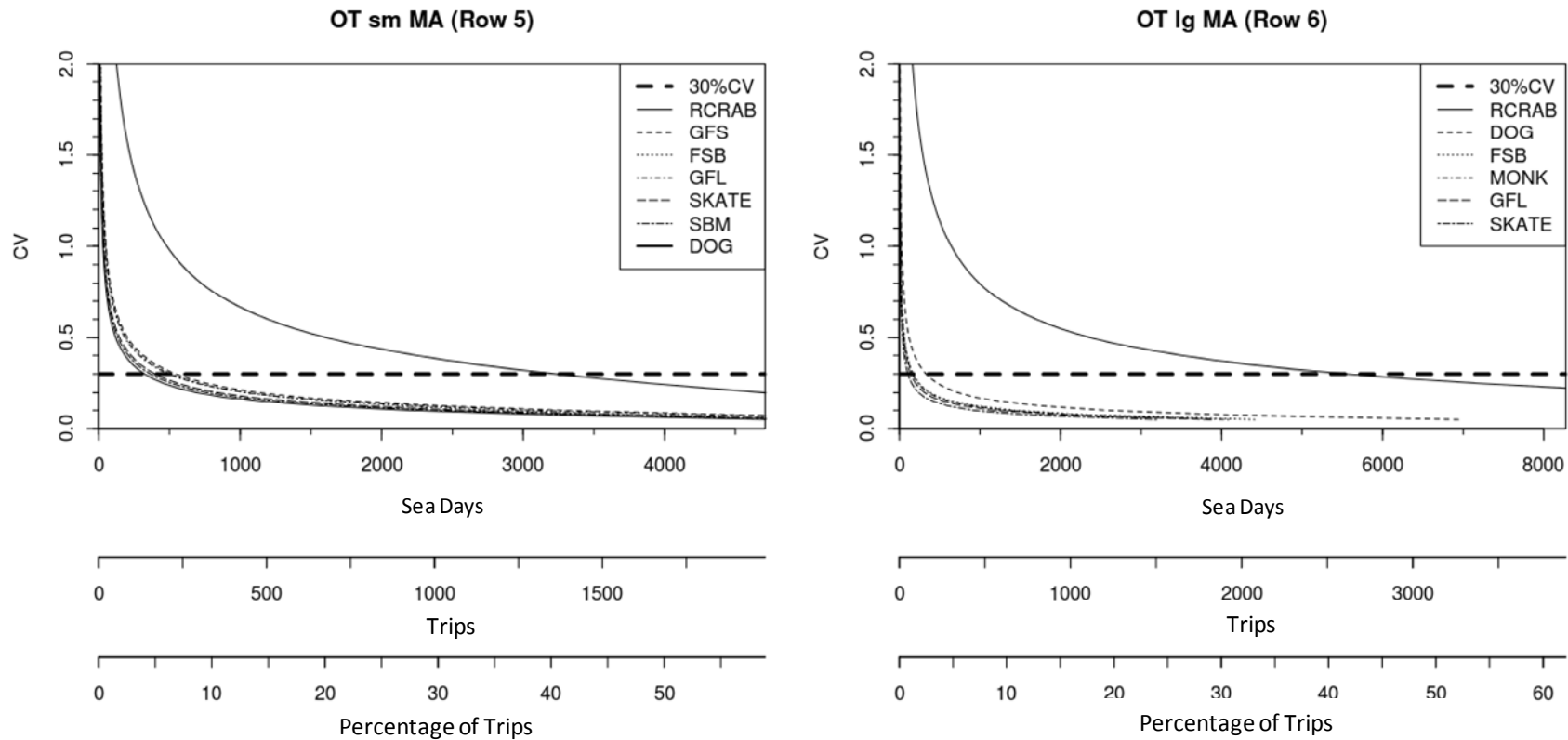


Figure 3, continued. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.

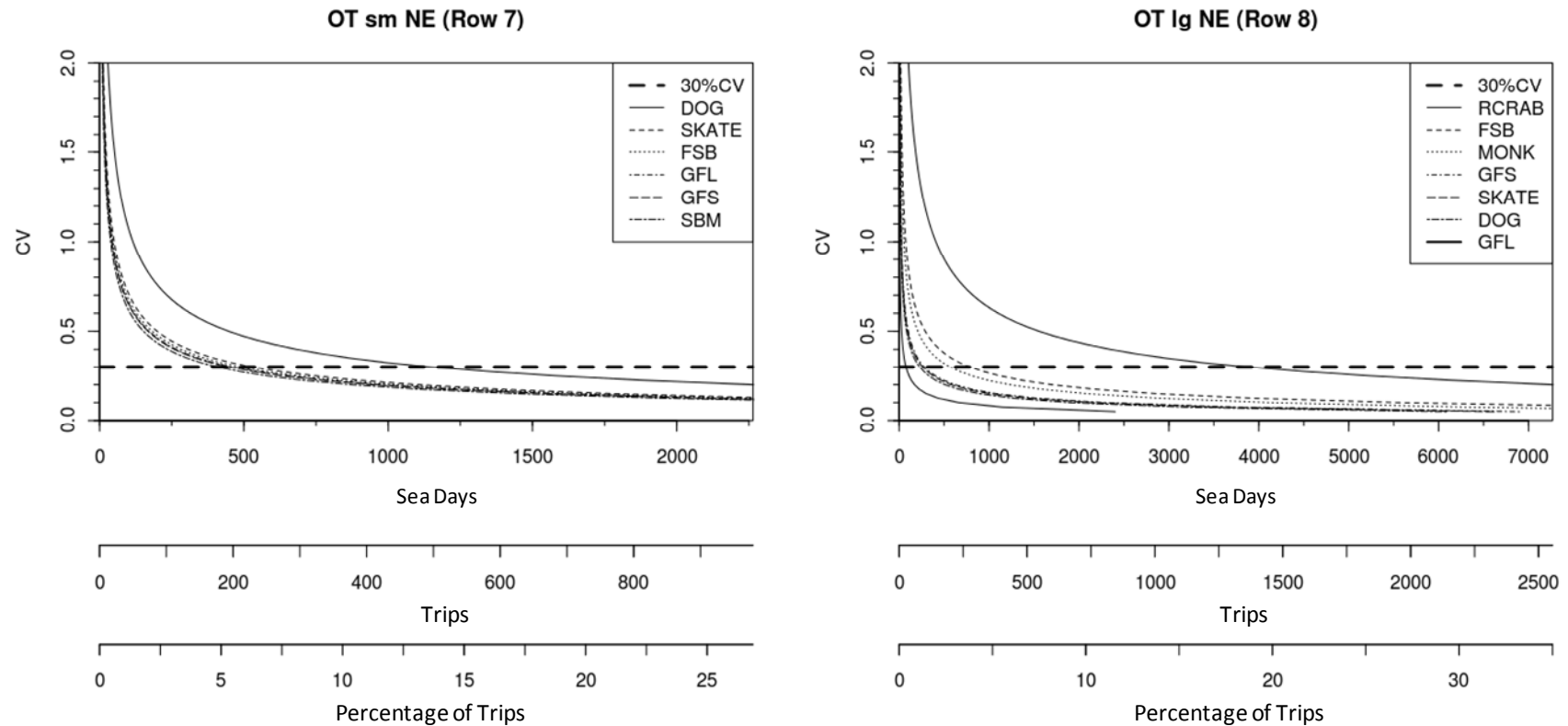


Figure 3, continued. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.

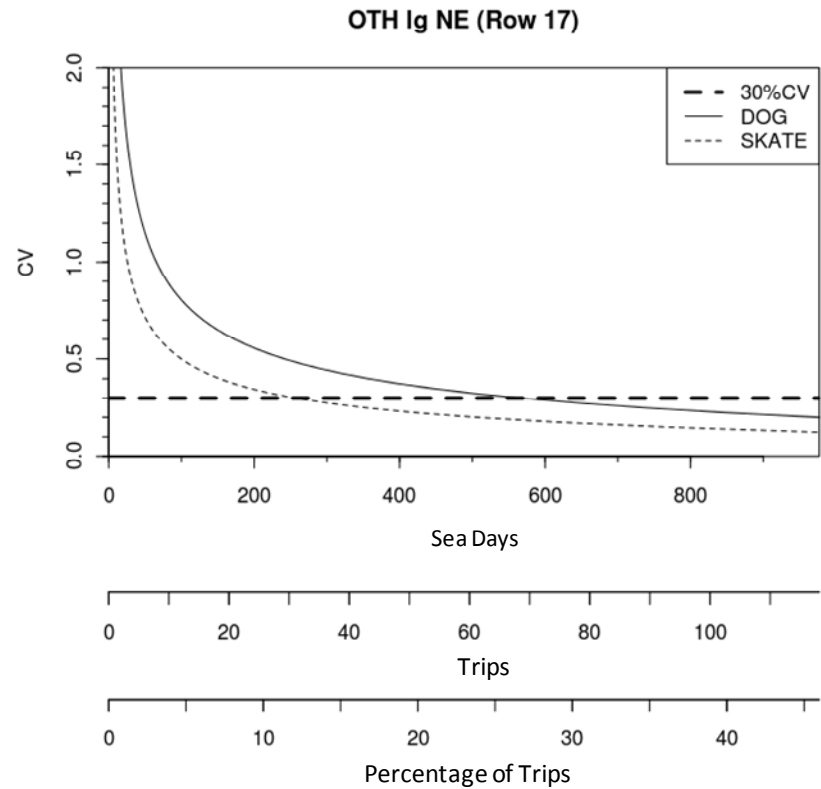
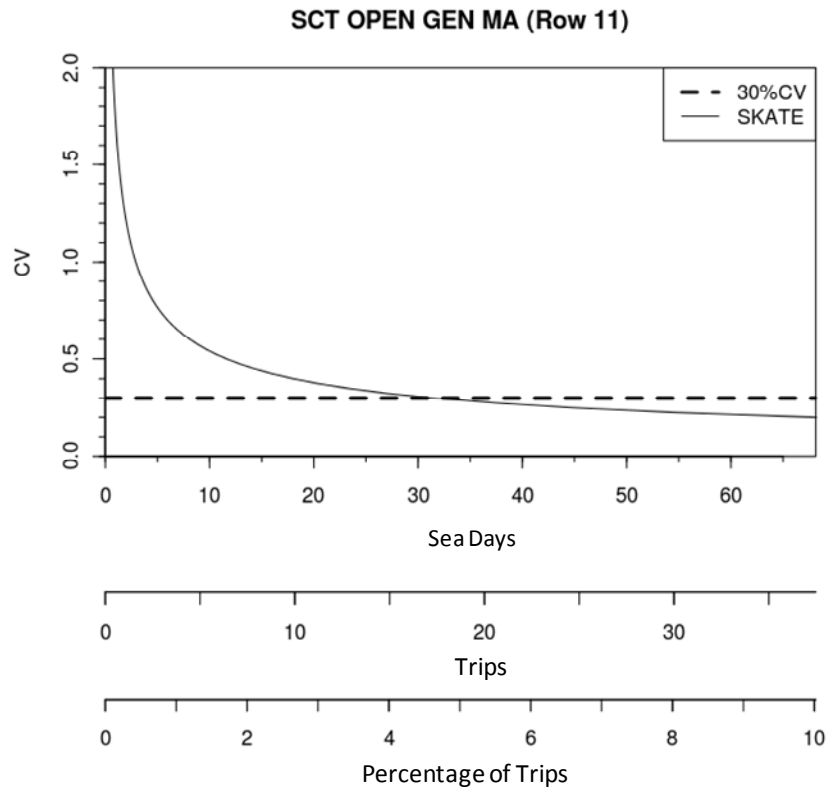


Figure 3, continued. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.

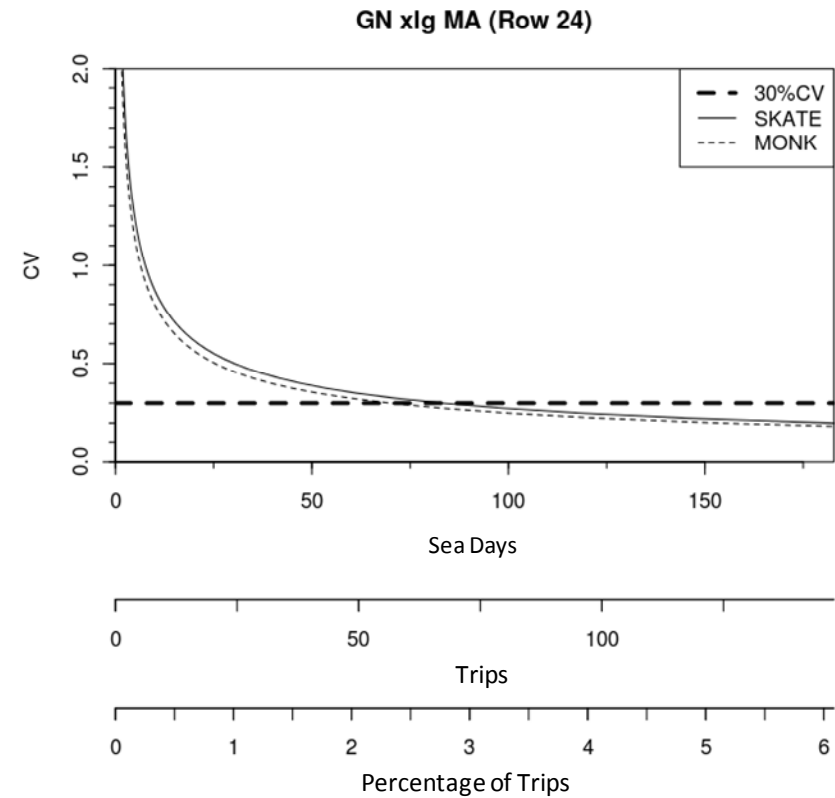
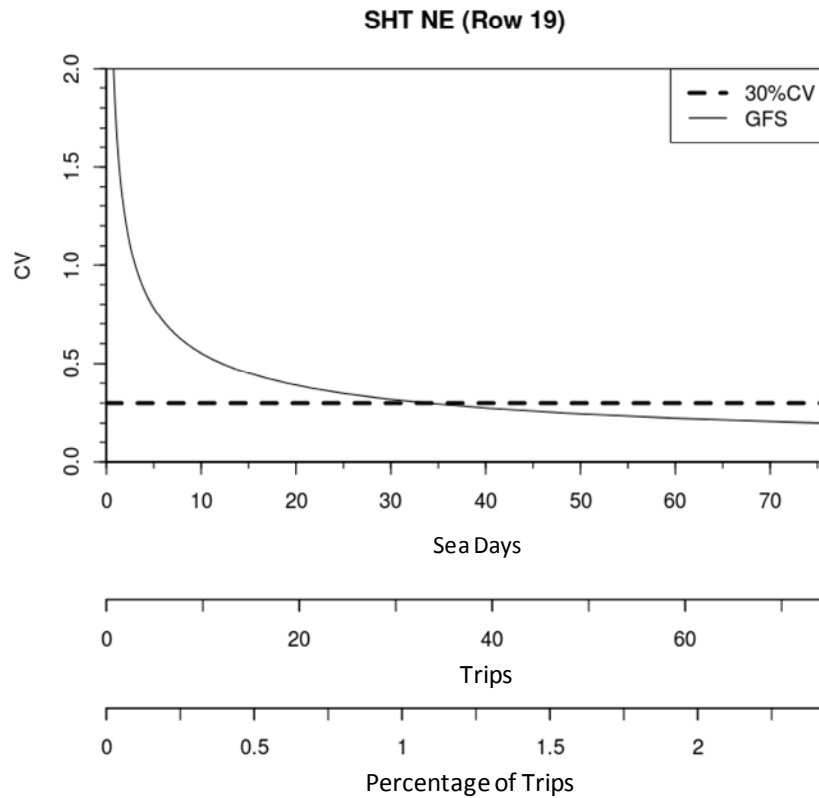


Figure 3, continued. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.

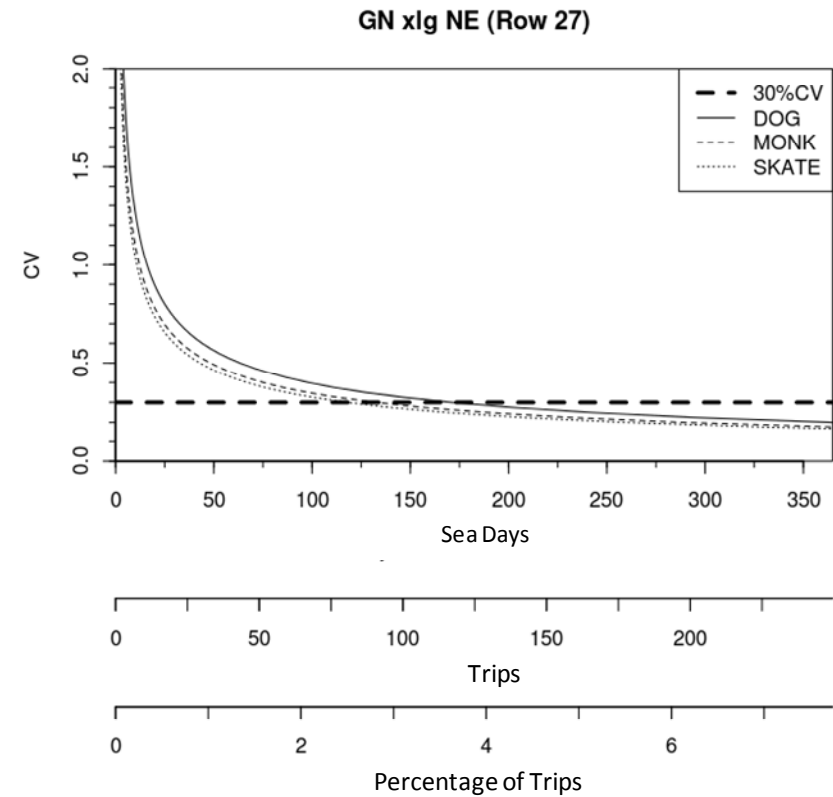
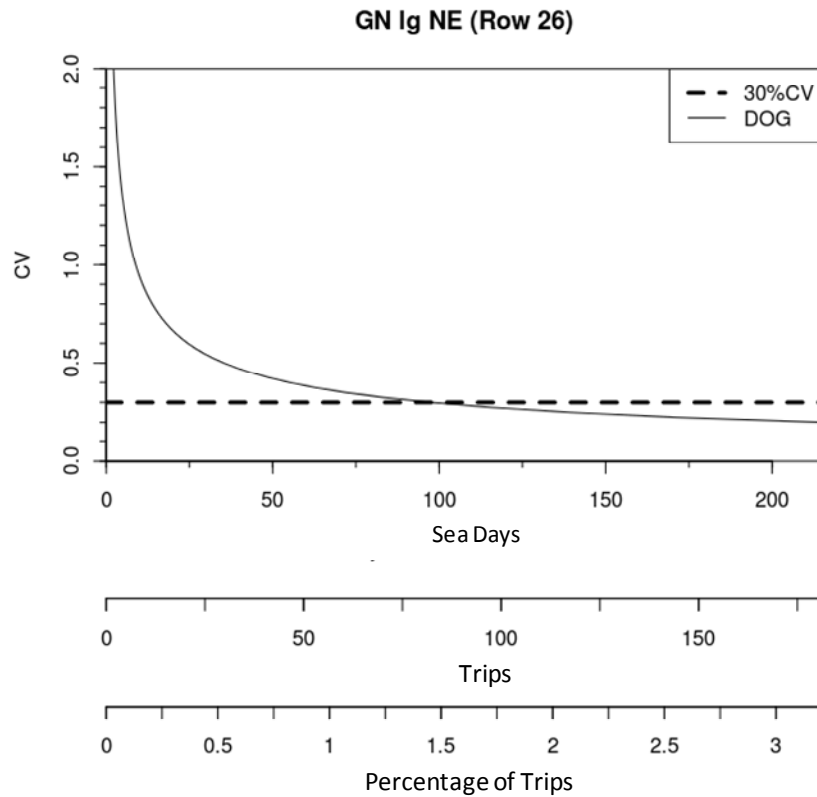


Figure 3, continued. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.

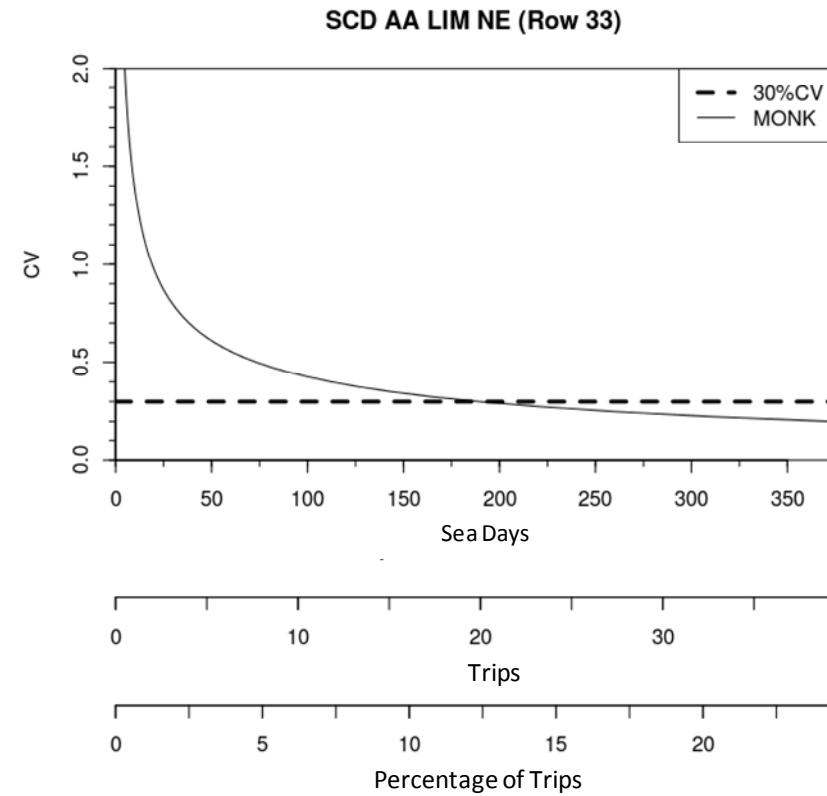
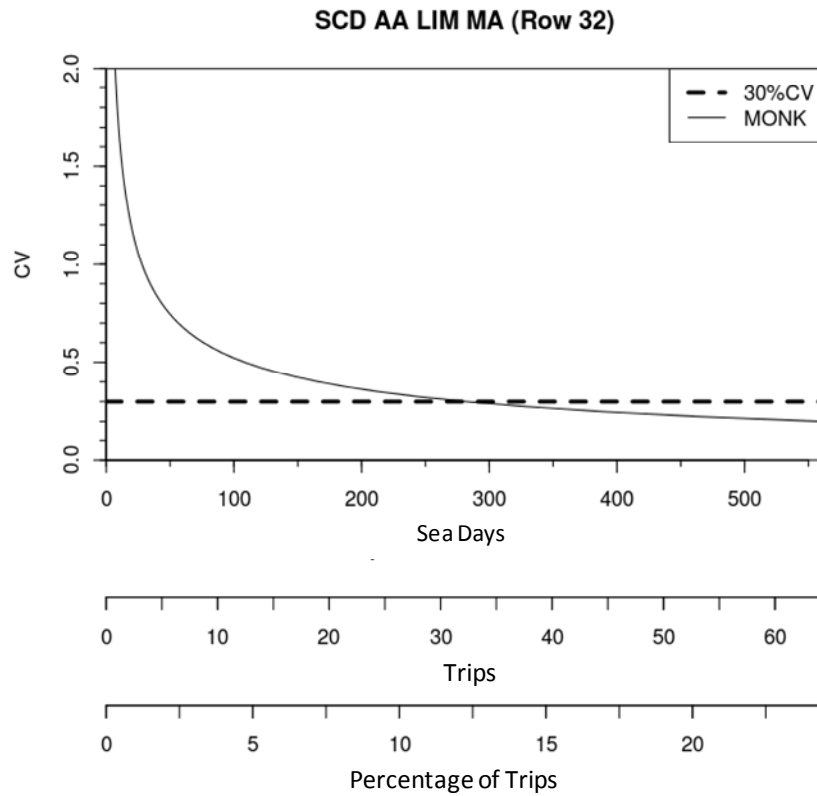




Figure 3, continued. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.

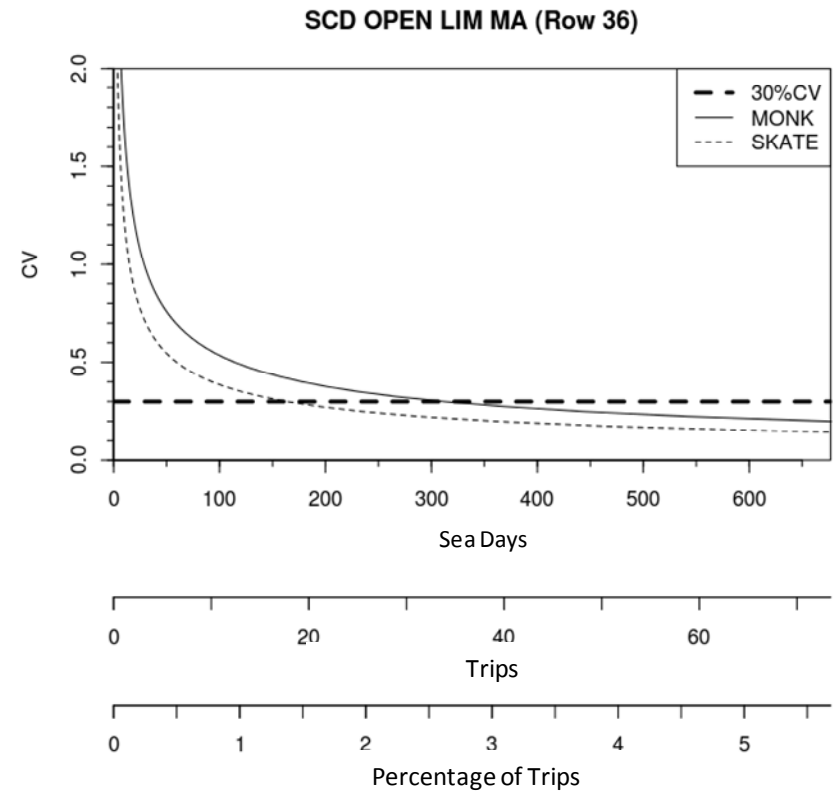
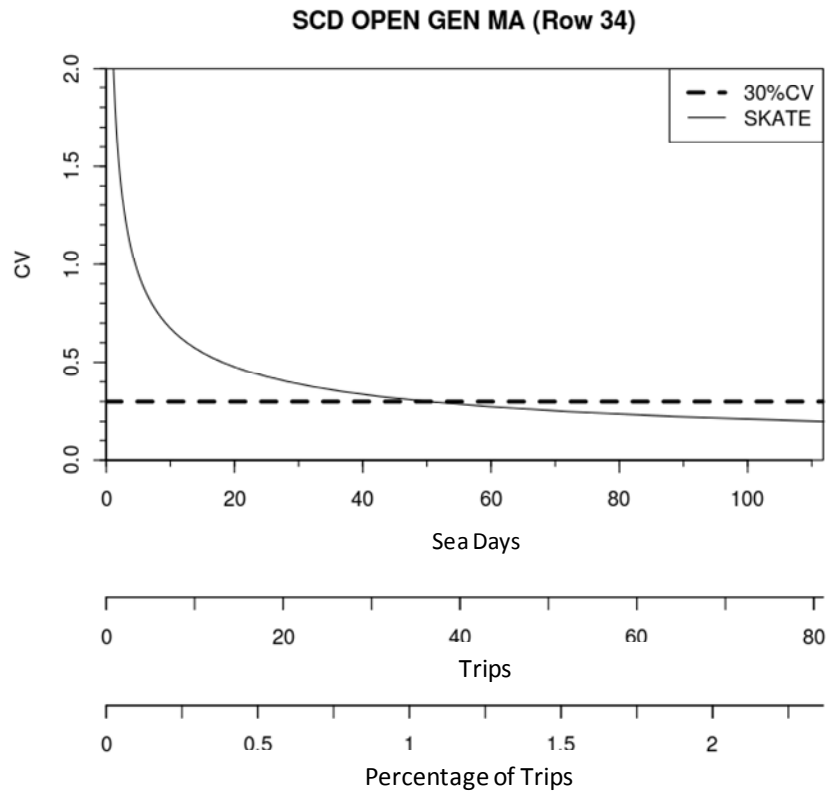
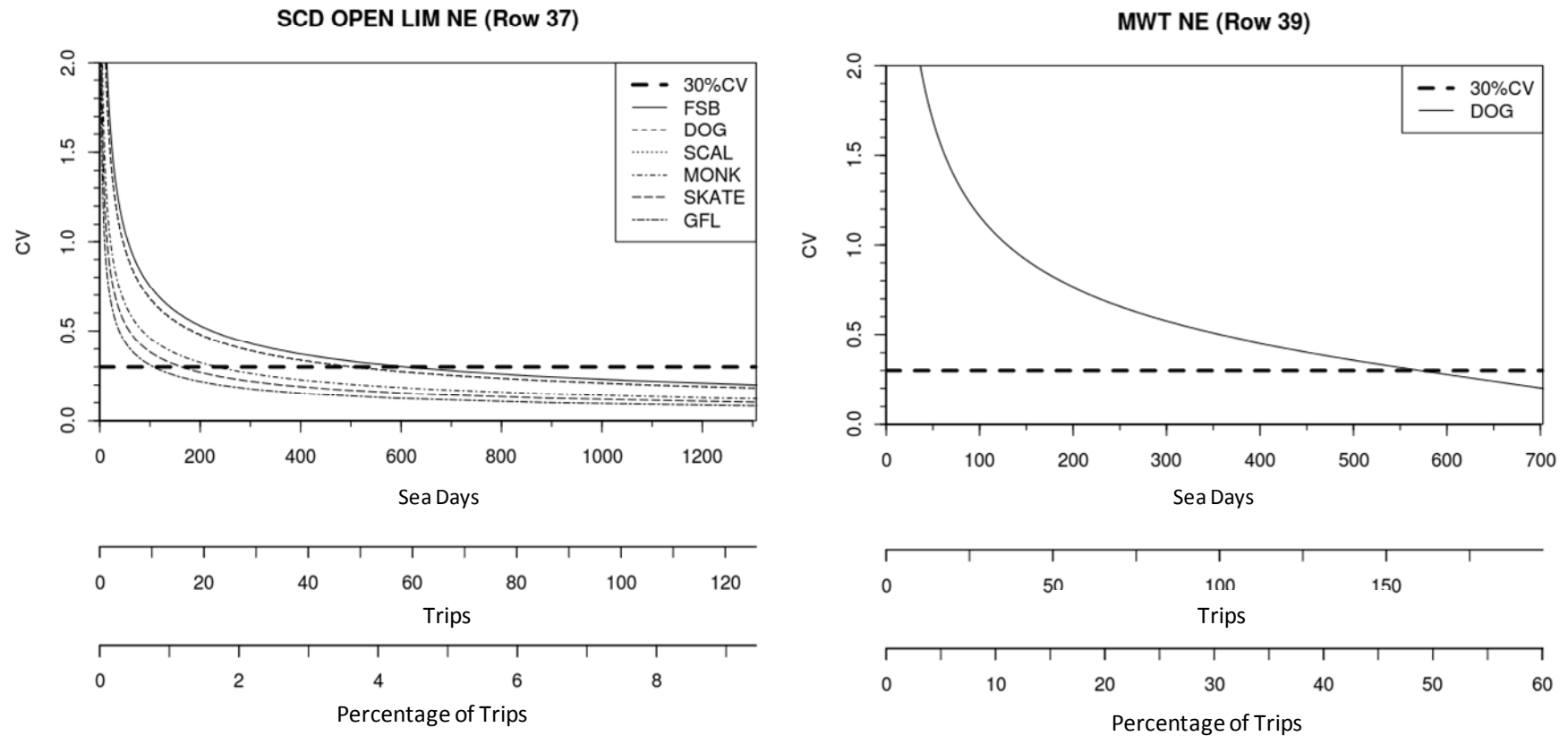


Figure 3, continued. Results from the 2012 sample size analysis conducted for 16 selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that were not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 3, respectively.



## APPENDIX

Equations used in discard estimation and sample size analysis.

Total discarded pounds for species  $j$  is defined as:

$$(1) \hat{D}_j = \sum_{h=1}^Q K_h r_{c,j}$$

where

$$(2) r_{c,j} = \frac{\sum_{h=1}^Q N_h \sum_{i=1}^{n_h} \frac{d_{jih}}{n_h}}{\sum_{h=1}^Q N_h \sum_{i=1}^{n_h} \frac{k_{ih}}{n_h}}$$

Where  $\hat{D}_j$  is total discarded pounds for species  $j$ ;  $K_h$  is VTR total kept pounds in stratum  $h$ ;  $r_{c,j}$  is the combined ratio of species  $j$ ;  $d_{jih}$  is discards of species  $j$  from trip  $i$  in stratum  $h$ ;  $k_{ih}$  is kept pounds of all species on trip  $i$  in stratum  $h$ ;  $N_h$  is the number of VTR trips in stratum  $h$ ;  $n_h$  is the number of observed trips in stratum  $h$ . In Eq. 2 the summation over strata  $h = 1$  to  $Q$  is over calendar quarters and the other strata values are held constant. Equation 3 (below) requires a more explicit definition of the stratum designation since the summation over quarter relies on an annual average ratio defined in Eq. 2.

Variance of  $\hat{D}_j$  for species  $j$  is defined as:

$$(3) V(\hat{D}_j) = \sum_{q=1}^4 K_{qh}^2 \left( \frac{N_{qh} - n_{qh}}{n_{qh} N_{qh}} \right) \frac{1}{\left( \frac{\sum_{i=1}^{n_h} k_{iqh}}{n_{qh}} \right)^2} \left[ \frac{\sum_{i=1}^{n_{qh}} \left( d_{jiqh}^2 + (r_{c,j})^2 k_{iqh}^2 - 2r_{c,j} d_{jiqh} k_{iqh} \right)}{n_{qh} - 1} \right]$$

where  $\hat{D}_j$  is total discarded pounds for species  $j$ ;  $K_{qh}$  is VTR total kept pounds in quarter  $q$  and stratum  $h$ ;  $r_{c,j}$  is the combined ratio of species  $j$ ;  $d_{jiqh}$  is discards of species  $j$  from trip  $i$  in quarter  $q$  and stratum  $h$ ;  $k_{iqh}$  is kept pounds of all species on trip  $i$  in quarter  $q$  and stratum  $h$ ;  $N_{qh}$  is the number of VTR trips in quarter  $q$  and stratum  $h$ ;  $n_{qh}$  is the number of observed trips in quarter  $q$  and stratum  $h$ .

Coefficient of variation (CV) of  $\hat{D}_j$  is defined as:

$$(4) CV(\hat{D}_j) = \frac{\sqrt{V(\hat{D}_j)}}{\hat{D}_j}$$

The number of sea days and trips needed to achieve a 30% CV are derived based on the variance of the total discards using the combined ratio method and the d/k discard ratio (Eq. 3).

From Eq. 3, let

$$(5) \quad \hat{S}_{jqh}^2 = \left[ \frac{\sum_{i=1}^{n_{qh}} \left( d_{jiqh}^2 + (r_{c,jh})^2 k_{iqh}^2 - 2r_{c,j} d_{jiqh} k_{iqh} \right)}{n_{qh} - 1} \right] \quad \text{and}$$

$$(6) \quad \delta_{qh} = \frac{n_{qh}}{\sum_{q=1}^4 n_{qh}}$$

where  $\delta_{qh}$  is the fraction of the trips in quarter  $q$  in stratum  $h$ ;  $r_{c,jh}$  is the combined annual ratio of species  $j$  in stratum  $h$ ;  $d_{jiqh}$  is discards of species  $j$  from trip  $i$  in stratum  $h$  in quarter  $q$ ;  $k_{iqh}$  is kept pounds of all species on trip  $i$  in stratum  $h$  in quarter  $q$ ; and  $n_{qh}$  is the number of observed trips in stratum  $h$  in quarter  $q$ . The  $r_{c,jh}$  in Eq. 5 is defined in Eq. 2 where the summation is over quarters within a given strata defined by gear, region, access area, trip type and so forth.

The number of trips necessary to achieve a 30% CV based on the variance of the composite annual total discards for species group  $j$  in stratum  $h$  is defined as

$$(7) \quad \hat{TD}_{30jh} = \frac{\sum_{q=1}^4 \left( \frac{K_{qh}^2}{\bar{k}_{qh}^2} \hat{S}_{jqh}^2 \frac{1}{\delta_{qh}} \right)}{(0.09) \hat{D}_{jh}^2 + \frac{\sum_{q=1}^4 \frac{K_{qh}^2}{\bar{k}_{qh}^2} \hat{S}_{jqh}^2}{N_h}}$$

where  $0.09 = 0.30^2$ , the square of the 30% CV, the given target precision level.

The number of sea days necessary to achieve a 30% CV based on the variance of the composite annual total discards for species group  $j$  in stratum  $h$  is defined as

$$(8) \quad \hat{SD}_{30jh} = \hat{TD}_{30jh} * \overline{DA_h}$$

where  $\overline{DA_h}$  is the weighted average trip length of VTR trips in stratum  $h$  (weighted by the number of VTR trips in each quarter) .

When total discards could not be estimated due to little or no observer coverage (no data) or when total discards are zero (no variance), sample size was determined by pilot cover, where 2% of the quarterly VTR trips for a fleet were multiplied by the quarterly mean VTR trip length.

$$(9) \hat{S}_{30,jhq} = \hat{T}_{hq} * \overline{DA_{hq}}$$

where  $\hat{T}_{hq}$  is 2% of the VTR trips in stratum  $h$  and quarter  $q$ , and  $3 \leq \hat{T}_{hq} \leq 100$  trips;  $\overline{DA_{hq}}$  is the average trip length of VTR trips in stratum  $h$  and quarter  $q$ . The quarterly trips and sea days were then summed for annual number of trips and sea days.

The achieved precision resulting from the number of funded sea days can be derived by converting funded sea days into funded trips. The number of funded trips,  $\hat{T}F_h$  for stratum  $h$  is defined as:

$$(10) \hat{T}F_h = \hat{S}F_h / \overline{DA_h}$$

where  $\hat{S}F_h$  is the number of funded sea days in stratum  $h$  and  $\overline{DA_h}$  is the weighted average trip length of VTR trips in stratum  $h$  (weighted by the number of VTR trips in each quarter).

The achieved coefficient of variation (CV) of  $\hat{D}_j$  is based on the variance of the composite annual total discards for species group  $j$  in stratum  $h$  and the number of funded trips in stratum  $h$  and re-writing Eq. 7.

From Eq. 7, let

$$(11) CV(\hat{D}_{jh}) = \sqrt{\frac{\sum_{q=1}^4 \left( \frac{K_{qh}^2}{\bar{k}_{qh}^2} \hat{S}_{jqh}^2 \frac{1}{\delta_{qh}} \right) - \hat{T}F_h \left[ \frac{\sum_{q=1}^4 \left( \frac{K_{qh}^2}{\bar{k}_{qh}^2} \hat{S}_{jqh}^2 \right)}{N_h} \right]}{\hat{T}F_h * \hat{D}_{jh}^2}}$$

**Appendix Table 1. Discard reason categories used in Appendix Tables 2A and 2B.**

Discard Reason Category	FISH DISPOSITION Code <sup>9</sup>	FISH DISPOSITION Description
No Market	001	NO MARKET, REASON NOT SPECIFIED.
	002	NO MARKET, TOO SMALL
	003	NO MARKET, TOO LARGE
	005	NO MARKET, WONT KEEP UNTIL TRIP END.
	006	NO MARKET, BUT RETAINED BY VESSEL FOR ALTERNATE PROGRAM.
	007	NO MARKET, BUT RETAINED FOR OBSERVER FOR SCIENTIFIC PURPOSES
Poor Quality	031	POOR QUALITY, REASON NOT SPECIFIED
	032	POOR QUALITY, SANDFLEA DAMAGE
	033	POOR QUALITY, SEAL DAMAGE
	034	POOR QUALITY, SHARK DAMAGE
	035	POOR QUALITY, CETACEAN DAMAGE
	036	POOR QUALITY, HAGFISH DAMAGE
	037	POOR QUALITY, SHALL DISEASE
	038	POOR QUALITY, GEAR DAMAGE
Regulation (Size)	012	REGULATIONS PROHIBIT RETENTION, TOO SMALL
	013	REGULATIONS PROHIBIT RETENTION, TOO LARGE
Regulation (Quota)	004	NO MARKET, QUOTA FILLED
	014	REGULATIONS PROHIBIT RETENTION, QUOTA FILLED.
	015	REGULATIONS PROHIBIT RETENTION, NO QUOTA IN AREA.
	025	REGULATIONS PROHIBIT ANY RETENTION.
Regulation (Other)	011	REGULATIONS PROHIBIT RETENTION, REASON NOT SPECIFIED.
	022	REGULATIONS PROHIBIT RETENTION, V-NOTCHED
	023	REGULATIONS PROHIBIT RETENTION, SOFT-SHELL
	024	REGULATIONS PROHIBIT RETENTION, WITH EGGS.
Other	000	DISCARDED GENERAL, UNKNOWN DISCARD REASON
	041	NOT BROUGHT ON BOARD, REASON NOT SPECIFIED
	042	NOT BROUGHT ON BOARD, GEAR DAMAGE PREVENTED CAPTURE
	043	NOT BROUGHT ON BOARD, FELL OUT/OFF OF GEAR
	044	NOT BROUGHT ON BOARD, CONSIDERED TO HAVE NO MARKET VALUE.
	048	NOT BROUGHT ON BOARD, VESSEL CAPACITY FILLED
	049	NOT BROUGHT ON BOARD, NOT ENOUGH FISH TO PUMP ABOARD
	052	INCIDENTAL TAKE (MAMMAL, SEA TURTLE, SEA BIRD)
	053	DEBRIS
	054	EMPTY SHELLS
	062	UPGRADED
	063	RETAINING ONLY CERTAIN SIZE BETTER PRICE TRIP QUOTA IN EFFECT.
	099	OTHER, DISCARDED

<sup>9</sup> Fish disposition code “039” = POOR QUALITY, PREVIOUSLY DISCARDED has been excluded from this report.

**Appendix Table 2A. Estimated discards (live pounds) and percentage by discard reason category for the 14 species for July 2010 through June 2011. Note: Salmon is not presented due to no discards.**

*Species Group: BLUEFISH*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
32 Other fleets filtered out						375,371	44.3	0.9	17.3	21.0	5.8	10.7	100.0

*Species Group: FLUKE - SCUP - BLACK SEA BASS*

							Discard by Reason Category [%]							
Row	Gear	Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter	Trawl	OPEN	all	MA	sm	1,088,895	4.6	71.2	20.6	0.7	0.0	2.7	100.0
6	Otter	Trawl	OPEN	all	MA	lg	1,041,621	2.1	63.5	31.4	0.0	0.0	3.0	100.0
7	Otter	Trawl	OPEN	all	NE	sm	832,098	10.9	62.6	22.2	0.8	0.1	3.4	100.0
8	Otter	Trawl	OPEN	all	NE	lg	625,775	3.0	8.1	78.6	1.7	0.6	7.9	100.0
37	Scallop	Dredge	OPEN	LIM	NE	all	838,800	74.5	0.0	24.5	0.9	0.1	0.0	100.0
27 Other fleets filtered out							965,046	49.0	6.9	39.5	1.0	2.6	1.2	100.0

*Species Group: HERRING, ATLANTIC*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
32 Other fleets filtered out						387,511	77.6	0.0	4.4	0.0	0.5	17.6	100.0

*Species Group: LARGE MESH GROUND FISH*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	824,043	31.1	3.4	64.4	1.1	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	779,536	29.1	3.1	56.4	11.4	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	400,400	10.7	3.2	85.9	0.1	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	2,214,486	6.4	62.7	29.7	0.0	0.8	0.4	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	841,986	76.5	0.6	22.8	0.1	0.0	0.0	100.0
27 Other fleets filtered out						2,277,083	13.7	24.3	53.5	1.2	6.2	1.1	100.0

**Appendix Table 2A, continued. Estimated discards (live pounds) and percentage by discard reason category for the 14 species groups for July 2010 through June 2011. Note: Salmon is not presented due to no discards.**

*Species Group: MONKFISH*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
6	Otter Trawl	OPEN	all	MA	1g	201,027	27.3	54.6	18.0	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	1g	634,066	1.5	75.0	16.2	0.0	0.1	7.2	100.0
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	199,762	0.4	7.0	3.1	0.0	89.5	0.0	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	283,601	1.0	6.3	2.0	0.0	87.2	3.5	100.0
32	Scallop Dredge	AA	LIM	MA	all	188,197	76.6	18.5	3.2	0.0	0.0	1.6	100.0
33	Scallop Dredge	AA	LIM	NE	all	178,549	75.7	22.6	0.2	0.0	0.2	1.4	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	1,697,549	79.5	12.1	7.2	0.0	0.0	1.1	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	1,607,216	68.9	30.3	0.0	0.1	0.0	0.7	100.0
24 Other fleets filtered out						403,389	26.6	53.3	17.0	1.8	0.5	0.7	100.0

*Species Group: RED CRAB*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	335,300	100.0	0.0	0.0	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	1g	222,747	100.0	0.0	0.0	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	1g	318,214	100.0	0.0	0.0	0.0	0.0	0.0	100.0
29 Other fleets filtered out						2,586,192	100.0	0.0	0.0	0.0	0.0	0.0	100.0

*Species Group: SEA SCALLOP*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
37	Scallop Dredge	OPEN	LIM	NE	all	17,327,809	87.0	0.0	0.0	0.0	3.1	9.8	100.0
31 Other fleets filtered out						8,115,737	70.2	0.4	13.7	0.6	4.3	10.8	100.0



**Appendix Table 2A, continued. Estimated discards (live pounds) and percentage by discard reason category for the 14 species groups for July 2010 through June 2011. Note: Salmon is not presented due to no discards.**

*Species Group: SKATE COMPLEX*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	Discard by Reason Category [%]						Total %
							No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	
5	Otter Trawl	OPEN	all	MA	sm	4,366,912	95.1	0.0	4.8	0.1	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	11,047,681	88.2	0.0	10.0	0.0	0.0	1.7	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,585,782	64.9	0.0	35.0	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	28,539,292	71.0	0.1	25.7	0.0	0.0	3.1	100.0
11	Scallop Trawl	OPEN	GEN	MA	all	1,190,509	99.8	0.0	0.0	0.0	0.2	0.0	100.0
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,373,349	74.5	0.1	22.8	0.0	0.0	2.6	100.0
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	1,100,411	18.1	0.1	73.6	0.0	2.9	5.4	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	2,735,262	20.3	0.4	52.4	0.1	16.1	10.6	100.0
34	Scallop Dredge	OPEN	GEN	MA	all	858,165	100.0	0.0	0.0	0.0	0.0	0.0	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	7,701,133	99.9	0.0	0.0	0.0	0.0	0.1	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	11,746,489	99.6	0.0	0.4	0.0	0.0	0.0	100.0
21 Other fleets filtered out						3,252,659	94.4	0.0	5.0	0.0	0.0	0.5	100.0

*Species Group: SMALL MESH GROUND FISH*

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	Discard by Reason Category [%]						Total %
							No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	
5	Otter Trawl	OPEN	all	MA	sm	1,916,300	98.9	0.3	0.0	0.0	0.7	0.1	100.0
7	Otter Trawl	OPEN	all	NE	sm	3,153,636	95.4	0.3	3.4	0.0	0.9	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	227,432	97.8	0.9	0.9	0.0	0.2	0.1	100.0
19	Shrimp Trawl	OPEN	all	NE	all	949,223	52.5	0.0	47.5	0.0	0.0	0.0	100.0
28 Other fleets filtered out						1,424,060	98.1	0.0	0.0	0.0	1.8	0.0	100.0

**Appendix Table 2A, continued. Estimated discards (live pounds) and percentage by discard reason category for the 14 species groups for July 2010 through June 2011. Note: Salmon is not presented due to no discards.**

*Species Group: SPINY DOGFISH*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	4,037,129	79.6	0.0	19.7	0.6	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	4,505,364	55.2	0.2	40.1	1.6	0.0	2.9	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,789,471	43.7	0.0	56.1	0.2	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	3,467,413	60.8	0.0	38.5	0.5	0.0	0.1	100.0
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	213,880	91.9	0.0	8.1	0.0	0.0	0.0	100.0
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	2,942,511	56.7	0.5	40.3	0.0	1.6	0.9	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	233,724	45.9	0.1	46.1	0.0	7.6	0.3	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	211,272	93.1	0.0	6.9	0.0	0.0	0.0	100.0
39	Mid-water paired & single Trawl	OPEN	all	NE	all	211,974	94.2	0.0	5.8	0.0	0.0	0.0	100.0
23 Other fleets filtered out						885,034	63.1	0.2	25.9	0.4	5.4	5.1	100.0

*Species Group: SQUID - BUTTERFISH – MACKEREL*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	2,360,495	90.2	0.4	5.0	0.0	1.2	3.2	100.0
7	Otter Trawl	OPEN	all	NE	sm	3,403,902	76.9	0.2	9.4	0.4	2.1	11.1	100.0
30 Other fleets filtered out						281,226	99.1	0.3	0.4	0.0	0.1	0.1	100.0

*Species Group: SURFCLAM - OCEAN QUAHOG*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
32 Other fleets filtered out						56,151	99.4	0.0	0.6	0.0	0.0	0.0	100.0

*Species Group: TILEFISH*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
32 Other fleets filtered out						10,405	58.9	9.6	7.8	0.0	23.7	0.0	100.0

**Appendix Table 2B. Estimated discards (live pounds) and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.**

*Species Group: BLACK SEA BASS*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	145,771	1.9	56.5	35.5	0.1	0.0	6.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	182,277	1.5	76.8	18.7	0.0	0.0	3.1	100.0
7	Otter Trawl	OPEN	all	NE	sm	70,151	12.5	54.0	32.5	0.0	0.0	1.0	100.0
29 Other fleets filtered out						33,609	70.4	0.5	28.8	0.2	0.0	0.0	100.0

*Species Group: FLUKE*

							Discard by Reason Category [%]							
Row	Gear	Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter	Trawl	OPEN	all	MA	sm	461,091	7.4	45.6	40.1	1.9	0.0	4.9	100.0
6	Otter	Trawl	OPEN	all	MA	lg	613,835	1.0	64.4	30.7	0.0	0.0	3.9	100.0
7	Otter	Trawl	OPEN	all	NE	sm	120,949	15.3	20.0	55.4	4.5	0.4	4.4	100.0
8	Otter	Trawl	OPEN	all	NE	lg	574,365	2.8	5.2	81.9	1.3	0.7	8.2	100.0
36	Scallop	Dredge	OPEN	LIM	MA	all	493,483	64.5	8.7	25.4	1.1	0.0	0.2	100.0
37	Scallop	Dredge	OPEN	LIM	NE	all	824,905	73.9	0.0	25.0	0.9	0.1	0.0	100.0
26 Other fleets filtered out							449,289	29.9	5.2	56.3	0.9	5.5	2.2	100.0

*Species Group: SCUP*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	482,034	3.2	96.1	0.7	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	640,999	9.9	72.0	14.5	0.2	0.1	3.4	100.0
30 Other fleets filtered out						299,477	8.6	49.4	39.7	1.2	0.0	1.1	100.0

**Appendix Table 2B, continued. Estimated discards (live pounds) and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.**

*Species Group: AMERICAN PLAICE*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
7	Otter Trawl	OPEN	all	NE	sm	75,890	1.2	4.9	93.9	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	357,353	0.1	98.7	0.0	0.0	1.1	0.0	100.0
19	Shrimp Trawl	OPEN	all	NE	all	139,598	8.5	0.0	91.5	0.0	0.0	0.0	100.0
29 Other fleets filtered out						18,543	15.2	77.3	5.5	0.2	1.5	0.4	100.0

*Species Group: ATLANTIC COD*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
8	Otter Trawl	OPEN	all	NE	lg	322,226	0.0	93.5	6.0	0.0	0.4	0.1	100.0
31 Other fleets filtered out						432,368	2.3	79.0	5.8	0.1	9.7	3.2	100.0

*Species Group: ATLANTIC HALIBUT*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
8	Otter Trawl	OPEN	all	NE	lg	30,511	0.4	90.7	7.2	0.5	0.0	1.2	100.0
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,736	0.0	97.9	2.1	0.0	0.0	0.0	100.0
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	4,281	0.9	92.2	3.7	1.1	1.4	0.8	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	14,382	0.0	45.7	48.0	0.5	5.8	0.0	100.0
28 Other fleets filtered out						1,687	16.0	78.7	5.3	0.0	0.0	0.0	100.0

*Species Group: ATLANTIC WOLFFISH*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
2	Longline	OPEN	all	NE	all	1,773	0.0	0.0	98.5	0.0	0.0	1.5	100.0
8	Otter Trawl	OPEN	all	NE	lg	51,913	0.7	0.0	99.3	0.0	0.0	0.0	100.0
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,235	0.5	0.0	98.5	0.0	0.3	0.7	100.0
29 Other fleets filtered out						3,107	2.2	0.0	97.8	0.0	0.0	0.0	100.0

**Appendix Table 2B, continued. Estimated discards (live pounds) and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.**

*Species Group: HADDOCK*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
	32 Other fleets filtered out					178,602	2.7	52.7	33.5	0.0	8.9	2.2	100.0

*Species Group: OCEAN POUT*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	30,880	97.1	0.0	2.9	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	44,303	33.6	0.0	66.4	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	20,276	48.5	0.0	51.5	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	87,324	40.2	0.0	59.7	0.0	0.0	0.1	100.0
11	Scallop Trawl	OPEN	GEN	MA	all	8,671	41.9	0.0	58.1	0.0	0.0	0.0	100.0
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	5,106	29.9	0.0	70.1	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	7,771	58.7	0.0	41.3	0.0	0.0	0.0	100.0
25 Other fleets filtered out						19,069	14.2	0.0	85.6	0.0	0.0	0.2	100.0

*Species Group: POLLOCK*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
	32 Other fleets filtered out					205,832	0.6	66.8	0.8	0.0	30.8	1.0	100.0

*Species Group: REDFISH*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
8	Otter Trawl	OPEN	all	NE	lg	256,498	3.7	95.4	0.0	0.0	0.5	0.4	100.0
31 Other fleets filtered out						75,759	30.1	48.1	21.1	0.0	0.4	0.3	100.0

**Appendix Table 2B, continued. Estimated discards (live pounds) and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.**

*Species Group: WHITE HAKE*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
	32 Other fleets filtered out					88,733	68.9	1.6	1.2	0.0	25.0	3.3	100.0

*Species Group: WINDOWPANE FLOUNDER*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	186,292	67.2	1.1	27.2	4.3	0.0	0.2	100.0
6	Otter Trawl	OPEN	all	MA	lg	469,307	33.1	0.0	49.8	17.1	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	413,193	13.3	0.2	86.2	0.0	0.0	0.3	100.0
11	Scallop Trawl	OPEN	GEN	MA	all	22,776	76.4	0.0	19.8	3.8	0.0	0.0	100.0
34	Scallop Dredge	OPEN	GEN	MA	all	35,073	65.7	0.0	33.8	0.5	0.0	0.0	100.0
35	Scallop Dredge	OPEN	GEN	NE	all	24,210	47.1	0.0	52.9	0.0	0.0	0.0	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	124,924	63.9	0.0	33.1	3.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	279,310	83.7	0.0	16.3	0.0	0.0	0.0	100.0
24 Other fleets filtered out						72,620	44.0	0.0	55.8	0.1	0.0	0.0	100.0

*Species Group: WINTER FLOUNDER*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	295,090	3.8	0.0	96.2	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	184,456	14.5	0.0	80.0	5.5	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	149,974	1.9	0.3	97.4	0.4	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	199,169	0.4	13.4	83.7	0.0	1.4	1.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	322,797	71.8	0.2	28.0	0.0	0.0	0.0	100.0
27 Other fleets filtered out						90,357	28.9	2.2	62.4	6.1	0.4	0.0	100.0

**Appendix Table 2B, continued. Estimated discards (live pounds) and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.**

*Species Group: WITCH FLOUNDER*

							Discard by Reason Category [%]							
Row	Gear	Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter	Trawl	OPEN	all	MA	sm	212,145	35.3	0.2	64.4	0.0	0.0	0.0	100.0
6	Otter	Trawl	OPEN	all	MA	lg	30,763	94.8	0.1	5.1	0.0	0.0	0.0	100.0
7	Otter	Trawl	OPEN	all	NE	sm	23,555	20.4	18.2	61.4	0.0	0.0	0.0	100.0
8	Otter	Trawl	OPEN	all	NE	lg	123,532	0.4	96.8	2.0	0.5	0.3	0.0	100.0
28 Other fleets filtered out							837,266	2.8	0.5	96.7	0.0	0.0	0.0	100.0

*Species Group: YELLOWTAIL FLOUNDER*

							Discard by Reason Category [%]							
Row	Gear	Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter	Trawl	OPEN	all	MA	sm	47,559	0.1	0.4	96.2	3.3	0.0	0.0	100.0
6	Otter	Trawl	OPEN	all	MA	lg	36,283	0.0	16.8	83.2	0.0	0.0	0.0	100.0
7	Otter	Trawl	OPEN	all	NE	sm	55,057	12.0	5.1	82.9	0.0	0.0	0.0	100.0
8	Otter	Trawl	OPEN	all	NE	lg	227,850	0.7	93.1	4.1	0.0	1.0	1.1	100.0
17	Otter Trawl, Haddock Separator		OPEN	all	NE	lg	24,188	0.2	85.7	0.1	0.0	2.5	11.4	100.0
35	Scallop	Dredge	OPEN	GEN	NE	all	34,745	10.3	0.5	40.0	49.2	0.0	0.0	100.0
36	Scallop	Dredge	OPEN	LIM	MA	all	61,507	80.7	0.7	18.5	0.0	0.0	0.0	100.0
37	Scallop	Dredge	OPEN	LIM	NE	all	207,760	74.6	1.5	23.7	0.2	0.0	0.0	100.0
24 Other fleets filtered out							54,346	17.7	39.7	42.0	0.0	0.6	0.0	100.0

*Species Group: OFFSHORE HAKE*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	1,062	100.0	0.0	0.0	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	10,013	0.0	0.0	0.0	0.0	100.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	5,979	97.7	0.0	2.3	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	2,389	97.2	0.0	0.0	0.0	2.8	0.0	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	3,925	100.0	0.0	0.0	0.0	0.0	0.0	100.0
27 Other fleets filtered out						981	99.6	0.0	0.0	0.0	0.4	0.0	100.0

**Appendix Table 2B, continued. Estimated discards (live pounds) and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.**

*Species Group: RED HAKE*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	846,366	100.0	0.0	0.0	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,135,488	99.5	0.0	0.5	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	86,962	97.0	1.7	1.2	0.0	0.0	0.1	100.0
19	Shrimp Trawl	OPEN	all	NE	all	35,415	100.0	0.0	0.0	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	59,591	99.0	0.0	1.0	0.0	0.0	0.0	100.0
27 Other fleets filtered out						91,666	99.4	0.1	0.0	0.0	0.1	0.4	100.0

*Species Group: SILVER HAKE*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	1,068,871	98.0	0.5	0.0	0.0	1.3	0.2	100.0
7	Otter Trawl	OPEN	all	NE	sm	2,012,169	93.0	0.4	5.1	0.0	1.5	0.0	100.0
19	Shrimp Trawl	OPEN	all	NE	all	913,808	50.7	0.0	49.3	0.0	0.0	0.0	100.0
29 Other fleets filtered out						1,395,964	98.6	0.1	0.1	0.0	1.3	0.0	100.0

*Species Group: ATLANTIC MACKEREL*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
7	Otter Trawl	OPEN	all	NE	sm	80,036	99.9	0.0	0.0	0.0	0.1	0.0	100.0
31 Other fleets filtered out						45,880	97.3	0.0	0.1	0.0	2.0	0.6	100.0

*Species Group: BUTTERFISH*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	1,012,732	83.5	1.1	12.9	0.0	2.2	0.3	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,936,031	76.8	0.3	16.4	0.7	0.0	5.9	100.0
30 Other fleets filtered out						55,511	98.2	1.5	0.0	0.0	0.2	0.1	100.0



**Appendix Table 2B, continued. Estimated discards (live pounds) and percentage by discard reason category for the 23 individual species that comprise the 14 species groups for July 2010 through June 2011.**

*Species Group: ILLEX SQUID*

							Discard by Reason Category [%]						
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
5	Otter Trawl	OPEN	all	MA	sm	1,228,034	98.0	0.0	0.0	0.0	0.3	1.6	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,090,314	72.6	0.0	0.3	0.0	3.2	23.9	100.0
30 Other fleets filtered out						183,477	99.5	0.0	0.5	0.0	0.0	0.0	100.0

*Species Group: LOLIGO SQUID*

						Discard by Reason Category [%]							
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Discarded	No Market	Regulation (Size)	Regulation (Quota)	Regulation (Other)	Poor Quality	Other	Total %
32 Other fleets filtered out						382,295	84.1	0.1	0.2	0.0	3.5	12.1	100.0

**Appendix Table 3. Fleet abbreviations used in Table 6 and Figures 1A, 1B, and 3. Fleets that were filtered out through the importance filter and fleets designated as in need of pilot coverage have been aggregated into “Other fleets.”**

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Fleet Abbreviation
1	Longline	OPEN	all	MA	all	LL MA
2	Longline	OPEN	all	NE	all	LL NE
3	Hand Line	OPEN	all	MA	all	HND MA
4	Hand Line	OPEN	all	NE	all	HND NE
5	Otter Trawl	OPEN	all	MA	sm	OT sm MA
6	Otter Trawl	OPEN	all	MA	lg	OT lg MA
7	Otter Trawl	OPEN	all	NE	sm	OT sm NE
8	Otter Trawl	OPEN	all	NE	lg	OT lg NE
9	Scallop Trawl	AA	GEN	MA	all	SCT AA GEN MA
10	Scallop Trawl	AA	LIM	MA	all	SCT AA LIM MA
11	Scallop Trawl	OPEN	GEN	MA	all	SCT OPEN GEN MA
12	Scallop Trawl	OPEN	LIM	MA	all	SCT OPEN LIM MA
13	Otter Trawl, Ruhle	OPEN	all	MA	lg	OTR lg MA
14	Otter Trawl, Ruhle	OPEN	all	NE	sm	OTR sm NE
15	Otter Trawl, Ruhle	OPEN	all	NE	lg	OTR lg NE
16	Otter Trawl, Haddock Separator	OPEN	all	MA	lg	OTH lg MA
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	OTH lg NE
18	Shrimp Trawl	OPEN	all	MA	all	SHT MA
19	Shrimp Trawl	OPEN	all	NE	all	SHT NE
20	Floating Trap	OPEN	all	MA	all	FT MA
21	Floating Trap	OPEN	all	NE	all	FT NE
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	GN sm MA
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	GN lg MA
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xl	GN xl MA
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	GN sm NE
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	GN lg NE
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xl	GN xl NE
28	Purse Seine	OPEN	all	MA	all	PS MA
29	Purse Seine	OPEN	all	NE	all	PS NE
30	Scallop Dredge	AA	GEN	MA	all	SCD AA GEN MA
31	Scallop Dredge	AA	GEN	NE	all	SCD AA GEN NE
32	Scallop Dredge	AA	LIM	MA	all	SCD AA LIM MA
33	Scallop Dredge	AA	LIM	NE	all	SCD AA LIM NE
34	Scallop Dredge	OPEN	GEN	MA	all	SCD OPEN GEN MA
35	Scallop Dredge	OPEN	GEN	NE	all	SCD OPEN GEN NE
36	Scallop Dredge	OPEN	LIM	MA	all	SCD OPEN LIM MA
37	Scallop Dredge	OPEN	LIM	NE	all	SCD OPEN LIM NE
38	Mid-water Paired & Single Trawl	OPEN	all	MA	all	MWT MA
39	Mid-water Paired & Single Trawl	OPEN	all	NE	all	MWT NE
40	Pots and Traps, Fish	OPEN	all	MA	all	FPT MA
41	Pots and Traps, Fish	OPEN	all	NE	all	FPT NE
42	Pots and Traps, Conch	OPEN	all	MA	all	CPT MA
43	Pots and Traps, Conch	OPEN	all	NE	all	CPT NE
44	Pots and Traps, Hagfish	OPEN	all	MA	all	HPT MA
45	Pots and Traps, Hagfish	OPEN	all	NE	all	HPT NE
46	Pots and Traps, Shrimp	OPEN	all	NE	all	SPT NE
47	Pots and Traps, Lobster	OPEN	all	MA	all	LPT MA
48	Pots and Traps, Lobster	OPEN	all	NE	all	LPT NE
49	Pots and Traps, Crab	OPEN	all	MA	all	CRPT MA
50	Pots and Traps, Crab	OPEN	all	NE	all	CRPT NE
51	Beam Trawl	OPEN	all	MA	all	BT MA
52	Beam Trawl	OPEN	all	NE	all	BT NE
53	Dredge, Other	OPEN	all	MA	all	DRO MA
54	Ocean Quahog/Surf Clam Dredge	OPEN	all	MA	all	CD MA
55	Ocean Quahog/Surf Clam Dredge	OPEN	all	NE	all	CD NE
	Other fleets aggregated together					Other Fleets

# **Procedures for Issuing Manuscripts in the *Northeast Fisheries Science Center Reference Document (CRD) Series***

---

## **Clearance**

All manuscripts submitted for issuance as CRDs must have cleared the NEFSC's manuscript/abstract/webpage review process. If any author is not a federal employee, he/she will be required to sign an "NEFSC Release-of-Copyright Form." If your manuscript includes material from another work which has been copyrighted, then you will need to work with the NEFSC's Editorial Office to arrange for permission to use that material by securing release signatures on the "NEFSC Use-of-Copyrighted-Work Permission Form."

For more information, NEFSC authors should see the NEFSC's online publication policy manual, "Manuscript/abstract/webpage preparation, review, and dissemination: NEFSC author's guide to policy, process, and procedure," located in the Publications/Manuscript Review section of the NEFSC intranet page.

## **Organization**

Manuscripts must have an abstract and table of contents, and (if applicable) lists of figures and tables. As much as possible, use traditional scientific manuscript organization for sections: "Introduction," "Study Area" and/or "Experimental Apparatus," "Methods," "Results," "Discussion," "Conclusions," "Acknowledgments," and "Literature/References Cited."

## **Style**

The CRD series is obligated to conform with the style contained in the current edition of the United States Government Printing Office Style Manual. That style manual is silent on many aspects of scientific manuscripts. The CRD series relies more on the CSE Style Manual. Manuscripts should be prepared to conform with these style manuals.

The CRD series uses the American Fisheries Society's guides to names of fishes, mollusks, and decapod

crustaceans, the Society for Marine Mammalogy's guide to names of marine mammals, the Biosciences Information Service's guide to serial title abbreviations, and the ISO's (International Standardization Organization) guide to statistical terms.

For in-text citation, use the name-date system. A special effort should be made to ensure that all necessary bibliographic information is included in the list of cited works. Personal communications must include date, full name, and full mailing address of the contact.

## **Preparation**

Once your document has cleared the review process, the Editorial Office will contact you with publication needs – for example, revised text (if necessary) and separate digital figures and tables if they are embedded in the document. Materials may be submitted to the Editorial Office as files on zip disks or CDs, email attachments, or intranet downloads. Text files should be in Microsoft Word, tables may be in Word or Excel, and graphics files may be in a variety of formats (JPG, GIF, Excel, PowerPoint, etc.).

## **Production and Distribution**

The Editorial Office will perform a copy-edit of the document and may request further revisions. The Editorial Office will develop the inside and outside front covers, the inside and outside back covers, and the title and bibliographic control pages of the document.

Once both the PDF (print) and Web versions of the CRD are ready, the Editorial Office will contact you to review both versions and submit corrections or changes before the document is posted online.

A number of organizations and individuals in the Northeast Region will be notified by e-mail of the availability of the document online.

---

Research Communications Branch  
Northeast Fisheries Science Center  
National Marine Fisheries Service, NOAA  
166 Water St.  
Woods Hole, MA 02543-1026

**MEDIA  
MAIL**

## **Publications and Reports of the Northeast Fisheries Science Center**

The mission of NOAA's National Marine Fisheries Service (NMFS) is "stewardship of living marine resources for the benefit of the nation through their science-based conservation and management and promotion of the health of their environment." As the research arm of the NMFS's Northeast Region, the Northeast Fisheries Science Center (NEFSC) supports the NMFS mission by "conducting ecosystem-based research and assessments of living marine resources, with a focus on the Northeast Shelf, to promote the recovery and long-term sustainability of these resources and to generate social and economic opportunities and benefits from their use." Results of NEFSC research are largely reported in primary scientific media (*e.g.*, anonymously-peer-reviewed scientific journals). However, to assist itself in providing data, information, and advice to its constituents, the NEFSC occasionally releases its results in its own media. Currently, there are three such media:

*NOAA Technical Memorandum NMFS-NE* -- This series is issued irregularly. The series typically includes: data reports of long-term field or lab studies of important species or habitats; synthesis reports for important species or habitats; annual reports of overall assessment or monitoring programs; manuals describing program-wide surveying or experimental techniques; literature surveys of important species or habitat topics; proceedings and collected papers of scientific meetings; and indexed and/or annotated bibliographies. All issues receive internal scientific review and most issues receive technical and copy editing.

*Northeast Fisheries Science Center Reference Document* -- This series is issued irregularly. The series typically includes: data reports on field and lab studies; progress reports on experiments, monitoring, and assessments; background papers for, collected abstracts of, and/or summary reports of scientific meetings; and simple bibliographies. Issues receive internal scientific review and most issues receive copy editing.

*Resource Survey Report* (formerly *Fishermen's Report*) -- This information report is a regularly-issued, quick-turnaround report on the distribution and relative abundance of selected living marine resources as derived from each of the NEFSC's periodic research vessel surveys of the Northeast's continental shelf. This report undergoes internal review, but receives no technical or copy editing.

**TO OBTAIN A COPY** of a *NOAA Technical Memorandum NMFS-NE* or a *Northeast Fisheries Science Center Reference Document*, either contact the NEFSC Editorial Office (166 Water St., Woods Hole, MA 02543-1026; 508-495-2350) or consult the NEFSC webpage on "Reports and Publications" (<http://www.nefsc.noaa.gov/nefsc/publications/>). To access *Resource Survey Report*, consult the Ecosystem Surveys Branch webpage (<http://www.nefsc.noaa.gov/femad/ecosurvey/mainpage/>).

**ANY USE OF TRADE OR BRAND NAMES IN ANY NEFSC PUBLICATION OR REPORT DOES NOT IMPLY ENDORSEMENT.**