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2015 Discard Estimation, Precision, and Sample Size Analyses for 14 Federally Managed Species Groups in the Waters off the Northeastern United States

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

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LIST OF ACRONYMS AND ABBREVIATIONS

AA = Access area
ASM = At-Sea Monitoring Program
ASMFC = Atlantic States Marine Fisheries Commission
CV = coefficient of variation
d/k = discard/kept
FED = finfish excluder device
FMP = fishery management plan
GEN = General category
lg = large mesh
LIM = Limited access category
MA = Mid-Atlantic
MRIP = Marine Recreational Information Program
NE = New England
NEFOP = Northeast Fisheries Observer Program
NEFSC = Northeast Fisheries Science Center
NMFS = National Marine Fisheries Service
OPEN = Nonaccess area
SBRM = Standardized Bycatch Reporting Methodology
SE = standard error of the estimate
sm = small mesh
VTR = Vessel Trip Report
xlg = extra large mesh

EXECUTIVE SUMMARY

This report describes the analyses associated with the discard estimation of 14 federally managed fish and invertebrate species groups during the July 2013 through June 2014 time period and the expected coverage needed by at-sea observers for northeastern US fisheries for the April 2015 through March 2016 period using the Standardized Bycatch Reporting Methodology.

An estimated 64,795 mt (142,848,902 lb) of federally regulated species were discarded during the July 2013 through June 2014 time period. The predominant species groups discarded are skates (Rajidae*)* and spiny dogfish (*Squalus acanthias*). Across all species groups examined, "No Market" is the reason reported for the majority of discards. Analyses also revealed that observer coverage within a fleet corresponded with the spatial and temporal patterns of fishing activity in terms of kept weight of all species for fleets with observer coverage. The discards reported in this document may not necessarily correspond directly with the discard estimates derived for individual stock assessments because of 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.

The sea days needed to achieve a precision-based performance standard (30% coefficient of variation of the discard estimate) were estimated to be 11,204 sea days for the 14 fish and invertebrate species groups across 56 fleets. The sea day analyses used a standardized protocol to account for the importance of the discarded species relative to the amount of discards by a fleet and total fishing mortality.

INTRODUCTION

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 15 September 2011 because of a deficiency associated with the prioritization process, an element of the amendment. The regulations implementing the SBRM were removed by the National Marine Fisheries Service (NMFS) on 29 December 2011 (NMFS 2011). A revised SBRM Omnibus Amendment was approved on 13 March 2015, and a final rule is pending. This report provides some of the information required by the annual discard report specified in the revised SBRM amendment.

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 (Wigley et al. 2012a). The analyses conducted for 2015 are similar to those conducted in 2014 (Wigley et al. 2014).

This document presents the estimated discards and associated precision as well as 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 northeastern US fleets[1]. Additionally, discard reasons associated with the discarded species are

[1] "Fleet" is synonymous with "fishing mode."

summarized. This document and Wigley et al. (2012b, 2013, 2014) differ from previous SBRM documents in that they do not include a sea day prioritization[2] and focus on fish and invertebrate species groups; they do not include sea turtles.

METHODS

Data Sources

The data sets used include July 2013 through June 2014 data from the Northeast Fisheries Observer Program[3] (NEFOP) database, the Vessel Trip Report (VTR; including logbooks from the surfclam [*Spisula solidissima*] and ocean quahog [*Artica islandica*] fishery) database, the Northeast Fisheries Science Center (NEFSC) commercial landings database, and the National Oceanic and Atmospheric Administration Marine Recreational Information Program (MRIP) database.

The NEFOP is a comprehensive, multipurpose program that collects a broad range of data including information on all species, by disposition (retained and discarded), that are encountered during a fishing trip as well as gear characteristics data, economic information, and biological samples (NEFOP 2013). The NEFOP employs trained sea-going observers and monitors to collect these data. Fish and invertebrate species are recorded in weight. Conversion factors were applied to convert any dressed weight data to live[4] 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 in the analysis. Aborted trips and "set only" trips were excluded from the analysis along with trips fishing in statistical areas associated with the Southeast Region (statistical area ≥ "700"), trips landing outside the Greater Atlantic Region (e.g., trips landing in Canada), and "carrier" trips (*fleet_type* = "050"; no fishing effort occurred on these trips). Hauls with no catch reported, species hail weight with discard reason "039" ("previously discarded"), and catch of nonliving matter (such as debris, shells, etc.; these items would not be kept and sold) were also excluded for the analysis. Additionally, there were 1 observed tuna purse seine trip, 1 scallop beam trawl trip, and 1 fish beam trawl trip for which there were no corresponding VTR trips for the gear types and 1 observed Mid-Atlantic shrimp trawl trip with no corresponding VTR trip for the calendar quarter; consequently these 4 observed trips were removed from the analysis.

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[2] The observer sea day allocation documents are available online at: http://www.nefsc.noaa.gov/femad/fsb/SBRM/

[3] There were 1,168 At-Sea Monitoring Program (ASM) trips associated with NE hand line, longline, otter trawl, Ruhle trawl, and gillnet fleets in the July 2013 through June 2014 data. A comparison of discard rates derived from observer and at-sea monitor data in 2013 and 2014 revealed there were generally similar discard rates between the 2 data collection programs for the 18 fish species for 5 gear types (longline, large mesh otter trawl, large mesh Ruhle trawl, large mesh gillnet, and extra large mesh gillnet) where at-sea monitor data exist, hence NEFOP and ASM data were pooled. See Northeast Fisheries Observer Program (2013) for more information on ASM. The Atlantic States Marine Fisheries Commission (ASMFC) funded 117 otter trawl trips (119 trips when stratified by gear type and mesh size) in the July 2013 through June 2014 data. A comparison of discard rates derived from NEFOP-allocated and ASMFC-allocated trips revealed there were generally similar discard rates for the 3 fleets where ASMFC-allocated trips exist (MA small mesh otter trawl fleet [83 trips], MA large mesh otter trawl fleet [5 trips], and NE small mesh otter trawl fleet [31 trips]); hence, these data have been pooled.

[4] In this document, "live" is equivalent to "round" grade (i.e., includes the weight of the shell for shellfish).

The same broad stratification scheme used in previous SBRM analyses was employed in this analysis, in which trips were partitioned into nonoverlapping fleets by using 5 classification variables: geographic region, gear type, mesh, access area, and trip category. Calendar quarter was used in the analyses and was based on landed date 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[5]; ports in states from Maine to Rhode Island constituted the NE region, and ports in states from Connecticut to northern North Carolina (35° N) 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, 2 mesh groups were formed: small (mesh less than 5.50 in) and large (5.50 in mesh and greater). For gillnets, 3 mesh groups were formed: small (mesh less than 5.50 in), large (mesh from 5.50 to 7.99 in), and extra large (mesh 8.00 in 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." In the data set analyzed, there were also trips associated with an exempted fishery where 100% observer coverage was required for trips. These exempted trips using a haddock separator trawl with small mesh have been grouped together to form a separator fleet.

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 5.50 in)
lg	Large mesh (from 5.50 to 7.99 in for gillnet; 5.50 in and greater for otter trawl)
xlg	Extra large mesh (8.00 in and greater)
LIM	Limited access category
GEN	General category
OPEN	Nonaccess 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-Greater Atlantic Regional Fisheries Office http://www.greateratlantic.fisheries.noaa.gov/aps/evtr/doc/vtr_inst.pdf for guidance). These self-reported data[6] constitute the basis of the fishing activity of the commercial fleets. While dealer data are the preferred data to use because of more accurate weights, VTR data are used as a surrogate because dealer data do not contain mesh size and area fished information. The VTR data were thus used to expand the NEFOP discard ratios to total discards. For this analysis, the commercial federal VTR trips were used. Conversion factors were

[5] 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 July 2007 through June 2011 data found similar results (Wigley et al. 2012a).
[6] See Wigley et al. 2007 for more details on self-reported VTR data.

applied to convert various units of measure to pounds and all weight to live weight. VTR trip data were grouped into fleets as defined above. Trips participating in the US/Canada access area 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 logbook system separate 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 that compose each species groups is given in Table 1. 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.

The spatial and temporal patterns of observer coverage within a fleet were evaluated. Rather than using number of trips (a trip-based metric), the kept weight of all species reported in the VTR was used. The "kept weight with observer coverage" was derived as the kept weight of all species reported in the VTR summed by fleet, statistical area, and quarter where at least 1 observed trip occurred in the fleet-quarter-statistical area cell and at least 3 observed trips[7] occurred in the fleet-quarter stratum. The "kept weight" was derived as the kept weight of all species reported in the VTR summed over all statistical areas and quarters within a fleet. The percentages of "kept weight with observer coverage" were calculated by dividing the "kept weight with observer coverage" by the "kept weight." These percentages were derived for the 56 fleets (reported as 50 individual fleets and 6 confidential fleets combined into "Confidential fleets"), "Other minor fleets" (that also include 1 confidential fleet), and all fleets combined. Additionally, as a relative measure of fleet activity among all fleets, the percentage of "kept weight" was derived by dividing the "kept weight" by the sum of the "kept weight" across all fleets.

Discard Estimation

Total discards of each of the 14 federally managed species groups were estimated for the July 2013 through June 2014 time period by 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 (i.e., any species retained during the trip). Total discards (in weight) 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. In this analysis, no survival ratios were applied to discard estimates.

Simple imputation methods were used to fill quarterly cells for which there were fewer than 3 observed trips. Data from adjoining strata were pooled to impute estimates for cells with 0, 1, or 2 trips. In this imputation only the temporal stratification (calendar quarter) was relaxed to an annual aggregation even though 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[8].

[7] The 3 trips for fleet-quarter correspond with a minimum threshold for allocating observer coverage.

[8] Pilot coverage is defined as a minimum level of observer coverage necessary to acquire bycatch information with which to calculate variance estimates that can then be used to further define the level of sampling needed (NMFS 2004).

If some data were available, then discard estimates were derived, but these results were not used in sample size analyses.

The variances and standard errors (SE) 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 6 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 2. The discard reasons "No Market" and "Poor Quality" are considered economic discards and not regulatory discards.

The observed (nonextrapolated) discards associated with each of the 6 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 each fleet that composes 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 to derive the estimated discards by discard reason category. The total estimated discards by discard reason category were summed over the fleets that compose 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. In other words, the "Other fleets filtered out" represents the weighted percentage where the weighting factor was the fleet extrapolated discards.

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 by 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 because of little or no observer coverage (no data), or when total discards were zero (no variance), the sample size (number of trips) was determined by 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 was the same as was used in previous sea day analyses (Wigley et al. 2012b, 2013, 2014) and the SBRM analyses (Wigley et al. 2007, 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, when effort changes sharply between years, or when the fleet comprises only a few trips. Further refinements are performed during the sea day allocation[9].

Some fleet/species combinations contribute very little to the total fishing mortality or discard of the species but may require significant resources to characterize the precision of the estimate. 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 fishing mortality of the resource. To address this, a modification of the filtering approach developed for the 2007 SBRM was employed[10]. 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 discards.

The 2015 baseline sea days were filtered by 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 catch constituted 98% of the total fishing mortality.

To determine the number of sea days (referred to as the "2015 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 approach 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 were filtered out, then the number of sea days for the fleet was based on minimum pilot days to maintain monitoring coverage for that fleet. Minimum pilot coverage represents a minimum threshold for the allocation of sea days and is defined as 3 trips per quarter for each quarter with industry activity. The quarterly number of trips is multiplied by the quarterly mean VTR trip length and then summed over quarters to derive the annual minimum pilot days for the 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 nonpilot fleets.

[9] A description of the further refinements can be found in the sea day allocation documents; see http://www.nefsc.noaa.gov/femad/fsb/SBRM/ .

[10] In the 2007 SBRM analyses, the importance filter comprised 3 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 3-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. 2012a). Thus, in this analysis and the 2014 analysis, all cells in the unlikely filter were set to 1 (all cells are likely; this is equivalent to removing the unlikely filter from the importance filter).

RESULTS

There were 56 fleets uniquely identified in the July 2013 through June 2014 data (Tables 2 and 3; Appendix Table 1). Based upon the industry activity during this time period, the MA and NE twin trawl fleets (Rows 13 and 14, respectively) and the NE haddock separator trawl small mesh exempted fleet (Row 56) were added to the collection of fleets analyzed (fleets that have not been included in previous analyses are indicated with a "+" in Tables 2 and 3). Compared to the 2014 sea day analysis, there were 2 fleets (NE LIM OPEN scallop trawl and NE shrimp pot) that were not included in this analysis because of no industry activity. The other minor fleets not uniquely identified in this analysis have been aggregated into a single fleet labeled "Other minor fleets." Because of confidentially rules, the landings associated with 5 unique fleets (MA GEN Access area scallop trawl [Row 9], MA LIM Access area scallop trawl [Row 10], MA large mesh Ruhle trawl [Row 15], MA floating trap [Row 21], and NE beam trawl [Row 52]) in Tables 2 and 3 have been aggregated into a single fleet labeled "Confidential fleets" for reporting purposes in Tables 4 and 5. An additional confidential fleet, NE twin trawl (Row 14; Tables 2 and 3), was not aggregated with the other confidential fleets because this fleet was the only confidential fleet with some NEFOP data (confidential data would be exposed); this fleet was aggregated into "Other minor fleets" in Tables 4 and 5. Hence, the fleet row numbers within Tables 2, 3, and 6 are sequential, while the fleet row numbers in Tables 4, 5, and 7 are ordered, but there are gaps in the row numbers.

Of the 56 fleets examined, 32 fleets had little or no observer data: 12 fleets had sparse observer data across all quarters, while 20 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., red deepsea crab [*Chaceon quinquedens*], whelk also known as conch [*Busycon carica, Busyotypus canaliculatus*], shrimp [*Pandalus borealis*], and hagfish [Myxinidae]). No discard estimation was performed for the 20 fleets with no observer coverage, and they were designated as fleets in need of pilot coverage (Tables 2 and 3; Appendix Table 1). The 12 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 with the sparse observer data. For the 24 remaining fleets (designated as nonpilot fleets), estimates of discards and their associated variance were derived and used to determine the sample sizes needed for a 30% CV. Of the 24 fleets, there were 11 fleets (Rows 2, 4, 11, 18, 23-25, 30, and 32-34) where the simple imputation was applied (Tables 2 and 3).

Thus, for the discard estimation and precision analysis, 20 fleets had no discard estimation, and 36 fleets had discards estimated. For the sample size analysis, 24 fleets had sample sizes derived from the discard variances, and 32 fleets had sample sizes based upon pilot coverage.

A total of 3,508 trips (10,800 days) was observed during the July 2013 through July 2014 period. When these trips were stratified, some trips were partitioned between strata resulting in 3,729 trips (11,335 days; Tables 2 and 3) in the NEFOP data set. The total number of trips and days do not include 2 observed beam trawl trips in the MA and NE fish and scallop beam trawl fleets because there were no reported VTR trips for these fleets. The information for these 2 fleets has been aggregated into "Other minor fleets." Information regarding beam trawl gear code and apparent misreporting of some gear types are further described in the discussion section of this report.

In terms of number of trips, the percentages of observed trips varied by fleet and calendar quarter. On an annual basis, for the 36 fleets with some observer coverage, the percentage of observed trips by fleet ranged between 0.03% (MA Hand Line, Row 3; Table 2) to 116% (NE small mesh haddock separator trawl exempted fleet, Row 56; Table 2). It is unexpected to have coverage percentages exceed 100%. In this case, the NEFOP observer reported 2 mesh sizes (large and small mesh) were used on a trip while the VTR for that trip reported only large mesh was used; hence more observed trips than VTR trips appeared in the data sets for this small mesh fleet. For the 24 nonpilot fleets (excluding the NE small mesh haddock separator trawl exempted fleet [Row 56] that required 100% observer coverage), the percentage of observed trips ranged between 0.14% (NE Lobster Pot, Row 48) and 24% (NE mid-water trawl fleet, Row 41). Over all fleets, the percentage of observed trips was 4.4% (Table 2).

In terms of kept weight of all species, the percentage of observer coverage over all fleets was 52% (Table 4). For the 24 nonpilot fleets, the percentage of observer coverage ranged between 19% and 100% with an average of 79% (Table 4). Twenty of the 24 fleets had a percentage greater than or equal to 69% with an average of 89%. This finding indicates that the majority of kept weight within the fleet was associated with statistical areas and quarters with observer coverage. Additionally, these 20 fleets composed 54% of the total kept weight across all fleets. The kept weight of all species was considered a surrogate for fishing effort; hence, observer coverage spatially and temporally occurred where the majority of fishing effort occurred.

The landings associated with the combined fleet "Other minor fleets" contributed 0.2% of the total landings across all fleets (Table 4); thus, the 56 uniquely identified fleets account for almost all of the total VTR landings.

Annual VTR landings for all fleets and estimated discards (live weight, in pounds) with associated precision (CV and SE) for 35 individual fleets (Rows 2-8, 11, 13, 16-18, 23-25, 27, 28, 30-38, 40-42, 44, 45, 47, 48, 50, and 56[11]) are summarized for each of the 14 species groups, the individual species that composed those species groups, and the 14 species groups combined (Tables 5A, 5B, and 5C; Figures 1A and 1B). There were 15 fleets (Rows 1, 12, 19, 20, 22, 26, 29, 39, 43, 46, 49, 51, and 53-55) with no discard estimation because of the lack of NEFOP coverage; 2 combined fleets ("Confidential fleets," and "Other minor fleets") also have landings only. Fleets with no discard estimation have dark shade in Tables 5A and 5B. In Table 5A, 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 5B) and 14 species group combined (Table 5C) were not used in the sample size analysis.

Based upon this analysis, 64,795 mt (142,848,902 lb; live weight) of discards for the 14 species groups occurred during the July 2013 through June 2014 period (Table 5C). The majority (78%) of the discards comprises 2 species groups: skates (Rajidae; 63%) and spiny dogfish (*Squalus acanthias*; 15%); the remaining species groups each accounted for less than or equal to 5% (Table 5A).

The percentage of discards to total catch varied among the 14 species groups (Table 5A; Figure 1A) and individual species (Table 5B; Figure 1B). There were 3 species groups (SCOQ, HERR, and TILE) where discards were less than 1% of total catch; 4 species groups (BLUE, SCAL, RCRAB, and SBM) where percentages of discards ranged between 1% and 10% of total

[11] Discards were estimated rather than summed for the NE small mesh haddock separator trawl exempted fleet (Row 56) because unobserved hauls occurred on observed trips in this fleet.

catch; 3 species groups (GFL, FSB, and GFS) where discards ranged between 11% and 25% of total catch; and 4 species groups (MONK, DOG, SKATE, and SAL) where discards were greater than 26% of total catch. The species groups with the highest percentage of total discards relative to total catch were: Atlantic salmon (*Salmo salar*; 100%), skates (76%), spiny dogfish (69%), and monkfish (*Lophius americanus*; 28%; Figure 1A). Because of the no possession regulation for Atlantic salmon, it is not surprising to have a discard percentage equal to 100%. For individual species (Table 5B; Figure 1B), most notable are the high percentages of discards to total catch for Atlantic wolffish *(Anarhichas lupus*; >99%), ocean pout (*Zoarces americanus*; >99%), and windowpane flounder (*Scophthalmus aquosus*; >99%) because of the no possession regulations for these 3 individual species and for Atlantic halibut (*Hippoglossus hippoglossus*; 75%) because of a 1 fish per trip regulation. The NE large mesh otter trawl fleet (Row 8) had the highest estimated discards (Table 5C).

The reasons for discarding varied among the 14 species groups (Appendix Table 3A) and individual species (Appendix Table 3B). Overall, for the 14 species groups, the majority (84%) of discards were attributed to "No Market." "Regulation" (size, quota, and other), "Poor Quality," and "Other" contributed 14%, 1%, and 1%, respectively (Appendix Table 3A).

The percentages of discards to total catch by fleet were also summarized for the 24 nonpilot fleets (Figure 2). Discards of 1 or more of the 14 species groups that were filtered out via the importance filter have been aggregated into a species group labeled[12] "Other SBRM." Discards of nonfederally managed species have been aggregated into a species group labeled "Non-SBRM." The percentages of discards to total catch varied by fleet (Figure 2). There were 2 fleets (Rows 30 and 41) where discards were less than 1% of the total catch in the fleet; 2 fleets (Rows 24 and 32) where the percentages of discards ranged between 1% and 10%; 13 fleets (Rows 2, 4, 7, 18, 23, 25, 28, 33, 34, 36-38, and 56) where the percentages of discards ranged between 11% and 25% of total catch; 5 fleets (Rows 5, 8, 27, 35, and 48) where the percentages of discards ranged between 26% and 50% of the total catch; and 2 fleets (Rows 6 and 11) where discards were greater than 50% of the total catch (Figure 2).

The number of species groups discarded within a fleet also varied among fleets. The majority of fleets (16 of the 24 fleets) comprised 2 or 3 discarded species groups. For 8 of these fleets (Rows 2, 11, 18, 24, 32, 33, 36, and 56), the "Other SBRM" species group comprised the majority of the discards. This finding indicates that the majority of discards were filtered out via the importance filter. For one fleet (Row 25), "Other SBRM" species group comprised the plurality of discards. There were 4 fleets (Rows 23, 30, 41, and 48) for which the "Non-SBRM" species group comprised the majority of the discards and 1 fleet (Row 35) for which the "Non-SBRM" species group comprised the plurality of the discards. There were another 2 fleets where 2 of the 3 discarded species groups were "Other SBRM" and "Non-SBRM," and the third represented at least 76% of the discards: Row 4 (large mesh groundfish) and Row 27 (spiny dogfish; Figure 2). The remaining fleets (8 of the 24 fleets) had between 4 and 9 discarded species groups. The skate species group dominated the discards in 4 of these fleets (Rows 6, 8, 28, and 34) while the "Non-SBRM" group dominated the discards in 3 fleets (Rows 7, 37, and 38) and 1 fleet (Row 5) for which these groups combined comprised the majority of discards.

[12] The labels used to reference the species groups have changed, however, the species groups have not changed. The 2012 – 2014 annual analyses used species group labels "Other FMP" and "non-FMP" because the regulations associated with 2007 SBRM Omnibus Amendment had been removed. It is anticipated that the revised SBRM Omnibus Amendment will be implemented in 2015, hence this report uses "Other SBRM" and "non-SBRM," the same labels used in the SBRM 3-year Review Report (Wigley et al. 2011).

The dominant "Non-SBRM" species in the scallop dredge fleets (Rows 32-38) were: sand dollar (Clypeasteroida), sponge (Porifera), and starfish (Asteroidea). "Fish, not known" was the dominant "Non-SBRM" species in the NE purse seine fleet and the NE mid-water trawl fleet (Rows 30 and 41). American lobster (*Homarus americanus*) and Jonah crab (*Cancer borealis*) were the dominant "Non-SBRM" species in the NE lobster pot fleet (Row 48; Figure 2).

The precision of the discard estimates varied by species group and fleet (Table 5A). Of the 14 species groups, 11 species groups (BLUE, FSB, GFL, MONK, SCAL, SKATE, GFS, DOG, SBM, SCOQ, and TILE) had an overall CV that was less than 30%, and 3 species groups (SAL, HERR, and RCRAB) had an overall CV that was greater than 30%. The discards of 6 species groups (SAL, BLUE, HERR, SCAL, SCOQ, and TILE) were filtered out in all fleets; this finding indicates that the discards of these species groups were a minor component of the total catch of these species (Table 5A; Figure 1A). The precision of the discard estimates for individual species are given in Table 5B; these precision estimates were not used in the sample size analysis.

The number of sea days needed for each species group and fleet, as well of the number of pilot coverage days, minimum pilot coverage days, and the sea days needed for the fleet (referred to as "2015 Sea Days Needed"), are summarized in Table 6. A total of 11,204 days are needed for the 56 fleets. As mentioned previously, 32 fleets had insufficient observer information to estimate discards and the sea days for these fleets were based on pilot coverage days. The number of sea days needed for fleets with the pilot coverage designation was 1,300 days (12% of 11,204 days; Table 6). There are 9 fleets for which the sea days for all species groups were filtered out via the importance filter, and minimum pilot coverage days were used to maintain some coverage (Rows 2, 11, 23, 24, 30, 32, 36, 41, and 56; Table 6). There was a total of 204 sea days associated with the fleets with minimum pilot coverage (2% of 11,204 days; Table 6). The sea days needed for the remaining 15 fleets (9,700 days, representing 87% of the total sea days needed) were derived by using the variance of the discard estimate (Tables 6). Of the 9,700 days, 4,647 days (48%) were associated with 1 fleet (NE large mesh otter trawl [Row 8]; Table 6).

The sample size (in terms of number of sea days, number of trips, and percentage of trips based on the July 2013 through June 2014 VTR trips) needed to achieve a 30% CV of the discard estimate in 15 fleets is given in Table 7. 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 1 fleet (Row 8), resulting in the penultimate (next largest) value being used in the fleet (e.g., 731 days rather than 4,647 days for Row 8), then the total number of sea days needed across the 56 fleets would be 7,288 days (a 35% decrease from the 11,204 days). When the penultimate value is used, the expected achieved precision of red crab discards in Row 8 would be 81% CV.

DISCUSSION

A broad stratification was used to support the deployment of observers on commercial fishing trips among various fleets by using attributes known prior to the trip departure. As discussed in previous discard estimation analyses (Wigley et al. 2007, 2011), species-specific stock assessment discard estimation may differ from this report because of differences in stratification and data used (calendar year versus 12-month [July through June] time period; area fished versus region [port of departure]; discard mortality assumptions, 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 when uncertainty in the estimates is taken into account 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.

No survival ratios were applied to the discard estimates; 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 useful to note that survival ratios are applied in stock assessments for Georges Bank and Gulf of Maine stocks of Atlantic cod (*Gadus morhua*), Atlantic sea scallop (*Placopecten magellanicus*), spiny dogfish, fluke (*Paralichthys dentatus*), southern New England and Gulf of Maine stocks of winter flounder (*Pseudopleuronectes americanus*), and southern New England yellowtail flounder (*Limanda ferruginea*).

These analyses have used VTR data. Dealer (*CFDERSyyyy*) data do not contain mesh or area fished information until the trip-based allocation is performed (Wigley et al. 2008). 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 hails) 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.

During the data preparation for these analyses, some possible misreported gear types were encountered. Some of the possible misreporting was associated with the seasonal switch between fishing for groundfish and shrimp. For example, captains reported using a shrimp trawl ("OTS") with 6.5 in mesh catching groundfish (in these cases, one would expect "OTF," otter trawl fish). Conversely, captains reported "OTF" with 1 7/8 in mesh catching shrimp (in these cases, one would expect "OTS"). Generally, there are only a few trips with these possible reporting errors.

There also appeared to be some confusion in the proper use of the VTR gear code "OTS" (shrimp trawl), "OTC" (scallop trawl), and "OTF" (otter trawl). Some of the "OTS" trips have either squid or scallops (species that start with the letter "S") as the predominant species reported (no shrimp reported), and it is not certain whether or not these trips used a shrimp trawl, scallop trawl, otter trawl, or twin trawl. Caution should be used when interpreting results associated with these otter trawl gear types as the implications of changed and/or misreported gear types are variable among fleets, and the true magnitude is unknown. Continued outreach and education to industry members emphasizing proper reporting of gear types is a critical need as well as improved VTR database management.

In 2014, the northern shrimp fishery was closed. Since the northern shrimp fishery is traditionally closed during the calendar quarter 3, the VTR trips associated with NE shrimp trawl fleet (Row 20, Qtr 3; Tables 2 and 3) were investigated in the 2013 analysis. These trips used 2 in mesh, and most trips reported catching herring while a few trips reported catching squid. The captains of these vessels indicated that a finfish excluder device (FED) was not used. The northern shrimp fishery requires a FED; however, other small mesh exempted fisheries do not require a FED. Currently, there is no data element within the VTR database that indicates whether or not a FED or other bycatch reduction device was used. Because of this limitation, the trips within the NE shrimp trawl fleet (Row 20) represent trips using a shrimp trawl with and without a FED (Tables 2 - 7; Figures 2 and 3). Stratifying the data by quarter reduces some of the

uncertainty in the discard estimates that are related to this data limitation. An additional data element within the VTR database is needed to partition these trips into separate fleets.

The analysis conducted for the spatial and temporal observer coverage used live weight. As a result, fleets using scallop dredge and clam dredge targeting species with shells have higher kept weight percentage than other fleets because of the use of "live" weight rather than "landed meat" weight. However, the use of live weight does not distort the observed percentage (spatial or temporal pattern) within a fleet. It is important to remember that percent observer coverage is an indicator of where observed kept weight (or trips) occurred relative to unobserved kept weight (or trips). The percentage observed should not be confused with the precision of the discard estimate, which is the metric used to describe discard variability and to determine the sample size needed for monitoring purposes.

The use of minimum pilot coverage represents a refinement over the 2012 (and prior) analyses when pilot coverage was used. As depicted in Figure 4 of Wigley et al. 2012a, there were 2 cases in which pilot coverage had been invoked in the sample size analysis: (1) insufficient or no NEFOP data (no discard information is available) and (2) when all sea days were filtered out (discard information is available and discards found to be low relative to other fleets). By utilizing the minimum pilot coverage, the numbers of trips needed to monitor the fleets in the upcoming year are based upon the information obtained via the data analysis. It is important to note that in many cases, there are only minor differences in the number of the pilot days versus the minimum pilot days because of the low number of industry trips in the fleets where all species are filtered out. Thus, the use of minimum pilot coverage represents only a minor refinement in the sea day analysis.

For fleets with low overall trip activity, the use of pilot coverage results in designating either more observed trips than the number of trips that occurred in a fleet or observer coverage that could exceed fleets with coverage derived from observer data. Pilot coverage needs further refinement.

There is 1 fleet with high sea day requirements (>2,000 sea days). The NEFOP data associated with the trips within this fleet were reviewed to rule out any data "irregularities." The high monitoring coverage for New England large mesh otter trawl fleets (Row 8; Table 6) was because of high variability of red deepsea crab discards. In this analysis, as well as in previous analyses (NEFSC 2011a, 2011b; Wigley et al. 2011, 2012b, 2013, 2014), the high variability arose from observing some trips that were fishing in deep-water portions of statistical areas as well as observing other trips that were fishing in shallower portions of the same statistical areas. Red deepsea crabs were encountered during trips fishing in deep water. Although the discard reason reported for this fleet was "No Market" (Appendix Table 3A), these vessels do not generally have permits to land red deepsea crabs, thus the red deepsea 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 quality 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 2013) in which 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.

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Table 1. List of the 14 fish and invertebrate species groups (in bold), with species group abbreviations in parentheses and scientific names in italics, and the species that compose these groups, corresponding to the 13 federal fishery management plans implemented in the waters off the northeastern United States.

ATLANTIC SALMON (SAL)	*Salmo salar*
BLUEFISH (BLUE)	*Pomatomus saltatrix*
FLUKE - SCUP - BLACK SEA BASS (FSB)	
Black sea bass	*Centropristis striata*
Fluke	*Paralichthys dentatus*
Scup	*Stenotomus chrysops*
HERRING, ATLANTIC (HERR)	*Clupea harengus*
LARGE MESH GROUNDFISH (GFL)	
American plaice	*Hippoglossoides platessoides*
Atlantic cod	*Gadus morhua*
Atlantic halibut	*Hippoglossus hippoglossus*
Atlantic wolffish	*Anarhichas lupus*
Haddock	*Melanogrammus aeglefinus*
Ocean pout	*Zoarces americanus*
Pollock	*Pollachius virens*
Redfish	*Sebastes fasciatus*
White hake	*Urophycis tenuis*
Windowpane flounder	*Scophthalmus aquosus*
Winter flounder	*Pseudopleuronectes americanus*
Witch flounder	*Glyptocephalus cynoglossus*
Yellowtail flounder	*Limanda ferruginea*
MONKFISH (MONK)	*Lophius americanus*
RED DEEPSEA CRAB (RCRAB)[13]	*Chaceon quinquedens*
SEA SCALLOP (SCAL)	*Placopecten magellanicus*
SKATE COMPLEX[14] **(SKATE)**	Rajidae
Barndoor skate	*Dipturus laevis*
Clearnose skate	*Raja eglanteria*
Little skate	*Leucoraja erinacea*
Rosette skate	*Leucoraja garmani*
Smooth skate	*Malacoraja senta*
Thorny skate	*Amblyraja radiata*
Winter skate	*Leucoraja ocellata*
SMALL MESH GROUNDFISH (GFS)	
Offshore hake	*Merluccius albidus*
Red hake	*Urophycis chuss*
Silver hake	*Merluccius bilinearis*
SPINY DOGFISH (DOG)	*Squalus acanthias*
SQUID[15] **- BUTTERFISH - MACKEREL (SBM)**	
Atlantic mackerel	*Scomber scombrus*
Butterfish	*Peprilus triacanthus*
Northern shortfin squid	*Illex illecebrosus*
Longfin inshore squid	*Doryteuthis (Amerigo) pealeii*
SURFCLAM - OCEAN QUAHOG (SCOQ)[16]	
Surfclam	*Spisula solidissima*
Ocean quahog	*Artica islandica*
TILEFISH (TILE)	*Lopholatilus chamaeleonticeps*

[13] In previous documents (e.g., Wigley et al. 2014; Wigley et al. 2013) red deepsea crab was referred to as red crab.
[14] Skate complex is composed of 7 species as well as skate, unknown, and little/winter mixed skate. Individual species are not summarized separately.
[15] Squid, unclassified is included in this species group. Longfin inshore squid and northern shortfin squid are also known as Loligo squid and Illex squid, respectively.
[16] In this analysis, surfclams and ocean quahogs compose the species group and are not reported separately.

Table 2. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) based on July 2013 through June 2014 data. "P" indicates fleets with "pilot" designation.

Fleet						NEFOP					VTR					
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	Pilot
1	Longline	OPEN	all	MA	all	.	.	.	.	**.**	62	26	37	69	**194**	P
2	Longline	OPEN	all	NE	all	.	4	20	6	**30**	203	160	56	73	**492**	
3	Hand Line	OPEN	all	MA	all	.	.	.	1	**1**	1,562	722	70	754	**3,108**	P
4	Hand Line	OPEN	all	NE	all	8	3	.	1	**12**	1,377	377	6	435	**2,195**	
5	Otter Trawl	OPEN	all	MA	sm	106	83	49	119	**357**	1,472	900	394	1,073	**3,839**	
6	Otter Trawl	OPEN	all	MA	lg	50	34	48	47	**179**	1,625	733	810	1,015	**4,183**	
7	Otter Trawl	OPEN	all	NE	sm	99	55	32	93	**279**	1,386	745	420	1,037	**3,588**	
8	Otter Trawl	OPEN	all	NE	lg	199	250	203	346	**998**	2,127	1,523	1,348	1,667	**6,665**	
9	Scallop Trawl	AA	GEN	MA	all	.	.	.	.	**.**	.	.	.	13	**13**	P
10	Scallop Trawl	AA	LIM	MA	all	.	.	.	.	**.**	.	1	2	.	**3**	P
11	Scallop Trawl	OPEN	GEN	MA	all	8	3	2	11	**24**	119	20	6	134	**279**	
12	Scallop Trawl	OPEN	LIM	MA	all	.	.	.	.	**.**	10	4	5	6	**25**	P
13+	Otter Trawl, Twin	OPEN	all	MA	all	.	.	1	.	**1**	2	9	9	29	**49**	P
14+	Otter Trawl, Twin	OPEN	all	NE	all	.	2	.	.	**2**	5	6	6	2	**19**	P
15	Otter Trawl, Ruhle	OPEN	all	MA	lg	.	.	.	.	**.**	6	.	2	.	**8**	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	.	.	.	2	**2**	1	.	14	3	**18**	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	.	.	.	1	**1**	2	.	1	6	**9**	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4	3	1	20	**28**	14	25	12	73	**124**	
19	Shrimp Trawl	OPEN	all	MA	all	.	.	.	.	**.**	249	152	4	.	**405**	P
20	Shrimp Trawl	OPEN	all	NE	all	.	.	.	.	**.**	78	4	.	49	**131**	P
21	Floating Trap	OPEN	all	MA	all	.	.	.	.	**.**	42	5	.	38	**85**	P
22	Floating Trap	OPEN	all	NE	all	.	.	.	.	**.**	9	.	.	1	**10**	P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	2	6	.	5	**13**	663	452	363	460	**1,938**	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1	4	.	5	**10**	534	720	308	453	**2,015**	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	.	8	7	19	**34**	98	714	244	1,064	**2,120**	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	.	.	.	.	**.**	1	3	.	1	**5**	P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	279	174	80	182	**715**	1,546	990	257	828	**3,621**	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	210	48	24	111	**393**	1,194	556	252	931	**2,933**	
29	Purse Seine	OPEN	all	MA	all	.	.	.	.	**.**	105	.	.	124	**229**	P
30	Purse Seine	OPEN	all	NE	all	24	4	1	5	**34**	218	39	2	37	**296**	
31	Scallop Dredge	AA	GEN	MA	all	2	.	.	1	**3**	9	13	8	37	**67**	P
32	Scallop Dredge	AA	GEN	NE	all	6	.	.	1	**7**	59	6	2	4	**71**	

See text for fleet abbreviations; "+" = new fleets in 2015.

Table 2, continued. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) based on July 2013 through June 2014 data. "P" indicates fleets with "pilot" designation.

Fleet						NEFOP					VTR					
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	Pilot
33	Scallop Dredge	AA	LIM	MA	all	10	2	3	3	**18**	92	25	23	60	**200**	
34	Scallop Dredge	AA	LIM	NE	all	20	8	2	4	**34**	168	83	18	59	**328**	
35	Scallop Dredge	OPEN	GEN	MA	all	31	27	18	29	**105**	703	391	349	783	**2,226**	
36	Scallop Dredge	OPEN	GEN	NE	all	45	14	10	44	**113**	866	669	1,090	972	**3,597**	
37	Scallop Dredge	OPEN	LIM	MA	all	10	6	7	25	**48**	115	54	59	221	**449**	
38	Scallop Dredge	OPEN	LIM	NE	all	36	11	22	57	**126**	353	93	171	426	**1,043**	
39	Danish Seine	OPEN	all	MA	all	.	.	.	.	**.**	24	.	.	61	**85**	P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	1	.	1	.	**2**	1	.	12	.	**13**	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	37	21	28	19	**105**	127	112	140	60	**439**	
42	Pots and Traps, Fish	OPEN	all	MA	all	.	.	.	4	**4**	387	253	61	270	**971**	P
43	Pots and Traps, Fish	OPEN	all	NE	all	.	.	.	.	**.**	707	112	1	103	**923**	P
44	Pots and Traps, Conch	OPEN	all	MA	all	.	.	.	2	**2**	225	528	96	258	**1,107**	P
45	Pots and Traps, Conch	OPEN	all	NE	all	.	1	.	1	**2**	401	362	.	356	**1,119**	P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	.	.	.	.	**.**	17	14	4	12	**47**	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	.	.	.	2	**2**	800	398	93	401	**1,692**	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	9	9	10	9	**37**	11,982	7,823	1,773	4,590	**26,168**	
49	Pots and Traps, Crab	OPEN	all	MA	all	.	.	.	.	**.**	10	5	6	33	**54**	P
50	Pots and Traps, Crab	OPEN	all	NE	all	.	.	1	.	**1**	14	17	27	23	**81**	P
51	Beam Trawl	OPEN	all	MA	all	.	.	.	.	**.**	36	28	11	39	**114**	P
52	Beam Trawl	OPEN	all	NE	all	.	.	.	.	**.**	30	5	.	12	**47**	P
53	Dredge, Other	OPEN	all	MA	all	.	.	.	.	**.**	.	41	183	64	**288**	P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	.	.	.	.	**.**	506	365	454	499	**1,824**	P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	.	.	.	.	**.**	823	571	563	769	**2,726**	P
56+	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	.	.	.	7	**7**	.	.	.	6	**6**	
					Total	1,197	780	570	1,182	**3,729**	33,165	20,854	9,772	20,493	**84,284**	

See text for fleet abbreviations; "+" = new fleets in 2015.

Table 3. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) sea days, by fleet and calendar quarter (Q) based on July 2013 through June 2014 data. "P" indicates fleets with "pilot" designation.

Fleet						NEFOP					VTR					
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	Pilot
1	Longline	OPEN	all	MA	all	.	.	.	.	**.**	347	227	272	457	**1,303**	P
2	Longline	OPEN	all	NE	all	.	4	24	6	**34**	203	178	67	92	**540**	
3	Hand Line	OPEN	all	MA	all	.	.	.	1	**1**	1,728	781	101	785	**3,395**	P
4	Hand Line	OPEN	all	NE	all	9	3	.	1	**13**	1,500	432	6	447	**2,385**	
5	Otter Trawl	OPEN	all	MA	sm	263	250	223	257	**993**	2,880	2,166	1,789	1,989	**8,824**	
6	Otter Trawl	OPEN	all	MA	lg	74	96	156	99	**425**	2,342	1,652	3,330	1,832	**9,156**	
7	Otter Trawl	OPEN	all	NE	sm	262	177	95	201	**735**	3,094	2,068	1,637	2,519	**9,318**	
8	Otter Trawl	OPEN	all	NE	lg	906	808	787	1,363	**3,864**	4,789	4,496	4,558	4,968	**18,811**	
9	Scallop Trawl	AA	GEN	MA	all	.	.	.	.	**.**	.	.	.	26	**26**	P
10	Scallop Trawl	AA	LIM	MA	all	.	.	.	.	**.**	.	7	14	.	**21**	P
11	Scallop Trawl	OPEN	GEN	MA	all	14	6	4	25	**49**	240	27	14	254	**535**	
12	Scallop Trawl	OPEN	LIM	MA	all	.	.	.	.	**.**	45	32	30	33	**140**	P
13+	Otter Trawl, Twin	OPEN	all	MA	all	.	.	9	.	**9**	11	70	52	31	**164**	P
14+	Otter Trawl, Twin	OPEN	all	NE	all	.	14	.	.	**14**	28	47	36	18	**129**	P
15	Otter Trawl, Ruhle	OPEN	all	MA	lg	.	.	.	.	**.**	8	.	15	.	**23**	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	.	.	.	12	**12**	8	.	33	17	**58**	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	.	.	.	9	**9**	20	.	5	46	**71**	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	32	29	6	156	**223**	112	213	83	582	**990**	
19	Shrimp Trawl	OPEN	all	MA	all	.	.	.	.	**.**	1,302	825	30	.	**2,157**	P
20	Shrimp Trawl	OPEN	all	NE	all	.	.	.	.	**.**	79	4	.	52	**135**	P
21	Floating Trap	OPEN	all	MA	all	.	.	.	.	**.**	42	5	.	38	**85**	P
22	Floating Trap	OPEN	all	NE	all	.	.	.	.	**.**	9	.	.	6	**15**	P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	2	6	.	5	**13**	703	456	372	463	**1,994**	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1	5	.	5	**11**	553	733	321	513	**2,120**	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	.	10	12	26	**48**	113	859	303	1,203	**2,478**	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	.	.	.	.	**.**	1	3	.	1	**5**	P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	371	240	154	323	**1,088**	2,113	1,525	502	1,251	**5,391**	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	247	53	51	214	**565**	1,417	765	525	1,659	**4,366**	
29	Purse Seine	OPEN	all	MA	all	.	.	.	.	**.**	105	.	.	126	**231**	P
30	Purse Seine	OPEN	all	NE	all	48	9	3	13	**73**	447	81	8	82	**618**	
31	Scallop Dredge	AA	GEN	MA	all	4	.	.	1	**5**	22	23	21	80	**146**	P
32	Scallop Dredge	AA	GEN	NE	all	14	.	.	3	**17**	120	14	6	12	**152**	

See text for fleet abbreviations; "+" = new fleets in 2015.

Table 3, continued. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) sea days, by fleet and calendar quarter (Q) based on July 2013 through June 2014 data. "P" indicates fleets with "pilot" designation.

Fleet						NEFOP					VTR					
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	Pilot
33	Scallop Dredge	AA	LIM	MA	all	82	18	19	23	**142**	810	196	144	430	**1,580**	
34	Scallop Dredge	AA	LIM	NE	all	156	67	18	26	**267**	1,307	675	139	458	**2,579**	
35	Scallop Dredge	OPEN	GEN	MA	all	49	47	36	53	**185**	1,102	699	676	1,339	**3,816**	
36	Scallop Dredge	OPEN	GEN	NE	all	62	25	18	63	**168**	1,174	885	1,256	1,347	**4,662**	
37	Scallop Dredge	OPEN	LIM	MA	all	91	55	58	227	**431**	1,096	457	452	2,048	**4,053**	
38	Scallop Dredge	OPEN	LIM	NE	all	364	108	194	604	**1,270**	3,420	799	1,503	4,579	**10,301**	
39	Danish Seine	OPEN	all	MA	all	.	.	.	.	**.**	24	.	.	61	**85**	P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	5	.	4	.	**9**	7	.	44	.	**51**	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	203	77	107	68	**455**	573	270	371	212	**1,426**	
42	Pots and Traps, Fish	OPEN	all	MA	all	.	.	.	4	**4**	392	263	70	280	**1,005**	P
43	Pots and Traps, Fish	OPEN	all	NE	all	.	.	.	.	**.**	726	120	7	103	**956**	P
44	Pots and Traps, Conch	OPEN	all	MA	all	.	.	.	2	**2**	327	587	131	296	**1,341**	P
45	Pots and Traps, Conch	OPEN	all	NE	all	.	1	.	1	**2**	401	365	.	356	**1,122**	P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	.	.	.	.	**.**	116	113	22	87	**338**	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	.	.	.	2	**2**	1,043	531	152	544	**2,270**	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	29	29	46	29	**133**	14,435	10,083	3,468	6,409	**34,395**	
49	Pots and Traps, Crab	OPEN	all	MA	all	.	.	.	.	**.**	53	5	14	36	**108**	P
50	Pots and Traps, Crab	OPEN	all	NE	all	.	.	8	.	**8**	99	137	175	139	**550**	P
51	Beam Trawl	OPEN	all	MA	all	.	.	.	.	**.**	132	95	33	64	**324**	P
52	Beam Trawl	OPEN	all	NE	all	.	.	.	.	**.**	30	6	.	19	**55**	P
53	Dredge, Other	OPEN	all	MA	all	.	.	.	.	**.**	.	41	183	84	**308**	P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	.	.	.	.	**.**	1,032	703	945	1,054	**3,735**	P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	.	.	.	.	**.**	936	747	704	843	**3,230**	P
56+	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	.	.	.	56	**56**	.	.	.	49	**49**	
					Totals	3,288	2,137	2,032	3,878	**11,335**	53,616	35,467	24,620	40,419	**154,121**	

See text for fleet abbreviations; "+" = new fleets in 2015.

Table 4. Vessel Trip Report kept weight of all species (live mt), percentage of kept weight of all species across all fleets, kept weight of all species (live mt) with Northeast Fisheries Observer Program (NEFOP) coverage from statistical areas and quarters with at least 1 observed trip and at least 3 observed trips in the fleet and quarter, and percentage of kept weight of all species with observer coverage, by fleet based on July 2013 through June 2014 data.

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Kept Weight (mt)	Percentage of Kept Weight	Kept Weight with NEFOP coverage (mt)	Percentage of Kept Weight with NEFOP coverage
1	Longline	OPEN	all	MA	all	806	0.1	0	0.0
2	Longline	OPEN	all	NE	all	592	0.1	222	37.4
3	Hand Line	OPEN	all	MA	all	237	<0.1	0	0.0
4	Hand Line	OPEN	all	NE	all	495	0.1	366	73.8
5	Otter Trawl	OPEN	all	MA	sm	17,863	3.1	16,611	93.0
6	Otter Trawl	OPEN	all	MA	lg	6,555	1.1	6,061	92.5
7	Otter Trawl	OPEN	all	NE	sm	25,319	4.4	22,709	89.7
8	Otter Trawl	OPEN	all	NE	lg	26,350	4.6	26,024	98.8
11	Scallop Trawl	OPEN	GEN	MA	all	452	0.1	395	87.4
12	Scallop Trawl	OPEN	LIM	MA	all	302	0.1	0	0.0
13	Otter Trawl, Twin	OPEN	all	MA	all	525	0.1	0	0.0
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	410	0.1	0	0.0
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	33	<0.1	0	0.0
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,097	0.2	962	87.7
19	Shrimp Trawl	OPEN	all	MA	all	567	0.1	0	0.0
20	Shrimp Trawl	OPEN	all	NE	all	168	<0.1	0	0.0
22	Floating Trap	OPEN	all	NE	all	9	<0.1	0	0.0
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,638	0.3	312	19.1
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	2,363	0.4	493	20.9
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	3,115	0.5	2,574	82.6
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	<1	<0.1	0	0.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,669	0.6	3,423	93.3
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	6,901	1.2	6,532	94.7
29	Purse Seine	OPEN	all	MA	all	17,554	3.0	0	0.0
30	Purse Seine	OPEN	all	NE	all	21,999	3.8	21,926	99.7
31	Scallop Dredge	AA	GEN	MA	all	164	<0.1	0	0.0
32	Scallop Dredge	AA	GEN	NE	all	204	<0.1	142	69.4
33	Scallop Dredge	AA	LIM	MA	all	7,063	1.2	5,508	78.0
34	Scallop Dredge	AA	LIM	NE	all	14,313	2.5	12,391	86.6
35	Scallop Dredge	OPEN	GEN	MA	all	4,503	0.8	4,298	95.5
36	Scallop Dredge	OPEN	GEN	NE	all	4,090	0.7	3,388	82.8
37	Scallop Dredge	OPEN	LIM	MA	all	25,093	4.4	23,330	93.0
38	Scallop Dredge	OPEN	LIM	NE	all	76,139	13.2	72,551	95.3
39	Danish Seine	OPEN	all	MA	all	1,736	0.3	0	0.0
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	2,537	0.4	0	0.0
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	67,143	11.6	63,195	94.1
42	Pots and Traps, Fish	OPEN	all	MA	all	241	<0.1	14	5.7
43	Pots and Traps, Fish	OPEN	all	NE	all	153	<0.1	0	0.0
44	Pots and Traps, Conch	OPEN	all	MA	all	1,545	0.3	0	0.0
45	Pots and Traps, Conch	OPEN	all	NE	all	313	0.1	0	0.0
46	Pots and Traps, Hagfish	OPEN	all	NE	all	675	0.1	0	0.0
47	Pots and Traps, Lobster	OPEN	all	MA	all	810	0.1	0	0.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	13,094	2.3	4,933	37.7

See text for fleet abbreviations.

Table 4, continued. Vessel Trip Report kept weight of all species (live mt), percentage of kept weight of all species across all fleets, kept weight of all species (live mt) with Northeast Fisheries Observer Program (NEFOP) coverage from statistical areas and quarters with at least 1 observed trip and at least 3 observed trips in the fleet and quarter, and percentage of kept weight of all species with observer coverage, by fleet based on July 2013 through June 2014 data.

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Kept Weight (mt)	Percentage of Kept Weight	Kept Weight with NEFOP coverage (mt)	Percentage of Kept Weight with NEFOP coverage
49	Pots and Traps, Crab	OPEN	all	MA	all	105	<0.1	0	0.0
50	Pots and Traps, Crab	OPEN	all	NE	all	1,293	0.2	0	0.0
51	Beam Trawl	OPEN	all	MA	all	336	0.1	0	0.0
53	Dredge, Other	OPEN	all	MA	all	161	<0.1	0	0.0
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	116,296	20.2	0	0.0
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	98,098	17.0	0	0.0
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	92	<0.1	92	100.0
	Confidential fleets					338	0.1	0	0.0
	Other minor fleets					1,285	0.2	0	0.0
					Total	**576,836**	**100.0**	**298,451**	**51.7**

See text for fleet abbreviations.

Table 5A. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: ATLANTIC SALMON (Salmo salar)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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			
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	33	0	33	0.896	30	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: ATLANTIC SALMON (Salmo salar)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	0	0	0			
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	33	0	33	0.896	30	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: BLUEFISH (Pomatomus saltatrix)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	140	140	0			
3	Hand Line	OPEN	all	MA	all	100,432	100,432	0			P
4	Hand Line	OPEN	all	NE	all	47,625	47,625	0			
5	Otter Trawl	OPEN	all	MA	sm	161,029	145,729	15,300	0.451	6,901	
6	Otter Trawl	OPEN	all	MA	lg	60,490	59,536	954	0.500	477	
7	Otter Trawl	OPEN	all	NE	sm	89,149	82,119	7,030	0.311	2,186	
8	Otter Trawl	OPEN	all	NE	lg	32,836	31,979	857	0.355	304	
11	Scallop Trawl	OPEN	GEN	MA	all	90	90	0			
12	Scallop Trawl	OPEN	LIM	MA	all	320	320				P
13	Otter Trawl, Twin	OPEN	all	MA	all	130	130	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
19	Shrimp Trawl	OPEN	all	MA	all	458	458				P
20	Shrimp Trawl	OPEN	all	NE	all	190	190				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	424,647	424,335	312	0.707	221	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,114,123	1,114,123	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	25,918	18,213	7,705	0.618	4,764	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	168	168				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	226,140	225,889	251	0.538	135	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	20,773	10,792	9,981	0.179	1,788	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: BLUEFISH (Pomatomus saltatrix)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	130	130	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	145	0	145	0.947	137	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	116	0	116	0.828	96	
42	Pots and Traps, Fish	OPEN	all	MA	all	536	536	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	125	125				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	1,601	1,601	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	81	81	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	7,149	7,149				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					135,713	135,713				
	Other minor fleets					17,867	17,867				
					TOTAL	2,468,121	2,425,470	42,651	0.208	8,872	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: FLUKE (Paralichthys dentatus) - SCUP (Stenotomus chrysops) - BLACK SEA BASS (Centropristis striata)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	215	215				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	184,426	184,426	0			P
4	Hand Line	OPEN	all	NE	all	38,106	38,106	0			
5	Otter Trawl	OPEN	all	MA	sm	7,591,056	6,369,190	1,221,866	0.227	277,694	
6	Otter Trawl	OPEN	all	MA	lg	9,762,122	9,013,703	748,419	0.217	162,370	
7	Otter Trawl	OPEN	all	NE	sm	5,243,177	4,690,466	552,711	0.299	165,285	
8	Otter Trawl	OPEN	all	NE	lg	3,701,554	2,636,434	1,065,120	0.146	155,956	
11	Scallop Trawl	OPEN	GEN	MA	all	43,758	31,424	12,334	0.477	5,889	
12	Scallop Trawl	OPEN	LIM	MA	all	52,020	52,020				P
13	Otter Trawl, Twin	OPEN	all	MA	all	19,571	4,331	15,240	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	114,586	60,700	53,886	0.048	2,584	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	6,500	6,500	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,173	340	833	0.664	554	
19	Shrimp Trawl	OPEN	all	MA	all	2,148	2,148				P
20	Shrimp Trawl	OPEN	all	NE	all	9,882	9,882				P
22	Floating Trap	OPEN	all	NE	all	9,649	9,649				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,830	1,529	301	0.512	154	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	14,720	12,579	2,141	0.887	1,900	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	43,847	14,910	28,937	0.744	21,526	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	178	178				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	145,324	145,204	120	0.322	39	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	73,545	14,852	58,693	0.222	13,053	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	2,136	2,136	0			P
32	Scallop Dredge	AA	GEN	NE	all	323	0	323	0.572	185	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: FLUKE (Paralichthys dentatus) - SCUP (Stenotomus chrysops) - BLACK SEA BASS (Centropristis striata)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	27,995	2,854	25,141	0.376	9,459	
34	Scallop Dredge	AA	LIM	NE	all	74,222	410	73,812	0.285	21,030	
35	Scallop Dredge	OPEN	GEN	MA	all	49,021	14,468	34,553	0.159	5,502	
36	Scallop Dredge	OPEN	GEN	NE	all	10,168	302	9,866	0.399	3,940	
37	Scallop Dredge	OPEN	LIM	MA	all	169,368	5,461	163,907	0.201	32,887	
38	Scallop Dredge	OPEN	LIM	NE	all	681,606	448	681,158	0.116	79,042	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	1,300	1,300	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	474,717	363,060	111,657	0.215	23,975	P
43	Pots and Traps, Fish	OPEN	all	NE	all	319,654	319,654				P
44	Pots and Traps, Conch	OPEN	all	MA	all	2,545	416	2,129	0.145	309	P
45	Pots and Traps, Conch	OPEN	all	NE	all	42,794	0	42,794	0.000	0	P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	149,987	118,844	31,143	0.332	10,324	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	14,264	13,298	966	0.971	938	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	543	543	0			P
51	Beam Trawl	OPEN	all	MA	all	57,597	57,597				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	113	5	108	0.153	17	
	Confidential fleets					39,705	39,705				
	Other minor fleets					30,926	30,926				
					TOTAL	29,208,374	24,270,213	4,938,161	0.082	405,448	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: HERRING, ATLANTIC (Clupea harengus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	222	222	0			P
4	Hand Line	OPEN	all	NE	all	1,350	1,350	0			
5	Otter Trawl	OPEN	all	MA	sm	399,239	379,795	19,444	0.635	12,356	
6	Otter Trawl	OPEN	all	MA	lg	6,050	5,533	517	0.530	274	
7	Otter Trawl	OPEN	all	NE	sm	11,403,867	11,285,362	118,505	0.645	76,426	
8	Otter Trawl	OPEN	all	NE	lg	53,877	36,231	17,646	0.196	3,456	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	804,076	804,000	76	0.060	5	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	4	0	4	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	304	0	304	0.366	111	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	141,250	141,250				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	347	347	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	147	147	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	2,162	500	1,662	0.197	328	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	48,499,512	48,499,422	90	0.158	14	
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: HERRING, ATLANTIC (Clupea harengus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	14	0	14	0.875	12	
36	Scallop Dredge	OPEN	GEN	NE	all	11	0	11	0.874	9	
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	40	0	40	0.421	17	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	3,152,003	3,152,000	3	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	140,448,579	140,445,741	2,838	0.722	2,049	
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	12	0	12	0.212	3	
	Confidential fleets					6,813	6,813				
	Other minor fleets					440,000	440,000				
					TOTAL	205,359,879	205,198,713	161,166	0.481	77,523	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: LARGE MESH GROUNDFISH

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	19	19				P
2	Longline	OPEN	all	NE	all	123,223	74,974	48,249	0.494	23,851	
3	Hand Line	OPEN	all	MA	all	5,123	5,123	0			P
4	Hand Line	OPEN	all	NE	all	282,228	55,852	226,376	0.518	117,168	
5	Otter Trawl	OPEN	all	MA	sm	443,462	5,704	437,758	0.187	81,678	
6	Otter Trawl	OPEN	all	MA	lg	731,374	274,358	457,016	0.126	57,465	
7	Otter Trawl	OPEN	all	NE	sm	353,875	9,891	343,984	0.193	66,270	
8	Otter Trawl	OPEN	all	NE	lg	37,895,421	34,940,438	2,954,983	0.096	283,717	
11	Scallop Trawl	OPEN	GEN	MA	all	19,593	34	19,559	0.242	4,732	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	4,399	2,948	1,451	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	40,949	23,638	17,311	0.060	1,044	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	96,056	65,401	30,655	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,559,825	2,370,105	189,720	0.226	42,829	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	114	64	50	0.506	25	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,679	266	1,413	1.256	1,776	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	1,679	728	951	0.771	734	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	4,875,131	4,662,822	212,309	0.055	11,770	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	230,414	203,770	26,644	0.202	5,378	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	1,631	50	1,581	0.846	1,337	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: LARGE MESH GROUNDFISH

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	41,671	499	41,172	0.318	13,093	
34	Scallop Dredge	AA	LIM	NE	all	133,157	4,776	128,381	0.278	35,725	
35	Scallop Dredge	OPEN	GEN	MA	all	63,658	27	63,631	0.161	10,216	
36	Scallop Dredge	OPEN	GEN	NE	all	51,455	72	51,383	0.189	9,702	
37	Scallop Dredge	OPEN	LIM	MA	all	128,006	380	127,626	0.125	15,994	
38	Scallop Dredge	OPEN	LIM	NE	all	677,012	2,380	674,632	0.100	67,441	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	165,783	125,860	39,923	0.681	27,190	
42	Pots and Traps, Fish	OPEN	all	MA	all	362	362	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	50	50				P
44	Pots and Traps, Conch	OPEN	all	MA	all	15	15	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	82,584	430	82,154	0.234	19,214	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	301,727	302	301,425	1.042	314,174	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	6	6				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	25	25				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	209,238	199,427	9,811	0.065	639	
	Confidential fleets					13	13				
	Other minor fleets					31	31				
					TOTAL	49,520,989	43,030,840	6,490,149	0.072	466,319	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: MONKFISH (Lophius americanus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	64	64				P
2	Longline	OPEN	all	NE	all	172	172	0			
3	Hand Line	OPEN	all	MA	all	81	81	0			P
4	Hand Line	OPEN	all	NE	all	0	0	0			
5	Otter Trawl	OPEN	all	MA	sm	228,649	106,035	122,613	0.310	37,959	
6	Otter Trawl	OPEN	all	MA	lg	554,716	321,365	233,350	0.425	99,262	
7	Otter Trawl	OPEN	all	NE	sm	153,795	125,516	28,279	0.679	19,202	
8	Otter Trawl	OPEN	all	NE	lg	6,993,676	6,071,426	922,250	0.079	72,850	
11	Scallop Trawl	OPEN	GEN	MA	all	24,534	4,392	20,142	0.270	5,436	
12	Scallop Trawl	OPEN	LIM	MA	all	5,648	5,648				P
13	Otter Trawl, Twin	OPEN	all	MA	all	4,443	4,306	137	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	330	252	78	0.060	5	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	19,189	18,820	369	0.686	253	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	498	498				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	476	476	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	13,136	13,136	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	4,018,170	3,762,104	256,066	0.492	126,064	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	258,464	248,423	10,041	0.097	970	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	3,856,707	3,620,186	236,520	0.147	34,691	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	3,754	1,139	2,615	0.367	961	P
32	Scallop Dredge	AA	GEN	NE	all	4,377	1,954	2,423	0.727	1,761	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: MONKFISH (Lophius americanus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	296,071	29,282	266,789	0.314	83,654	
34	Scallop Dredge	AA	LIM	NE	all	491,981	153,843	338,137	0.136	45,932	
35	Scallop Dredge	OPEN	GEN	MA	all	160,440	86,879	73,561	0.146	10,743	
36	Scallop Dredge	OPEN	GEN	NE	all	59,598	15,764	43,834	0.240	10,525	
37	Scallop Dredge	OPEN	LIM	MA	all	732,546	141,674	590,872	0.154	90,727	
38	Scallop Dredge	OPEN	LIM	NE	all	3,057,051	416,364	2,640,687	0.107	282,444	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	44	0	44	0.916	40	
42	Pots and Traps, Fish	OPEN	all	MA	all	214	214	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	103	103				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	60	60	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	18	18	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	3,899	3,899				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	19,346	19,346				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	4,930	4,930				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	164	161	3	0.376	1	
	Confidential fleets					205	205				
	Other minor fleets					7,050	7,050				
					TOTAL	20,974,598	15,185,788	5,788,810	0.063	362,546	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: RED DEEPSEA CRAB (Chaceon quinquedens)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	5,750	0	5,750	0.743	4,272	
6	Otter Trawl	OPEN	all	MA	lg	4,461	0	4,461	0.559	2,494	
7	Otter Trawl	OPEN	all	NE	sm	10	0	10	1.887	18	
8	Otter Trawl	OPEN	all	NE	lg	81,977	0	81,977	0.399	32,720	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2	0	2	2.196	4	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	179	0	179	0.325	58	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	38	0	38	1.027	39	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: RED DEEPSEA CRAB (Chaceon quinquedens)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	17	0	17	1.039	17	
38	Scallop Dredge	OPEN	LIM	NE	all	0	0	0			
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	9,045	0	9,045	1.312	11,871	
49	Pots and Traps, Crab	OPEN	all	MA	all	176,182	176,182				P
50	Pots and Traps, Crab	OPEN	all	NE	all	2,201,196	2,201,196	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	2,478,856	2,377,378	101,478	0.346	35,157	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SEA SCALLOP (Placopecten magellanicus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	178,490	77,910	100,579	0.329	33,088	
6	Otter Trawl	OPEN	all	MA	lg	1,228,781	1,091,432	137,349	0.359	49,352	
7	Otter Trawl	OPEN	all	NE	sm	59,106	11,071	48,035	0.402	19,308	
8	Otter Trawl	OPEN	all	NE	lg	149,637	80,734	68,902	0.251	17,322	
11	Scallop Trawl	OPEN	GEN	MA	all	994,119	902,980	91,139	0.383	34,916	
12	Scallop Trawl	OPEN	LIM	MA	all	600,485	600,485				P
13	Otter Trawl, Twin	OPEN	all	MA	all	21,736	21,736	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	27	0	27	0.551	15	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	369	42	327	0.952	312	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	692	0	692	0.558	386	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	443	0	443	0.271	120	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	361,240	355,408	5,832	0.159	929	P
32	Scallop Dredge	AA	GEN	NE	all	450,439	447,513	2,926	0.889	2,601	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SEA SCALLOP (Placopecten magellanicus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	16,516,766	15,537,872	978,895	0.529	517,416	
34	Scallop Dredge	AA	LIM	NE	all	32,023,849	31,345,190	678,659	0.356	241,918	
35	Scallop Dredge	OPEN	GEN	MA	all	9,914,091	9,777,988	136,103	0.223	30,312	
36	Scallop Dredge	OPEN	GEN	NE	all	9,184,413	8,966,054	218,359	0.284	62,121	
37	Scallop Dredge	OPEN	LIM	MA	all	55,293,187	55,171,776	121,411	0.269	32,619	
38	Scallop Dredge	OPEN	LIM	NE	all	170,136,761	167,486,862	2,649,900	0.206	546,400	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	63,791	63,791				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	739,879	739,879				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	223,234	223,234				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					83,033	83,033				
	Other minor fleets					34,782	34,782				
					TOTAL	298,259,352	293,019,773	5,239,579	0.152	797,540	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SKATE COMPLEX (*Rajidae*)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	2,879	2,879				P
2	Longline	OPEN	all	NE	all	111,203	964	110,238	0.547	60,347	
3	Hand Line	OPEN	all	MA	all	298	298	0			P
4	Hand Line	OPEN	all	NE	all	71	71	0			
5	Otter Trawl	OPEN	all	MA	sm	6,759,957	281,677	6,478,280	0.174	1,130,214	
6	Otter Trawl	OPEN	all	MA	lg	18,684,124	2,082,956	16,601,168	0.140	2,322,619	
7	Otter Trawl	OPEN	all	NE	sm	1,448,045	201,307	1,246,738	0.248	309,195	
8	Otter Trawl	OPEN	all	NE	lg	47,515,960	12,540,933	34,975,028	0.094	3,279,502	
11	Scallop Trawl	OPEN	GEN	MA	all	758,537	53,440	705,097	0.210	148,107	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	11,650	11,395	255	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	6,662	0	6,662	0.060	402	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	3,590	200	3,390	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	215,544	17,622	197,922	0.346	68,472	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	2,582	1,280	1,301	8.844	11,510	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	223,741	95,463	128,278	0.597	76,567	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	3,325,525	2,908,944	416,582	0.180	74,904	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	303,992	197,949	106,043	0.081	8,626	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	12,614,809	10,550,501	2,064,308	0.100	207,408	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	5,760	0	5,760	1.398	8,054	P
32	Scallop Dredge	AA	GEN	NE	all	11,474	0	11,474	0.869	9,975	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SKATE COMPLEX (*Rajidae*)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	905,482	0	905,482	0.204	184,656	
34	Scallop Dredge	AA	LIM	NE	all	1,880,014	0	1,880,014	0.188	353,112	
35	Scallop Dredge	OPEN	GEN	MA	all	1,730,208	6,722	1,723,487	0.116	200,415	
36	Scallop Dredge	OPEN	GEN	NE	all	563,211	36	563,175	0.159	89,507	
37	Scallop Dredge	OPEN	LIM	MA	all	4,354,455	1,314	4,353,141	0.098	427,043	
38	Scallop Dredge	OPEN	LIM	NE	all	17,901,753	75	17,901,678	0.074	1,317,100	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	277	227	50	0.616	31	
42	Pots and Traps, Fish	OPEN	all	MA	all	57	57	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	14,677	0	14,677	0.332	4,865	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	595	4	591	4.349	2,571	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	27,094	27,094				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	406	406				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	10,408	629	9,779	0.050	485	
	Confidential fleets					3,580	3,580				
	Other minor fleets					419	419				
					TOTAL	119,399,039	28,988,443	90,410,596	0.049	4,442,063	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SMALL MESH GROUNDFISH

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	26	26				P
2	Longline	OPEN	all	NE	all	740	1	739	0.627	464	
3	Hand Line	OPEN	all	MA	all	4,400	4,400	0			P
4	Hand Line	OPEN	all	NE	all	421	421	0			
5	Otter Trawl	OPEN	all	MA	sm	5,735,315	4,837,352	897,963	0.237	212,634	
6	Otter Trawl	OPEN	all	MA	lg	221,103	130,800	90,303	0.440	39,710	
7	Otter Trawl	OPEN	all	NE	sm	11,324,135	9,756,035	1,568,100	0.236	369,297	
8	Otter Trawl	OPEN	all	NE	lg	947,854	204,982	742,872	0.079	58,929	
11	Scallop Trawl	OPEN	GEN	MA	all	5,334	3,420	1,914	0.468	895	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	12,890	122	12,768	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	11,768	0	11,768	0.059	695	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	897	3	894	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	18,395	1,680	16,715	0.371	6,205	
19	Shrimp Trawl	OPEN	all	MA	all	2,641	2,641				P
20	Shrimp Trawl	OPEN	all	NE	all	67,070	67,070				P
22	Floating Trap	OPEN	all	NE	all	1,600	1,600				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	208	208	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2,123	2,014	109	0.617	67	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	101,320	85,358	15,962	0.149	2,385	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	5,762	5,019	743	0.234	174	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	11	0	11	0.818	9	
31	Scallop Dredge	AA	GEN	MA	all	367	0	367	0.109	40	P
32	Scallop Dredge	AA	GEN	NE	all	100	0	100	0.421	42	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SMALL MESH GROUNDFISH

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	24,202	0	24,202	0.411	9,946	
34	Scallop Dredge	AA	LIM	NE	all	57,464	15	57,449	0.244	13,999	
35	Scallop Dredge	OPEN	GEN	MA	all	5,014	67	4,947	0.251	1,239	
36	Scallop Dredge	OPEN	GEN	NE	all	5,620	0	5,620	0.395	2,218	
37	Scallop Dredge	OPEN	LIM	MA	all	15,335	5	15,330	0.239	3,657	
38	Scallop Dredge	OPEN	LIM	NE	all	107,301	77	107,224	0.207	22,230	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	4	0	4	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	3,951	0	3,951	0.912	3,604	
42	Pots and Traps, Fish	OPEN	all	MA	all	2,592	2,592	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	34	34				P
44	Pots and Traps, Conch	OPEN	all	MA	all	2,915	2,915	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	23,453	18,799	4,654	0.332	1,543	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	12,393	11,307	1,086	1.505	1,634	
49	Pots and Traps, Crab	OPEN	all	MA	all	128	128				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	6	6				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	4,060	1,800	2,260	0.106	240	
	Confidential fleets					559	559				
	Other minor fleets					5,706	5,706				
					TOTAL	18,735,217	15,147,162	3,588,055	0.121	433,031	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SPINY DOGFISH (Squalus acanthias)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	152,690	152,690				P
2	Longline	OPEN	all	NE	all	1,245,197	1,212,546	32,651	0.475	15,524	
3	Hand Line	OPEN	all	MA	all	51	51	0			P
4	Hand Line	OPEN	all	NE	all	719,174	705,289	13,885	1.671	23,204	
5	Otter Trawl	OPEN	all	MA	sm	3,853,454	142,984	3,710,470	0.204	757,578	
6	Otter Trawl	OPEN	all	MA	lg	5,106,394	205,954	4,900,440	0.222	1,088,310	
7	Otter Trawl	OPEN	all	NE	sm	906,210	67,738	838,472	0.264	221,451	
8	Otter Trawl	OPEN	all	NE	lg	7,423,410	263,924	7,159,486	0.073	525,776	
11	Scallop Trawl	OPEN	GEN	MA	all	119,521	0	119,521	0.600	71,682	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	18,749	0	18,749	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	111,012	0	111,012	0.058	6,450	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	12,789	200	12,589	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	313,298	4,400	308,898	0.353	109,075	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	939,449	909,132	30,317	1.930	58,517	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	2,804,975	2,675,897	129,078	0.818	105,561	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	290,297	116,367	173,930	0.513	89,241	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	5,709,445	2,386,266	3,323,179	0.085	281,283	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1,137,488	767,545	369,943	0.183	67,787	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	14,377	0	14,377	0.517	7,439	
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SPINY DOGFISH (Squalus acanthias)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	16,056	0	16,056	0.387	6,215	
34	Scallop Dredge	AA	LIM	NE	all	35,885	0	35,885	0.246	8,824	
35	Scallop Dredge	OPEN	GEN	MA	all	9,233	0	9,233	0.218	2,010	
36	Scallop Dredge	OPEN	GEN	NE	all	5,610	0	5,610	0.883	4,956	
37	Scallop Dredge	OPEN	LIM	MA	all	56,845	0	56,845	0.295	16,789	
38	Scallop Dredge	OPEN	LIM	NE	all	177,743	1,200	176,543	0.132	23,259	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	8,951	0	8,951	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	24,466	20	24,446	0.429	10,477	
42	Pots and Traps, Fish	OPEN	all	MA	all	9	9	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	25	25				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	4,595	170	4,425	1.185	5,242	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	1,237	0	1,237	0.000	0	P
51	Beam Trawl	OPEN	all	MA	all	2,700	2,700				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	43,723	0	43,723	0.064	2,788	
	Confidential fleets					189	189				
	Other minor fleets					0	0				
					TOTAL	31,265,249	9,615,296	21,649,953	0.069	1,486,303	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SQUID (Doryteuthis [Amerigo] pealeii, Illex illecebrosus)- BUTTERFISH (Peprilus triacanthus) - MACKEREL (Scomber scombrus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	423	423	0			
3	Hand Line	OPEN	all	MA	all	17	17	0			P
4	Hand Line	OPEN	all	NE	all	88,931	88,160	771	1.242	958	
5	Otter Trawl	OPEN	all	MA	sm	22,023,879	19,294,254	2,729,625	0.242	661,618	
6	Otter Trawl	OPEN	all	MA	lg	403,049	374,825	28,224	0.263	7,428	
7	Otter Trawl	OPEN	all	NE	sm	30,111,454	28,594,426	1,517,028	0.418	633,535	
8	Otter Trawl	OPEN	all	NE	lg	479,167	426,066	53,101	0.161	8,552	
11	Scallop Trawl	OPEN	GEN	MA	all	959	465	494	0.386	191	
12	Scallop Trawl	OPEN	LIM	MA	all	282	282				P
13	Otter Trawl, Twin	OPEN	all	MA	all	1,166,409	1,103,757	62,652	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	14,550	13,800	750	0.047	35	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	2	2	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,710	0	4,710	0.679	3,200	
19	Shrimp Trawl	OPEN	all	MA	all	3,139	3,139				P
20	Shrimp Trawl	OPEN	all	NE	all	151,257	151,257				P
22	Floating Trap	OPEN	all	NE	all	6,555	6,555				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	15,271	14,959	312	0.742	232	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,083	1,083	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	538	227	311	0.824	256	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	30	30				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	5,506	4,059	1,447	0.276	399	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	288	164	124	0.426	53	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	40	0	40	0.542	22	
31	Scallop Dredge	AA	GEN	MA	all	2,034	2,000	34	0.138	5	P
32	Scallop Dredge	AA	GEN	NE	all	14	0	14	1.030	14	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SQUID (Doryteuthis [Amerigo] pealeii, Illex illecebrosus)- BUTTERFISH (Peprilus triacanthus) - MACKEREL (Scomber scombrus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	149	32	117	0.420	49	
34	Scallop Dredge	AA	LIM	NE	all	983	0	983	0.440	433	
35	Scallop Dredge	OPEN	GEN	MA	all	3,177	2,145	1,032	0.252	260	
36	Scallop Dredge	OPEN	GEN	NE	all	146	0	146	0.580	85	
37	Scallop Dredge	OPEN	LIM	MA	all	1,383	10	1,373	0.324	445	
38	Scallop Dredge	OPEN	LIM	NE	all	5,418	0	5,418	0.253	1,373	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	11,510	11,000	510	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	7,452,531	7,450,772	1,759	0.884	1,555	
42	Pots and Traps, Fish	OPEN	all	MA	all	18	18	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	1	1	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	513,286	513,286				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	5	0	5	0.300	1	
	Confidential fleets					2,082	2,082				
	Other minor fleets					1,264,212	1,264,212				
					TOTAL	63,734,488	59,323,508	4,410,980	0.208	916,105	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SURFCLAM (Spisula solidissima) - OCEAN QUAHOG (Artica islandica)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	2,994	0	2,994	0.515	1,543	
6	Otter Trawl	OPEN	all	MA	lg	6,063	0	6,063	0.518	3,141	
7	Otter Trawl	OPEN	all	NE	sm	904	0	904	0.332	301	
8	Otter Trawl	OPEN	all	NE	lg	2,766	41	2,724	0.335	914	
11	Scallop Trawl	OPEN	GEN	MA	all	64	0	64	1.043	67	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0			
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	3	0	3	0.879	3	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SURFCLAM (Spisula solidissima) - OCEAN QUAHOG (Artica islandica)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	1,832	0	1,832	0.941	1,724	
34	Scallop Dredge	AA	LIM	NE	all	6,369	0	6,369	0.702	4,468	
35	Scallop Dredge	OPEN	GEN	MA	all	763	0	763	1.105	843	
36	Scallop Dredge	OPEN	GEN	NE	all	1,478	0	1,478	0.568	839	
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	18	0	18	0.949	17	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	255,607,665	255,607,665				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	215,583,883	215,583,883				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					466,340	466,340				
					TOTAL	471,681,142	471,657,929	23,214	0.264	6,126	

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: TILEFISH (Lopholatilus chamaeleonticeps)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	1,555,586	1,555,586				P
2	Longline	OPEN	all	NE	all	9,259	9,259	0			
3	Hand Line	OPEN	all	MA	all	1,269	1,269	0			P
4	Hand Line	OPEN	all	NE	all	0	0	0			
5	Otter Trawl	OPEN	all	MA	sm	9,727	8,668	1,059	0.491	520	
6	Otter Trawl	OPEN	all	MA	lg	768	687	81	0.562	46	
7	Otter Trawl	OPEN	all	NE	sm	12,891	11,835	1,056	0.780	824	
8	Otter Trawl	OPEN	all	NE	lg	1,900	1,454	446	0.651	290	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	40	40	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	50	50				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	25	25	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	5	5	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	70	70	0			
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	3,710	2,317	1,393	0.410	571	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5A, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 fish and invertebrate species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program 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 equals 0. "P" indicates fleets with "pilot" designation.

Species Group: TILEFISH (Lopholatilus chamaeleonticeps)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	42	0	42	1.009	42	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	283	283	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	25	25	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					17,575	17,575				
					TOTAL	1,613,226	1,609,148	4,078	0.286	1,168	

See text for fleet abbreviations.

Table 5B. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: BLACK SEA BASS (Centropristis striata)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	215	215				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	71,663	71,663	0			P
4	Hand Line	OPEN	all	NE	all	9,368	9,368	0			
5	Otter Trawl	OPEN	all	MA	sm	1,002,505	639,464	363,041	0.268	97,274	
6	Otter Trawl	OPEN	all	MA	lg	591,837	396,410	195,427	0.358	69,901	
7	Otter Trawl	OPEN	all	NE	sm	321,522	82,812	238,710	0.431	102,824	
8	Otter Trawl	OPEN	all	NE	lg	52,797	33,171	19,626	0.174	3,407	
11	Scallop Trawl	OPEN	GEN	MA	all	509	318	191	0.423	81	
12	Scallop Trawl	OPEN	LIM	MA	all	2,920	2,920				P
13	Otter Trawl, Twin	OPEN	all	MA	all	310	310	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	13,978	0	13,978	0.048	670	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	15	0	15	0.883	13	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	339	339	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	928	380	548	1.719	942	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2,171	2,171	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	8,515	8,495	20	0.943	19	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	471	295	176	0.628	110	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: BLACK SEA BASS (Centropristis striata)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	136	73	63	0.793	50	
34	Scallop Dredge	AA	LIM	NE	all	145	0	145	0.741	107	
35	Scallop Dredge	OPEN	GEN	MA	all	742	78	664	0.346	230	
36	Scallop Dredge	OPEN	GEN	NE	all	137	0	137	0.635	87	
37	Scallop Dredge	OPEN	LIM	MA	all	3,340	58	3,282	0.437	1,435	
38	Scallop Dredge	OPEN	LIM	NE	all	17,528	0	17,528	0.241	4,229	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	50	50	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	458,329	353,082	105,247	0.214	22,477	P
43	Pots and Traps, Fish	OPEN	all	NE	all	99,704	99,704				P
44	Pots and Traps, Conch	OPEN	all	MA	all	2,523	394	2,129	0.145	309	P
45	Pots and Traps, Conch	OPEN	all	NE	all	42,794	0	42,794	0.000	0	P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	148,313	117,170	31,143	0.332	10,324	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	12,276	11,621	655	1.119	733	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	453	453	0			P
51	Beam Trawl	OPEN	all	MA	all	8,900	8,900				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					6,395	6,395				
	Other minor fleets					2,788	2,788				
					TOTAL	2,884,615	1,849,097	1,035,518	0.154	159,895	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: FLUKE (Paralichthys dentatus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	70,338	70,338	0			P
4	Hand Line	OPEN	all	NE	all	12,578	12,578	0			
5	Otter Trawl	OPEN	all	MA	sm	868,510	621,553	246,957	0.248	61,233	
6	Otter Trawl	OPEN	all	MA	lg	7,245,681	6,827,970	417,711	0.229	95,715	
7	Otter Trawl	OPEN	all	NE	sm	739,868	645,722	94,146	0.268	25,184	
8	Otter Trawl	OPEN	all	NE	lg	2,416,854	1,409,275	1,007,579	0.154	154,723	
11	Scallop Trawl	OPEN	GEN	MA	all	43,033	30,977	12,056	0.486	5,865	
12	Scallop Trawl	OPEN	LIM	MA	all	48,100	48,100				P
13	Otter Trawl, Twin	OPEN	all	MA	all	2,707	2,091	616	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	1,700	1,700	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,159	340	819	0.675	553	
19	Shrimp Trawl	OPEN	all	MA	all	2,148	2,148				P
20	Shrimp Trawl	OPEN	all	NE	all	132	132				P
22	Floating Trap	OPEN	all	NE	all	1,500	1,500				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,425	1,124	301	0.512	154	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	12,607	11,014	1,593	0.641	1,021	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	41,576	12,639	28,937	0.744	21,526	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	64	64				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	18,471	18,378	93	0.305	28	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	72,565	14,068	58,497	0.223	13,055	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	2,136	2,136	0			P
32	Scallop Dredge	AA	GEN	NE	all	323	0	323	0.572	185	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: FLUKE (Paralichthys dentatus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	27,858	2,781	25,077	0.377	9,449	
34	Scallop Dredge	AA	LIM	NE	all	74,014	410	73,604	0.285	20,980	
35	Scallop Dredge	OPEN	GEN	MA	all	47,525	13,920	33,605	0.162	5,454	
36	Scallop Dredge	OPEN	GEN	NE	all	9,912	232	9,680	0.402	3,896	
37	Scallop Dredge	OPEN	LIM	MA	all	165,872	5,403	160,469	0.205	32,838	
38	Scallop Dredge	OPEN	LIM	NE	all	660,923	448	660,475	0.116	76,556	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	300	300	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	1,564	567	997	0.036	36	P
43	Pots and Traps, Fish	OPEN	all	NE	all	1,205	1,205				P
44	Pots and Traps, Conch	OPEN	all	MA	all	6	6	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	154	154	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	364	53	311	0.969	301	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	47,000	47,000				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	113	5	108	0.153	17	
	Confidential fleets					33,019	33,019				
	Other minor fleets					3,268	3,268				
					TOTAL	12,676,571	9,842,618	2,833,953	0.075	213,700	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: SCUP (Stenotomus chrysops)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	42,425	42,425	0			P
4	Hand Line	OPEN	all	NE	all	16,160	16,160	0			
5	Otter Trawl	OPEN	all	MA	sm	5,720,041	5,108,173	611,868	0.271	165,969	
6	Otter Trawl	OPEN	all	MA	lg	1,924,605	1,789,323	135,282	0.307	41,480	
7	Otter Trawl	OPEN	all	NE	sm	4,181,787	3,961,932	219,855	0.342	75,232	
8	Otter Trawl	OPEN	all	NE	lg	1,231,903	1,193,988	37,915	0.283	10,745	
11	Scallop Trawl	OPEN	GEN	MA	all	216	129	87	0.667	58	
12	Scallop Trawl	OPEN	LIM	MA	all	1,000	1,000				P
13	Otter Trawl, Twin	OPEN	all	MA	all	16,554	1,930	14,624	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	98,908	59,000	39,908	0.048	1,914	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	6,500	6,500	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	9,750	9,750				P
22	Floating Trap	OPEN	all	NE	all	8,149	8,149				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	66	66	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,185	1,185	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	100	100	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	114	114				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	118,339	118,331	8	0.683	5	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	510	489	21	1.355	28	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: SCUP (Stenotomus chrysops)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	64	0	64	0.865	55	
35	Scallop Dredge	OPEN	GEN	MA	all	754	470	284	0.612	174	
36	Scallop Dredge	OPEN	GEN	NE	all	120	70	50	1.061	53	
37	Scallop Dredge	OPEN	LIM	MA	all	156	0	156	0.826	129	
38	Scallop Dredge	OPEN	LIM	NE	all	3,155	0	3,155	0.456	1,439	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	950	950	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	14,825	9,411	5,414	0.319	1,730	P
43	Pots and Traps, Fish	OPEN	all	NE	all	218,745	218,745				P
44	Pots and Traps, Conch	OPEN	all	MA	all	16	16	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	1,520	1,520	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,624	1,624	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	90	90	0			P
51	Beam Trawl	OPEN	all	MA	all	1,697	1,697				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					291	291				
	Other minor fleets					24,870	24,870				
					TOTAL	13,647,188	12,578,498	1,068,690	0.175	187,218	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: AMERICAN PLAICE (Hippoglossoides platessoides)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	918	918	0			
3	Hand Line	OPEN	all	MA	all	1	1	0			P
4	Hand Line	OPEN	all	NE	all	0	0	0			
5	Otter Trawl	OPEN	all	MA	sm	714	563	151	0.849	128	
6	Otter Trawl	OPEN	all	MA	lg	5,321	242	5,079	0.641	3,255	
7	Otter Trawl	OPEN	all	NE	sm	26,793	399	26,394	0.201	5,299	
8	Otter Trawl	OPEN	all	NE	lg	2,803,760	2,603,469	200,291	0.071	14,316	
11	Scallop Trawl	OPEN	GEN	MA	all	18	0	18	0.249	4	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	14	5	9	0.060	1	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	21	21	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	11,026	8,323	2,703	0.382	1,032	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	65	65	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	46,127	43,310	2,817	0.143	403	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1,730	1,626	104	0.453	47	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: AMERICAN PLAICE (Hippoglossoides platessoides)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	484	0	484	0.884	428	
34	Scallop Dredge	AA	LIM	NE	all	3,142	25	3,117	0.348	1,086	
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	543	0	543	0.453	246	
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	6,958	0	6,958	0.466	3,242	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	61	31	30	0.275	8	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	2,907,695	2,658,998	248,697	0.064	16,025	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC COD (Gadus morhua)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	14	14				P
2	Longline	OPEN	all	NE	all	61,902	22,241	39,661	0.500	19,814	
3	Hand Line	OPEN	all	MA	all	3,747	3,747	0			P
4	Hand Line	OPEN	all	NE	all	106,678	22,154	84,524	0.228	19,266	
5	Otter Trawl	OPEN	all	MA	sm	964	320	644	0.473	305	
6	Otter Trawl	OPEN	all	MA	lg	4,526	3,904	622	0.724	450	
7	Otter Trawl	OPEN	all	NE	sm	7,698	276	7,422	0.247	1,836	
8	Otter Trawl	OPEN	all	NE	lg	3,754,564	3,652,235	102,329	0.122	12,451	
11	Scallop Trawl	OPEN	GEN	MA	all	1,956	7	1,949	1.072	2,089	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	3	3	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	34	34	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	718	718	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	91,860	89,283	2,577	0.319	823	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	5	5	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	80	80	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	898	591	307	0.878	270	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	635,403	604,423	30,980	0.067	2,067	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	30,213	25,367	4,846	0.230	1,113	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	4	0	4	0.973	4	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC COD (Gadus morhua)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	362	15	347	0.652	226	
34	Scallop Dredge	AA	LIM	NE	all	1,167	65	1,102	0.591	651	
35	Scallop Dredge	OPEN	GEN	MA	all	72	0	72	0.928	67	
36	Scallop Dredge	OPEN	GEN	NE	all	429	0	429	0.623	267	
37	Scallop Dredge	OPEN	LIM	MA	all	369	73	296	0.589	174	
38	Scallop Dredge	OPEN	LIM	NE	all	5,717	70	5,647	0.266	1,501	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	163	120	43	0.839	36	
42	Pots and Traps, Fish	OPEN	all	MA	all	341	341	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	43	43				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	167	167	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	93,565	85	93,480	0.840	78,522	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	6	6				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	1,028	1,012	16	0.143	2	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	4,804,698	4,427,399	377,299	0.223	84,271	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC HALIBUT (Hippoglossus hippoglossus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	2,287	2,287	0			
3	Hand Line	OPEN	all	MA	all	0	0	0			P
4	Hand Line	OPEN	all	NE	all	175	175	0			
5	Otter Trawl	OPEN	all	MA	sm	446	0	446	0.962	429	
6	Otter Trawl	OPEN	all	MA	lg	35	35	0			
7	Otter Trawl	OPEN	all	NE	sm	1,083	0	1,083	0.436	472	
8	Otter Trawl	OPEN	all	NE	lg	87,897	19,901	67,996	0.098	6,653	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,945	915	1,030	0.425	438	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	95	95	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	10,230	2,723	7,507	0.137	1,031	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	13,583	2,731	10,852	0.229	2,481	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC HALIBUT (Hippoglossus hippoglossus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	220	0	220	0.857	189	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	216	216	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	48	0	48	0.186	9	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	118,260	29,078	89,182	0.081	7,219	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC WOLFFISH (Anarhichas lupus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	2,369	0	2,369	0.565	1,339	
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	28,886	0	28,886	0.094	2,714	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,428	0	2,428	0.411	997	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,992	0	3,992	0.128	511	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	548	0	548	0.540	296	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC WOLFFISH (Anarhichas lupus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	517	0	517	0.591	305	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	6	0	6	0.316	2	
	Confidential fleets					0	0				
	Other minor fleets					31	31				
					TOTAL	38,777	31	38,746	0.084	3,255	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: HADDOCK (Melanogrammus aeglefinus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	50,200	45,546	4,654	0.520	2,422	
3	Hand Line	OPEN	all	MA	all	0	0	0			P
4	Hand Line	OPEN	all	NE	all	29,154	2,244	26,910	0.804	21,630	
5	Otter Trawl	OPEN	all	MA	sm	50,419	0	50,419	0.486	24,522	
6	Otter Trawl	OPEN	all	MA	lg	3,232	6	3,226	0.615	1,983	
7	Otter Trawl	OPEN	all	NE	sm	90,718	2,432	88,286	0.329	29,090	
8	Otter Trawl	OPEN	all	NE	lg	5,202,703	4,677,964	524,739	0.117	61,486	
11	Scallop Trawl	OPEN	GEN	MA	all	22	0	22	1.051	23	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	40,328	23,416	16,912	0.060	1,020	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	92,791	62,136	30,655	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,053,710	1,887,141	166,569	0.230	38,355	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	4	4	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	51,872	42,486	9,386	0.096	905	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1,826	1,285	541	0.517	280	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	5	0	5	1.030	6	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: HADDOCK (Melanogrammus aeglefinus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	375	0	375	0.982	368	
34	Scallop Dredge	AA	LIM	NE	all	3,786	0	3,786	0.869	3,290	
35	Scallop Dredge	OPEN	GEN	MA	all	24	0	24	0.564	14	
36	Scallop Dredge	OPEN	GEN	NE	all	138	0	138	0.935	129	
37	Scallop Dredge	OPEN	LIM	MA	all	7	0	7	1.011	7	
38	Scallop Dredge	OPEN	LIM	NE	all	4,829	0	4,829	0.244	1,177	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	163,024	124,355	38,669	0.695	26,887	
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	6	6	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,245	0	1,245	0.545	679	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	204,428	195,189	9,239	0.071	652	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	8,044,848	7,064,210	980,638	0.091	88,966	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: OCEAN POUT (Zoarces americanus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	1,259	0	1,259	0.700	882	
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	50,653	0	50,653	0.481	24,375	
6	Otter Trawl	OPEN	all	MA	lg	14,250	0	14,250	0.795	11,326	
7	Otter Trawl	OPEN	all	NE	sm	3,611	0	3,611	0.742	2,678	
8	Otter Trawl	OPEN	all	NE	lg	73,449	0	73,449	0.145	10,622	
11	Scallop Trawl	OPEN	GEN	MA	all	284	2	282	0.948	267	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	546	0	546	0.439	240	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	15	15	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	33	0	33	0.492	16	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	28	0	28	0.454	13	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: OCEAN POUT (Zoarces americanus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	276	0	276	0.976	269	
34	Scallop Dredge	AA	LIM	NE	all	220	0	220	0.386	85	
35	Scallop Dredge	OPEN	GEN	MA	all	142	0	142	0.615	87	
36	Scallop Dredge	OPEN	GEN	NE	all	6	0	6	0.978	6	
37	Scallop Dredge	OPEN	LIM	MA	all	104	0	104	0.627	65	
38	Scallop Dredge	OPEN	LIM	NE	all	1,592	0	1,592	0.201	320	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	82,154	0	82,154	0.234	19,214	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,353	0	1,353	0.646	874	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	115	0	115	0.148	17	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	230,090	17	230,073	0.151	34,834	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: POLLOCK (Pollachius virens)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	292	163	129	0.910	118	
3	Hand Line	OPEN	all	MA	all	1,041	1,041	0			P
4	Hand Line	OPEN	all	NE	all	145,654	30,712	114,942	0.925	106,275	
5	Otter Trawl	OPEN	all	MA	sm	234	65	169	0.737	125	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0			
7	Otter Trawl	OPEN	all	NE	sm	6,156	640	5,516	0.994	5,481	
8	Otter Trawl	OPEN	all	NE	lg	5,913,791	5,783,357	130,434	0.129	16,819	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	123	0	123	0.060	7	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	1,005	1,005	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	74,116	65,616	8,500	1.983	16,857	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	267	0	267	1.174	313	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,068,827	2,949,248	119,579	0.070	8,342	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	82,033	76,657	5,376	0.296	1,590	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: POLLOCK (Pollachius virens)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	1	0	1	1.006	1	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	450	0	450	0.589	265	
42	Pots and Traps, Fish	OPEN	all	MA	all	15	15	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	7	7	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	177	0	177	1.576	278	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	53	34	19	0.118	2	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	9,294,242	8,908,560	385,682	0.284	109,379	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: REDFISH (Sebastes fasciatus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	5	5				P
2	Longline	OPEN	all	NE	all	301	185	116	0.590	69	
3	Hand Line	OPEN	all	MA	all	0	0	0			P
4	Hand Line	OPEN	all	NE	all	450	450	0			
5	Otter Trawl	OPEN	all	MA	sm	1,730	0	1,730	0.893	1,545	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0			
7	Otter Trawl	OPEN	all	NE	sm	2,804	529	2,275	0.647	1,471	
8	Otter Trawl	OPEN	all	NE	lg	9,416,670	8,450,348	966,322	0.276	266,506	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	166,139	164,447	1,692	0.332	562	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	25	25	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	22	22	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	109,141	103,450	5,691	0.235	1,340	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	4,154	4,153	1	0.880	1	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: REDFISH (Sebastes fasciatus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	86	0	86	0.770	66	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	1,248	625	623	0.650	405	
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	250	250	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	2,930	0	2,930	3.290	9,639	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	9,705,954	8,724,489	981,465	0.272	266,693	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WHITE HAKE (Urophycis tenuis)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	149	87	62	0.866	54	
3	Hand Line	OPEN	all	MA	all	104	104	0			P
4	Hand Line	OPEN	all	NE	all	84	84	0			
5	Otter Trawl	OPEN	all	MA	sm	3,969	1,351	2,618	0.695	1,819	
6	Otter Trawl	OPEN	all	MA	lg	724	134	590	0.622	367	
7	Otter Trawl	OPEN	all	NE	sm	3,904	1,710	2,194	0.737	1,617	
8	Otter Trawl	OPEN	all	NE	lg	2,359,407	2,342,805	16,602	0.250	4,155	
11	Scallop Trawl	OPEN	GEN	MA	all	25	25	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	13	13	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	19,150	19,120	30	0.412	12	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	12	12	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	713,612	685,319	28,293	0.125	3,549	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	83,938	80,332	3,606	0.345	1,244	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WHITE HAKE (Urophycis tenuis)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	302	0	302	0.957	289	
34	Scallop Dredge	AA	LIM	NE	all	516	70	446	0.922	411	
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	164	0	164	0.604	99	
38	Scallop Dredge	OPEN	LIM	NE	all	711	0	711	0.392	279	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	13	0	13	0.916	12	
42	Pots and Traps, Fish	OPEN	all	MA	all	6	6	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	15	15	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	201,847	0	201,847	1.208	243,733	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	74	68	6	0.350	2	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	3,388,739	3,131,255	257,484	0.947	243,811	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WINDOWPANE FLOUNDER (Scophthalmus aquosus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	2	2	0			
5	Otter Trawl	OPEN	all	MA	sm	177,911	830	177,081	0.192	34,006	
6	Otter Trawl	OPEN	all	MA	lg	340,704	3,517	337,187	0.150	50,668	
7	Otter Trawl	OPEN	all	NE	sm	42,180	10	42,170	0.468	19,727	
8	Otter Trawl	OPEN	all	NE	lg	634,876	0	634,876	0.111	70,165	
11	Scallop Trawl	OPEN	GEN	MA	all	6,610	0	6,610	0.300	1,980	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	12	0	12	0.060	1	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,389	0	1,389	0.326	453	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	69	19	50	0.506	25	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,507	94	1,413	1.256	1,776	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	70	7	63	1.217	76	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	765	95	670	0.323	216	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	149	0	149	0.257	38	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	209	0	209	0.575	120	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WINDOWPANE FLOUNDER (Scophthalmus aquosus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	13,800	0	13,800	0.381	5,260	
34	Scallop Dredge	AA	LIM	NE	all	41,515	0	41,515	0.462	19,170	
35	Scallop Dredge	OPEN	GEN	MA	all	47,522	0	47,522	0.174	8,246	
36	Scallop Dredge	OPEN	GEN	NE	all	16,578	0	16,578	0.340	5,638	
37	Scallop Dredge	OPEN	LIM	MA	all	76,025	0	76,025	0.173	13,174	
38	Scallop Dredge	OPEN	LIM	NE	all	236,075	0	236,075	0.152	35,851	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	125	0	125	0.920	115	
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	145	0	145	0.178	26	
	Confidential fleets					4	4				
	Other minor fleets					0	0				
					TOTAL	1,638,242	4,578	1,633,664	0.064	104,867	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WINTER FLOUNDER (Pseudopleuronectes americanus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	3,255	3,255	0			
3	Hand Line	OPEN	all	MA	all	230	230	0			P
4	Hand Line	OPEN	all	NE	all	25	25	0			
5	Otter Trawl	OPEN	all	MA	sm	82,092	2,202	79,890	0.261	20,883	
6	Otter Trawl	OPEN	all	MA	lg	124,296	87,930	36,366	0.269	9,785	
7	Otter Trawl	OPEN	all	NE	sm	132,462	2,121	130,341	0.236	30,711	
8	Otter Trawl	OPEN	all	NE	lg	4,966,642	4,910,391	56,251	0.134	7,517	
11	Scallop Trawl	OPEN	GEN	MA	all	6,064	0	6,064	0.344	2,086	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	185	185	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	135	135	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	1,329	1,329	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	123,297	122,961	336	0.540	182	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	314	0	314	1.174	369	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	58,526	57,697	829	0.174	144	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	2,233	1,854	379	0.724	275	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	855	0	855	1.067	913	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WINTER FLOUNDER (Pseudopleuronectes americanus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	9,433	0	9,433	0.711	6,704	
34	Scallop Dredge	AA	LIM	NE	all	13,708	44	13,664	0.269	3,672	
35	Scallop Dredge	OPEN	GEN	MA	all	3,709	0	3,709	0.259	960	
36	Scallop Dredge	OPEN	GEN	NE	all	15,931	10	15,921	0.162	2,586	
37	Scallop Dredge	OPEN	LIM	MA	all	8,601	0	8,601	0.293	2,516	
38	Scallop Dredge	OPEN	LIM	NE	all	189,102	438	188,664	0.158	29,738	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	320	320	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	7	7				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	312	1	311	0.968	301	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	2,500	2,492	8	0.215	2	
	Confidential fleets					9	9				
	Other minor fleets					0	0				
					TOTAL	5,745,574	5,193,636	551,938	0.090	49,938	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WITCH FLOUNDER (Glyptocephalus cynoglossus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	6	6	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	54,550	205	54,345	0.468	25,454	
6	Otter Trawl	OPEN	all	MA	lg	33,931	4,464	29,467	0.291	8,583	
7	Otter Trawl	OPEN	all	NE	sm	9,979	274	9,705	0.256	2,484	
8	Otter Trawl	OPEN	all	NE	lg	1,286,787	1,206,938	79,849	0.080	6,386	
11	Scallop Trawl	OPEN	GEN	MA	all	240	0	240	0.691	166	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	1,451	0	1,451	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	10	3	7	0.060	<1	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	10	10	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	10,156	8,830	1,326	0.729	967	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	11,131	10,814	317	0.129	41	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	9,175	9,172	3	0.857	3	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: WITCH FLOUNDER (Glyptocephalus cynoglossus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	808	0	808	0.600	485	
34	Scallop Dredge	AA	LIM	NE	all	12,312	42	12,270	0.531	6,514	
35	Scallop Dredge	OPEN	GEN	MA	all	1,029	0	1,029	0.417	429	
36	Scallop Dredge	OPEN	GEN	NE	all	1,889	0	1,889	0.971	1,835	
37	Scallop Dredge	OPEN	LIM	MA	all	4,182	0	4,182	0.254	1,063	
38	Scallop Dredge	OPEN	LIM	NE	all	30,387	238	30,149	0.206	6,209	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	10	10	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	1,468,043	1,241,006	227,037	0.129	29,247	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: YELLOWTAIL FLOUNDER (Limanda ferruginea)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	286	286	0			
3	Hand Line	OPEN	all	MA	all	0	0	0			P
4	Hand Line	OPEN	all	NE	all	6	6	0			
5	Otter Trawl	OPEN	all	MA	sm	19,779	168	19,611	0.337	6,617	
6	Otter Trawl	OPEN	all	MA	lg	204,354	174,126	30,228	0.364	10,993	
7	Otter Trawl	OPEN	all	NE	sm	26,487	1,500	24,987	0.203	5,062	
8	Otter Trawl	OPEN	all	NE	lg	1,365,990	1,293,030	72,960	0.162	11,855	
11	Scallop Trawl	OPEN	GEN	MA	all	4,372	0	4,372	0.263	1,152	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	2,760	2,760	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	280	32	248	0.060	15	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	182	182	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,062	3,469	593	0.333	198	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	5	5	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	19	19	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	165,471	163,257	2,214	0.145	320	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	831	593	238	0.312	74	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	529	50	479	0.878	421	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: YELLOWTAIL FLOUNDER (Limanda ferruginea)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	15,831	484	15,347	0.553	8,486	
34	Scallop Dredge	AA	LIM	NE	all	56,792	4,530	52,262	0.254	13,269	
35	Scallop Dredge	OPEN	GEN	MA	all	11,160	27	11,133	0.204	2,275	
36	Scallop Dredge	OPEN	GEN	NE	all	15,940	62	15,878	0.198	3,141	
37	Scallop Dredge	OPEN	LIM	MA	all	38,555	307	38,248	0.273	10,442	
38	Scallop Dredge	OPEN	LIM	NE	all	200,818	1,634	199,184	0.142	28,344	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	440	440	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	83	0	83	0.969	80	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	25	25				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	770	591	179	0.092	16	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	2,135,827	1,647,583	488,244	0.080	38,833	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: OFFSHORE HAKE (Merluccius albidus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	14	14	0			
5	Otter Trawl	OPEN	all	MA	sm	23,388	11,375	12,013	0.557	6,697	
6	Otter Trawl	OPEN	all	MA	lg	2,070	1,216	854	0.601	513	
7	Otter Trawl	OPEN	all	NE	sm	10,339	9,625	714	0.628	448	
8	Otter Trawl	OPEN	all	NE	lg	1,850	1,141	709	0.663	470	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	0	0	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
19	Shrimp Trawl	OPEN	all	MA	all	13	13				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	184	184	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	40	40	0			
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: OFFSHORE HAKE (Merluccius albidus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	85	27	58	0.928	54	
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	77	77	0			
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	4	0	4	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	38,065	23,712	14,353	0.470	6,748	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: RED HAKE (Urophycis chuss)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	26	26				P
2	Longline	OPEN	all	NE	all	740	1	739	0.627	464	
3	Hand Line	OPEN	all	MA	all	4,397	4,397	0			P
4	Hand Line	OPEN	all	NE	all	54	54	0			
5	Otter Trawl	OPEN	all	MA	sm	891,441	419,972	471,469	0.324	152,571	
6	Otter Trawl	OPEN	all	MA	lg	56,259	36,175	20,084	0.527	10,577	
7	Otter Trawl	OPEN	all	NE	sm	1,669,752	796,201	873,551	0.258	225,296	
8	Otter Trawl	OPEN	all	NE	lg	208,095	21,476	186,619	0.075	14,047	
11	Scallop Trawl	OPEN	GEN	MA	all	1,120	600	520	0.489	254	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	812	0	812	0.060	49	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	255	0	255	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	5,228	0	5,228	0.471	2,463	
19	Shrimp Trawl	OPEN	all	MA	all	110	110				P
20	Shrimp Trawl	OPEN	all	NE	all	10,335	10,335				P
22	Floating Trap	OPEN	all	NE	all	200	200				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	2	2	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	2,966	144	2,822	0.100	282	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	40	0	40	0.746	30	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	367	0	367	0.109	40	P
32	Scallop Dredge	AA	GEN	NE	all	95	0	95	0.423	40	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: RED HAKE (Urophycis chuss)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	16,609	0	16,609	0.517	8,594	
34	Scallop Dredge	AA	LIM	NE	all	36,016	0	36,016	0.190	6,857	
35	Scallop Dredge	OPEN	GEN	MA	all	2,559	0	2,559	0.312	798	
36	Scallop Dredge	OPEN	GEN	NE	all	3,336	0	3,336	0.460	1,534	
37	Scallop Dredge	OPEN	LIM	MA	all	8,692	0	8,692	0.332	2,883	
38	Scallop Dredge	OPEN	LIM	NE	all	65,326	0	65,326	0.229	14,957	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	3	0	3	0.926	3	
42	Pots and Traps, Fish	OPEN	all	MA	all	2,551	2,551	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	34	34				P
44	Pots and Traps, Conch	OPEN	all	MA	all	2,915	2,915	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	23,453	18,799	4,654	0.332	1,543	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	12,393	11,307	1,086	1.505	1,634	
49	Pots and Traps, Crab	OPEN	all	MA	all	128	128				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	432	0	432	0.110	47	
	Confidential fleets					540	540				
	Other minor fleets					0	0				
					TOTAL	3,027,281	1,325,967	1,701,314	0.161	273,337	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: SILVER HAKE (Merluccius bilinearis)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	3	3	0			P
4	Hand Line	OPEN	all	NE	all	353	353	0			
5	Otter Trawl	OPEN	all	MA	sm	4,820,485	4,406,005	414,480	0.311	129,059	
6	Otter Trawl	OPEN	all	MA	lg	162,773	93,409	69,364	0.426	29,549	
7	Otter Trawl	OPEN	all	NE	sm	9,644,044	8,950,209	693,835	0.337	233,656	
8	Otter Trawl	OPEN	all	NE	lg	737,910	182,365	555,545	0.092	51,369	
11	Scallop Trawl	OPEN	GEN	MA	all	4,215	2,820	1,395	0.473	659	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	12,890	122	12,768	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	10,956	0	10,956	0.059	646	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	642	3	639	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	13,167	1,680	11,487	0.349	4,014	
19	Shrimp Trawl	OPEN	all	MA	all	2,518	2,518				P
20	Shrimp Trawl	OPEN	all	NE	all	56,735	56,735				P
22	Floating Trap	OPEN	all	NE	all	1,400	1,400				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	22	22	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2,123	2,014	109	0.617	67	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	98,314	85,174	13,140	0.178	2,340	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	5,722	5,019	703	0.240	169	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	11	0	11	0.818	9	
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	5	0	5	0.816	4	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: SILVER HAKE (Merluccius bilinearis)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	7,593	0	7,593	0.514	3,905	
34	Scallop Dredge	AA	LIM	NE	all	21,448	15	21,433	0.383	8,213	
35	Scallop Dredge	OPEN	GEN	MA	all	2,370	40	2,330	0.228	531	
36	Scallop Dredge	OPEN	GEN	NE	all	2,284	0	2,284	0.342	781	
37	Scallop Dredge	OPEN	LIM	MA	all	6,642	5	6,637	0.255	1,695	
38	Scallop Dredge	OPEN	LIM	NE	all	41,898	0	41,898	0.197	8,250	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	3,948	0	3,948	0.913	3,604	
42	Pots and Traps, Fish	OPEN	all	MA	all	41	41	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	6	6				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	3,628	1,800	1,828	0.106	194	
	Confidential fleets					19	19				
	Other minor fleets					5,706	5,706				
					TOTAL	15,669,872	13,797,483	1,872,389	0.146	273,776	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC MACKEREL (Scomber scombrus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	0	0				P
2	Longline	OPEN	all	NE	all	423	423	0			
3	Hand Line	OPEN	all	MA	all	4	4	0			P
4	Hand Line	OPEN	all	NE	all	87,716	86,945	771	1.242	958	
5	Otter Trawl	OPEN	all	MA	sm	110,540	75,883	34,657	0.557	19,316	
6	Otter Trawl	OPEN	all	MA	lg	1,657	1,306	351	1.015	356	
7	Otter Trawl	OPEN	all	NE	sm	1,101,045	1,081,758	19,287	1.753	33,816	
8	Otter Trawl	OPEN	all	NE	lg	2,615	265	2,350	0.378	889	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	0	0	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	4,650	4,650	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	172	0	172	0.459	79	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	5	5				P
22	Floating Trap	OPEN	all	NE	all	170	170				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	43	43	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	739	739	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	532	221	311	0.824	256	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	30	30				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	5,374	4,009	1,365	0.292	399	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	258	164	94	0.523	49	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	34	0	34	0.546	18	
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: ATLANTIC MACKEREL (Scomber scombrus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	89	0	89	0.707	63	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	11,003	11,000	3	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	7,450,307	7,450,242	65	0.192	12	
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					8,098	8,098				
					TOTAL	8,785,503	8,725,955	59,548	0.654	38,970	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: BUTTERFISH (Peprilus triacanthus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	66	66	0			
5	Otter Trawl	OPEN	all	MA	sm	1,573,012	614,053	958,959	0.276	264,613	
6	Otter Trawl	OPEN	all	MA	lg	76,087	68,967	7,120	0.313	2,226	
7	Otter Trawl	OPEN	all	NE	sm	5,105,183	4,378,775	726,408	0.269	195,506	
8	Otter Trawl	OPEN	all	NE	lg	48,201	45,683	2,518	0.452	1,139	
11	Scallop Trawl	OPEN	GEN	MA	all	307	200	107	0.666	71	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	1,850	235	1,615	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	848	100	748	0.047	36	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	16	0	16	0.367	6	
19	Shrimp Trawl	OPEN	all	MA	all	2,596	2,596				P
20	Shrimp Trawl	OPEN	all	NE	all	3,097	3,097				P
22	Floating Trap	OPEN	all	NE	all	280	280				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	15,213	14,901	312	0.742	232	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	288	288	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	6	6	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	101	20	81	0.313	25	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	30	0	30	0.607	18	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	6	0	6	0.936	6	
31	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: BUTTERFISH (Peprilus triacanthus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	0	0	0			
34	Scallop Dredge	AA	LIM	NE	all	26	0	26	0.778	20	
35	Scallop Dredge	OPEN	GEN	MA	all	37	1	36	0.716	26	
36	Scallop Dredge	OPEN	GEN	NE	all	9	0	9	0.996	9	
37	Scallop Dredge	OPEN	LIM	MA	all	8	0	8	1.023	9	
38	Scallop Dredge	OPEN	LIM	NE	all	362	0	362	0.514	186	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	10	0	10	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	961	90	871	0.919	801	
42	Pots and Traps, Fish	OPEN	all	MA	all	14	14	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	1	1	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	5,000	5,000				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	<1	0	<1	0.367	<1	
	Confidential fleets					2,054	2,054				
	Other minor fleets					3,344	3,344				
					TOTAL	6,839,028	5,139,784	1,699,244	0.194	329,013	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: NORTHERN SHORTFIN SQUID (Illex illecebrosus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	6,816,179	5,962,991	853,188	0.363	309,862	
6	Otter Trawl	OPEN	all	MA	lg	840	741	99	0.813	81	
7	Otter Trawl	OPEN	all	NE	sm	5,372,371	4,832,637	539,734	0.682	368,019	
8	Otter Trawl	OPEN	all	NE	lg	20,130	1,496	18,634	0.112	2,081	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
13	Otter Trawl, Twin	OPEN	all	MA	all	61,037	0	61,037	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	8,200	8,200	0			P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	0	0	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	400	0	400	2.076	829	
19	Shrimp Trawl	OPEN	all	MA	all	0	0				P
20	Shrimp Trawl	OPEN	all	NE	all	0	0				P
22	Floating Trap	OPEN	all	NE	all	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1	0	1	0.886	1	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	4	0	4	1.944	9	P
32	Scallop Dredge	AA	GEN	NE	all	14	0	14	1.030	14	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: NORTHERN SHORTFIN SQUID (Illex illecebrosus)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	57	0	57	0.508	29	
34	Scallop Dredge	AA	LIM	NE	all	34	0	34	0.679	23	
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
36	Scallop Dredge	OPEN	GEN	NE	all	10	0	10	0.934	9	
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
38	Scallop Dredge	OPEN	LIM	NE	all	457	0	457	0.521	238	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	453	0	453	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	53	0	53	0.869	46	
42	Pots and Traps, Fish	OPEN	all	MA	all	0	0	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	107,000	107,000				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	<1	0	<1	0.338	<1	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	12,387,239	10,913,065	1,474,174	0.326	481,101	

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: LONGFIN INSHORE SQUID (Doryteuthis [Amerigo] pealeii)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	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	1,149	1,149	0			
5	Otter Trawl	OPEN	all	MA	sm	13,524,138	12,641,317	882,821	0.317	279,539	
6	Otter Trawl	OPEN	all	MA	lg	324,336	303,811	20,525	0.332	6,814	
7	Otter Trawl	OPEN	all	NE	sm	18,525,840	18,301,256	224,584	0.698	156,656	
8	Otter Trawl	OPEN	all	NE	lg	408,007	378,622	29,385	0.274	8,055	
11	Scallop Trawl	OPEN	GEN	MA	all	652	265	387	0.472	183	
12	Scallop Trawl	OPEN	LIM	MA	all	282	282				P
13	Otter Trawl, Twin	OPEN	all	MA	all	1,103,522	1,103,522	0			P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	852	850	2	0.060	<1	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	2	2	0			P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,122	0	4,122	0.767	3,160	
19	Shrimp Trawl	OPEN	all	MA	all	543	543				P
20	Shrimp Trawl	OPEN	all	NE	all	148,155	148,155				P
22	Floating Trap	OPEN	all	NE	all	6,105	6,105				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	15	15	0			
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	56	56	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	30	30	0			
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	0	0	0			
31	Scallop Dredge	AA	GEN	MA	all	2,030	2,000	30	0.128	4	P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0			

See text for fleet abbreviations.

Table 5B, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 23 individual species that compose the 14 species groups, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: LONGFIN INSHORE SQUID (Doryteuthis [Amerigo] pealeii)

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	93	32	61	0.478	29	
34	Scallop Dredge	AA	LIM	NE	all	924	0	924	0.462	427	
35	Scallop Dredge	OPEN	GEN	MA	all	3,134	2,138	996	0.246	245	
36	Scallop Dredge	OPEN	GEN	NE	all	127	0	127	0.625	79	
37	Scallop Dredge	OPEN	LIM	MA	all	1,375	10	1,365	0.327	446	
38	Scallop Dredge	OPEN	LIM	NE	all	4,511	0	4,511	0.283	1,279	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	43	0	43	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	1,210	440	770	0.920	709	
42	Pots and Traps, Fish	OPEN	all	MA	all	4	4	0			P
43	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	MA	all	0	0	0			P
45	Pots and Traps, Conch	OPEN	all	NE	all	0	0	0			P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0	0			P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0	0			P
51	Beam Trawl	OPEN	all	MA	all	401,286	401,286				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0	0				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	4	0	4	0.350	1	
	Confidential fleets					28	28				
	Other minor fleets					1,252,770	1,252,770				
					TOTAL	35,715,345	34,544,688	1,170,657	0.274	320,635	

See text for fleet abbreviations.

Table 5C. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 Standardized Bycatch Reporting Methodology (SBRM) species groups combined, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: 14 SBRM SPECIES GROUPS COMBINED

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	1,711,479	1,711,479				P
2	Longline	OPEN	all	NE	all	1,490,357	1,298,479	191,878	0.348	66,722	
3	Hand Line	OPEN	all	MA	all	296,320	296,320	0			P
4	Hand Line	OPEN	all	NE	all	1,177,906	936,874	241,032	0.496	119,447	
5	Otter Trawl	OPEN	all	MA	sm	47,393,001	31,649,299	15,743,702	0.099	1,555,892	
6	Otter Trawl	OPEN	all	MA	lg	36,769,493	13,561,150	23,208,344	0.111	2,573,438	
7	Otter Trawl	OPEN	all	NE	sm	61,106,617	54,835,765	6,270,852	0.135	848,933	
8	Otter Trawl	OPEN	all	NE	lg	105,280,035	57,234,642	48,045,393	0.069	3,338,657	
11	Scallop Trawl	OPEN	GEN	MA	all	1,966,509	996,246	970,264	0.174	168,466	
12	Scallop Trawl	OPEN	LIM	MA	all	658,754	658,754				P
13	Otter Trawl, Twin	OPEN	all	MA	all	1,260,016	1,148,765	111,251	0.000	0	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	1,103,933	902,390	201,543	0.035	7,072	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	119,838	72,306	47,532	0.000	0	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	3,132,468	2,412,967	719,501	0.189	135,902	
19	Shrimp Trawl	OPEN	all	MA	all	8,386	8,386				P
20	Shrimp Trawl	OPEN	all	NE	all	369,649	369,649				P
22	Floating Trap	OPEN	all	NE	all	18,352	18,352				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,384,925	1,352,331	32,594	1.830	59,639	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	4,173,630	3,912,719	260,911	0.500	130,431	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	7,708,472	6,823,553	884,919	0.196	173,070	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	376	376				P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	11,628,459	7,956,540	3,671,919	0.077	281,674	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	17,943,981	15,175,147	2,768,834	0.080	221,403	
29	Purse Seine	OPEN	all	MA	all	0	0				P
30	Purse Seine	OPEN	all	NE	all	48,513,940	48,499,422	14,518	0.512	7,439	
31	Scallop Dredge	AA	GEN	MA	all	375,290	360,682	14,608	0.559	8,164	P
32	Scallop Dredge	AA	GEN	NE	all	468,359	449,517	18,842	0.560	10,545	

See text for fleet abbreviations.

Table 5C, continued. Total catch (live lb), Vessel Trip Report landings (kept; live lb), estimated discards (live lb), associated coefficient of variation (CV), and standard error of the estimated discards (SE; live lb) for 14 Standardized Bycatch Reporting Methodology (SBRM) species groups combined, by fleet, based on July 2013 through June 2014 data. Dark shading indicates fleets not considered or with no Northeast Fisheries Observer Program trips in the annual analysis. These CVs were not used in the annual sample size analysis. Blank CV indicates either no discards or discards equals 0. "P" indicates fleets with "pilot" designation.

Species: 14 SBRM SPECIES GROUPS COMBINED

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
33	Scallop Dredge	AA	LIM	MA	all	17,830,225	15,570,539	2,259,686	0.246	556,073	
34	Scallop Dredge	AA	LIM	NE	all	34,703,924	31,504,235	3,199,689	0.135	432,822	
35	Scallop Dredge	OPEN	GEN	MA	all	11,935,749	9,888,426	2,047,323	0.099	203,326	
36	Scallop Dredge	OPEN	GEN	NE	all	9,881,711	8,982,229	899,483	0.122	110,096	
37	Scallop Dredge	OPEN	LIM	MA	all	60,751,142	55,320,621	5,430,521	0.081	439,652	
38	Scallop Dredge	OPEN	LIM	NE	all	192,744,890	167,907,405	24,837,485	0.059	1,457,709	
39	Danish Seine	OPEN	all	MA	all	0	0				P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	3,172,468	3,163,000	9,468	0.000	0	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	148,097,047	148,023,920	73,127	0.403	29,474	
42	Pots and Traps, Fish	OPEN	all	MA	all	478,506	366,848	111,657	0.215	23,975	P
43	Pots and Traps, Fish	OPEN	all	NE	all	319,991	319,991				P
44	Pots and Traps, Conch	OPEN	all	MA	all	5,475	3,346	2,129	0.145	309	P
45	Pots and Traps, Conch	OPEN	all	NE	all	42,794	0	42,794	0.000	0	P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	272,646	140,018	132,628	0.169	22,401	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	342,744	25,205	317,539	0.990	314,458	
49	Pots and Traps, Crab	OPEN	all	MA	all	176,310	176,310				P
50	Pots and Traps, Crab	OPEN	all	NE	all	2,202,976	2,201,739	1,237	0.000	0	P
51	Beam Trawl	OPEN	all	MA	all	675,527	675,527				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	256,367,297	256,367,297				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	215,812,072	215,812,072				P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	267,724	202,022	65,702	0.044	2,911	
	Confidential fleets					271,892	271,892				
	Other minor fleets					2,284,907	2,284,907				
					TOTAL	1,314,698,562	1,171,849,660	142,848,902	0.034	4,911,669	

See text for fleet abbreviations.

Table 6. The number of sea days needed to achieve a 30% coefficient of variation of the discard estimate for each of the 14 fish and invertebrate species groups, the number of pilot sea days, the number of minimum pilot sea days, and the maximum number of sea days needed for each fleet (2015 Sea Days Needed) for fish and invertebrate species groups based on July 2013 through June 2014 data. Bold red font indicates basis for fleet sea days. "P" indicates fleets with "pilot" designation. Species group abbreviations are given in Table 1.

Row	Fleet 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	Min Pilot Days	2015 Sea Days Needed	Pilot
1	Longline	OPEN	all	MA	all	85	85	85	85	85	85	85	85	85	85	85	85	85	85	**85**	85	85	P
2	Longline	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	**14**	14	
3	Hand Line	OPEN	all	MA	all	70	70	70	70	70	70	70	70	70	70	70	70	70	70	**70**	14	70	P
4	Hand Line	OPEN	all	NE	all	0	0	0	0	0	0	0	**48**	0	0	0	0	0	0	51	13	48	
5	Otter Trawl	OPEN	all	MA	sm	0	0	0	0	0	**556**	0	336	531	294	402	493	0	0	176	32	556	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0	0	0	0	**744**	72	0	89	220	210	0	0	183	29	744	
7	Otter Trawl	OPEN	all	NE	sm	0	0	0	0	0	**1,311**	0	313	460	0	571	720	0	0	186	34	1,311	
8	Otter Trawl	OPEN	all	NE	lg	0	0	0	**4,647**	0	0	228	349	231	316	192	731	0	0	376	35	4,647	
9	Scallop Trawl	AA	GEN	MA	all	6	6	6	6	6	6	6	6	6	6	6	6	6	6	**6**	6	6	P
10	Scallop Trawl	AA	LIM	MA	all	42	42	42	42	42	42	42	42	42	42	42	42	42	42	**42**	42	42	P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	**23**	23	
12	Scallop Trawl	OPEN	LIM	MA	all	72	72	72	72	72	72	72	72	72	72	72	72	72	72	**72**	72	72	P
13	Otter Trawl, Twin	OPEN	all	MA	all	60	60	60	60	60	60	60	60	60	60	60	60	60	60	**60**	60	60	P
14	Otter Trawl, Twin	OPEN	all	NE	all	85	85	85	85	85	85	85	85	85	85	85	85	85	85	**85**	85	85	P
15	Otter Trawl, Ruhle	OPEN	all	MA	lg	27	27	27	27	27	27	27	27	27	27	27	27	27	27	**27**	27	27	P
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	48	48	48	48	48	48	48	48	48	48	48	48	48	48	**48**	48	48	P
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	68	68	68	68	68	68	68	68	68	68	68	68	68	68	**68**	68	68	P
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0	0	0	0	0	0	0	0	**302**	0	0	0	94	94	302	
19	Shrimp Trawl	OPEN	all	MA	all	65	65	65	65	65	65	65	65	65	65	65	65	65	65	**65**	54	65	P
20	Shrimp Trawl	OPEN	all	NE	all	9	9	9	9	9	9	9	9	9	9	9	9	9	9	**9**	9	9	P
21	Floating Trap	OPEN	all	MA	all	9	9	9	9	9	9	9	9	9	9	9	9	9	9	**9**	9	9	P
22	Floating Trap	OPEN	all	NE	all	21	21	21	21	21	21	21	21	21	21	21	21	21	21	**21**	21	21	P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	**12**	12	
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	**13**	13	
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0	0	0	0	**122**	0	0	0	0	0	0	0	51	14	122	
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	9	9	9	9	9	9	9	9	9	9	9	9	9	9	**9**	9	9	P
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0	0	0	0	0	0	0	0	**103**	0	0	0	108	19	103	
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0	0	0	0	152	0	0	73	**240**	0	0	0	87	19	240	
29	Purse Seine	OPEN	all	MA	all	6	6	6	6	6	6	6	6	6	6	6	6	6	6	**6**	6	6	P
30	Purse Seine	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	**31**	31	
31	Scallop Dredge	AA	GEN	MA	all	27	27	27	27	27	27	27	27	27	27	27	27	27	27	**27**	27	27	P
32	Scallop Dredge	AA	GEN	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	**31**	31	
33	Scallop Dredge	AA	LIM	MA	all	0	0	0	0	0	0	**153**	0	0	0	0	0	0	0	90	90	153	
34	Scallop Dredge	AA	LIM	NE	all	0	0	0	0	0	0	65	0	0	**121**	0	0	0	0	97	94	121	
35	Scallop Dredge	OPEN	GEN	MA	all	0	0	0	0	0	0	0	0	0	**28**	0	0	0	0	76	21	28	
36	Scallop Dredge	OPEN	GEN	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93	**16**	16	
37	Scallop Dredge	OPEN	LIM	MA	all	0	0	0	0	0	0	**123**	0	0	51	0	0	0	0	118	105	123	

See text for fleet abbreviations.

Table 6, continued. The number of sea days needed to achieve a 30% coefficient of variation of the discard estimate for each of the 14 fish and invertebrate species groups, the number of pilot sea days, the number of minimum pilot sea days, and the maximum number of sea days needed for each fleet (2015 Sea Days Needed) for fish and invertebrate species groups based on July 2013 through June 2014 data. Bold red font indicates basis for fleet sea days. "P" indicates fleets with "pilot" designation. Species group abbreviations are given in Table 1.

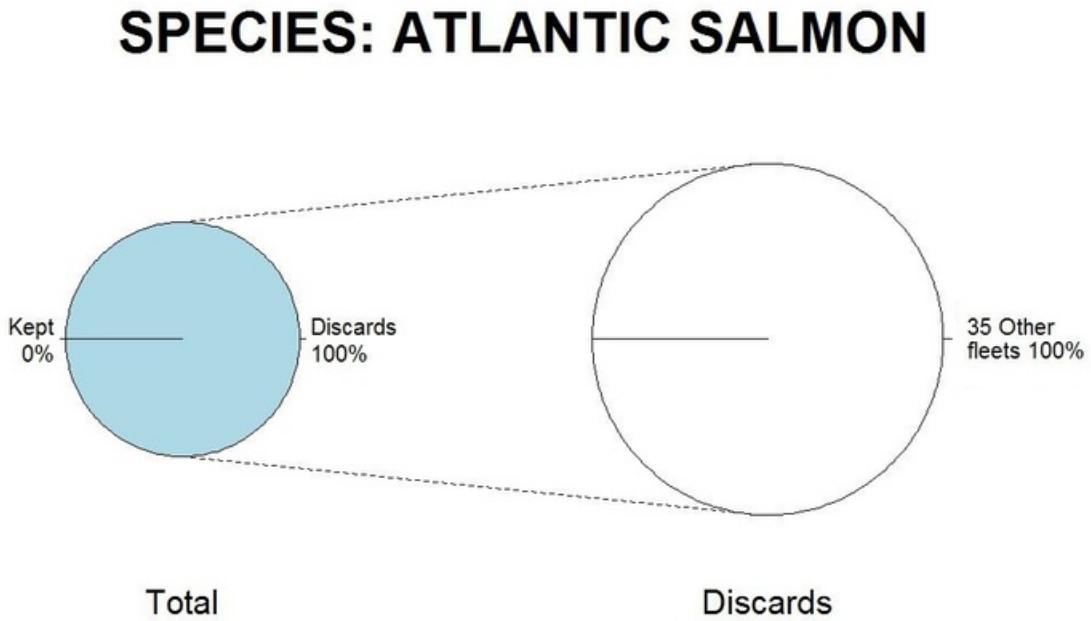
Row	Fleet Gear Type	Access Area	Trip Category	Region	Mesh Group	BLUE	HERR	SAL	RCRAB	SCAL	SBM	MONK	GFL	GFS	SKATE	DOG	FSB	SCOQ	TILE	Pilot Days	Min Pilot Days	2015 Sea Days Needed	Pilot
38	Scallop Dredge	OPEN	LIM	NE	all	0	0	0	0	0	0	176	155	**630**	84	0	207	0	0	216	113	630	
39	Danish Seine	OPEN	all	MA	all	6	6	6	6	6	6	6	6	6	6	6	6	6	6	**6**	6	6	P
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	32	32	32	32	32	32	32	32	32	32	32	32	32	32	**32**	32	32	P
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	**39**	39	
42	Pots and Traps, Fish	OPEN	all	MA	all	22	22	22	22	22	22	22	22	22	22	22	22	22	22	**22**	13	22	P
43	Pots and Traps, Fish	OPEN	all	NE	all	42	42	42	42	42	42	42	42	42	42	42	42	42	42	**42**	30	42	P
44	Pots and Traps, Conch	OPEN	all	MA	all	28	28	28	28	28	28	28	28	28	28	28	28	28	28	**28**	15	28	P
45	Pots and Traps, Conch	OPEN	all	NE	all	22	22	22	22	22	22	22	22	22	22	22	22	22	22	**22**	9	22	P
46	Pots and Traps, Hagfish	OPEN	all	NE	all	83	83	83	83	83	83	83	83	83	83	83	83	83	83	**83**	83	83	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	47	47	47	47	47	47	47	47	47	47	47	47	47	47	**47**	17	47	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0	0	0	0	0	**572**	0	0	0	0	0	0	447	18	572	
49	Pots and Traps, Crab	OPEN	all	MA	all	29	29	29	29	29	29	29	29	29	29	29	29	29	29	**29**	29	29	P
50	Pots and Traps, Crab	OPEN	all	NE	all	83	83	83	83	83	83	83	83	83	83	83	83	83	83	**83**	83	83	P
51	Beam Trawl	OPEN	all	MA	all	35	35	35	35	35	35	35	35	35	35	35	35	35	35	**35**	35	35	P
52	Beam Trawl	OPEN	all	NE	all	11	11	11	11	11	11	11	11	11	11	11	11	11	11	**11**	11	11	P
53	Dredge, Other	OPEN	all	MA	all	11	11	11	11	11	11	11	11	11	11	11	11	11	11	**11**	10	11	P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	75	75	75	75	75	75	75	75	75	75	75	75	75	75	**75**	24	75	P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	65	65	65	65	65	65	65	65	65	65	65	65	65	65	**65**	14	65	P
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	**25**	25	
					Totals	**1,300**	**1,300**	**1,300**	**5,947**	**1,300**	**3,167**	**3,063**	**3,145**	**3,152**	**2,356**	**3,330**	**3,661**	**1,300**	**1,300**	**3,998**	**1,987**	**11,204**	

See text for fleet abbreviations.

Table 7. Number of sea days, trips, and percentage of trips (based upon previous industry activity) needed to achieve a 30% coefficient of variation of the discard estimate, by fleet and species group, based on July 2013 through June 2014 data. See Table 1 for species group abbreviations.

Fleet Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Species Group	Sea Days	Trips	% of Trips
4	Hand Line	OPEN	all	NE	all	GFL	48	45	2
5	Otter Trawl	OPEN	all	MA	sm	SBM	556	242	6
						GFS	531	231	6
						FSB	493	214	6
						DOG	402	175	5
						GFL	336	146	4
						SKATE	293	128	3
6	Otter Trawl	OPEN	all	MA	lg	MONK	744	340	8
						DOG	220	100	2
						FSB	210	96	2
						SKATE	89	40	1
						GFL	72	33	1
7	Otter Trawl	OPEN	all	NE	sm	SBM	1,311	505	14
						FSB	720	277	8
						DOG	571	220	6
						GFS	460	177	5
						GFL	313	120	3
8	Otter Trawl	OPEN	all	NE	lg	RCRAB	4,647	1,646	25
						FSB	730	259	4
						GFL	349	124	2
						SKATE	316	112	2
						GFS	231	82	1
						MONK	228	81	1
						DOG	192	68	1
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	DOG	302	38	30
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	MONK	121	104	5
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	DOG	103	69	2
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	DOG	240	161	5
						MONK	152	102	3
						SKATE	73	49	2
33	Scallop Dredge	AA	LIM	MA	all	MONK	153	19	10
34	Scallop Dredge	AA	LIM	NE	all	SKATE	121	15	5
						MONK	65	8	3
35	Scallop Dredge	OPEN	GEN	MA	all	SKATE	28	16	1
37	Scallop Dredge	OPEN	LIM	MA	all	MONK	123	14	3
						SKATE	51	6	1
38	Scallop Dredge	OPEN	LIM	NE	all	GFS	629	64	6
						FSB	207	21	2
						MONK	175	18	2
						GFL	155	16	2
						SKATE	84	9	1
48	Pots and Traps, Lobster	OPEN	all	NE	all	GFL	572	435	2

See text for fleet abbreviations.



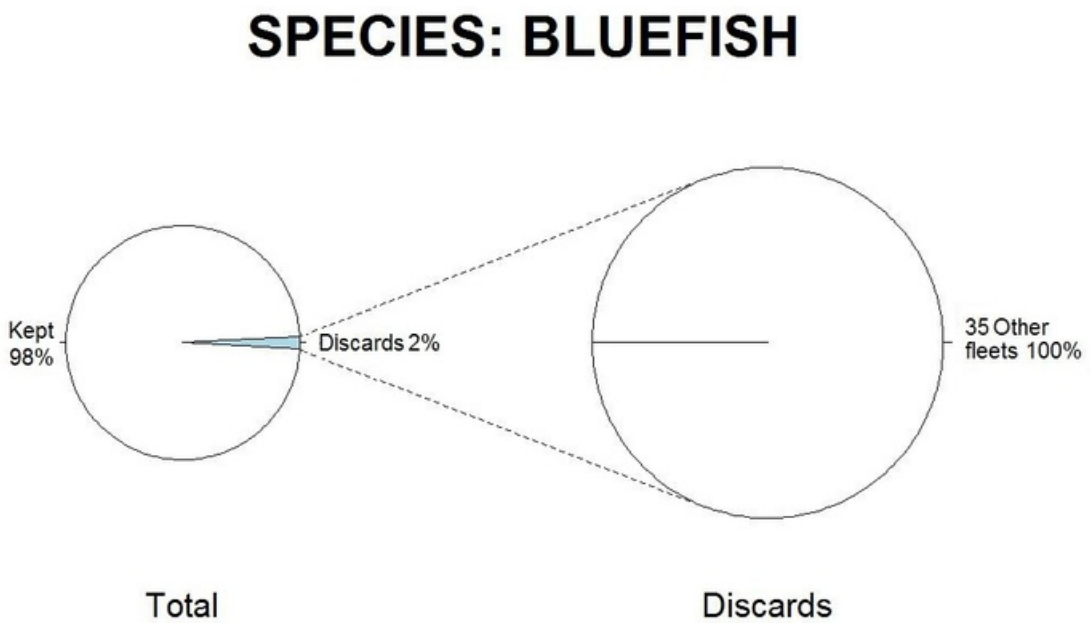


Figure 1A. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations.
Top: Atlantic salmon (*Salmo salar);* bottom: bluefish *(Pomatomus saltatrix).*

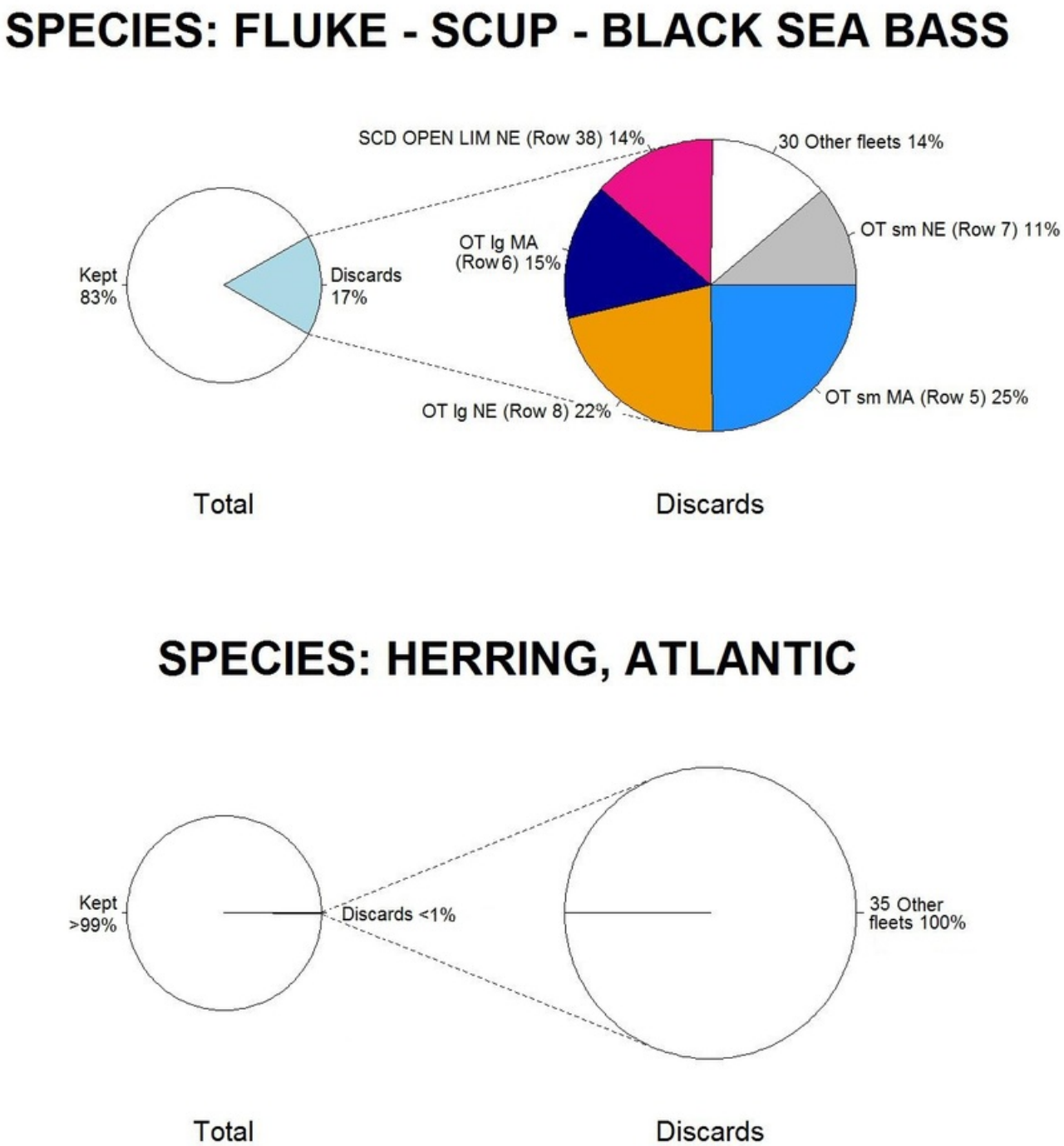
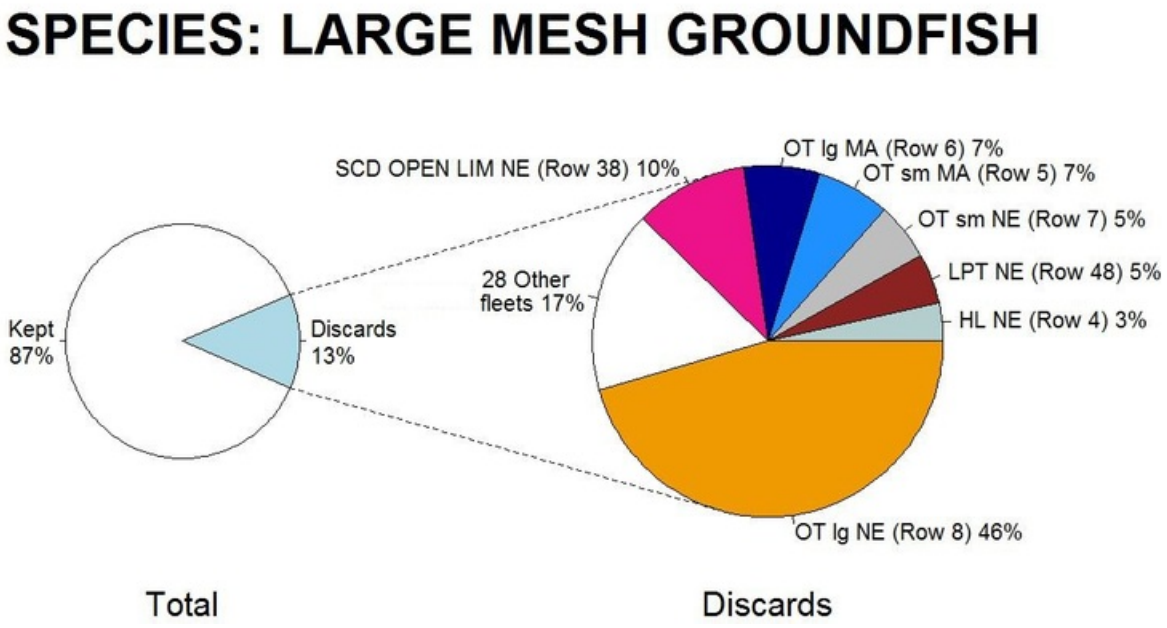


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: fluke (*Paralichthys dentatus) - scup (Stenotomus chrysops) - black sea bass (Centropristis striata);* bottom: *Atlantic herring (Clupea harengus)*.



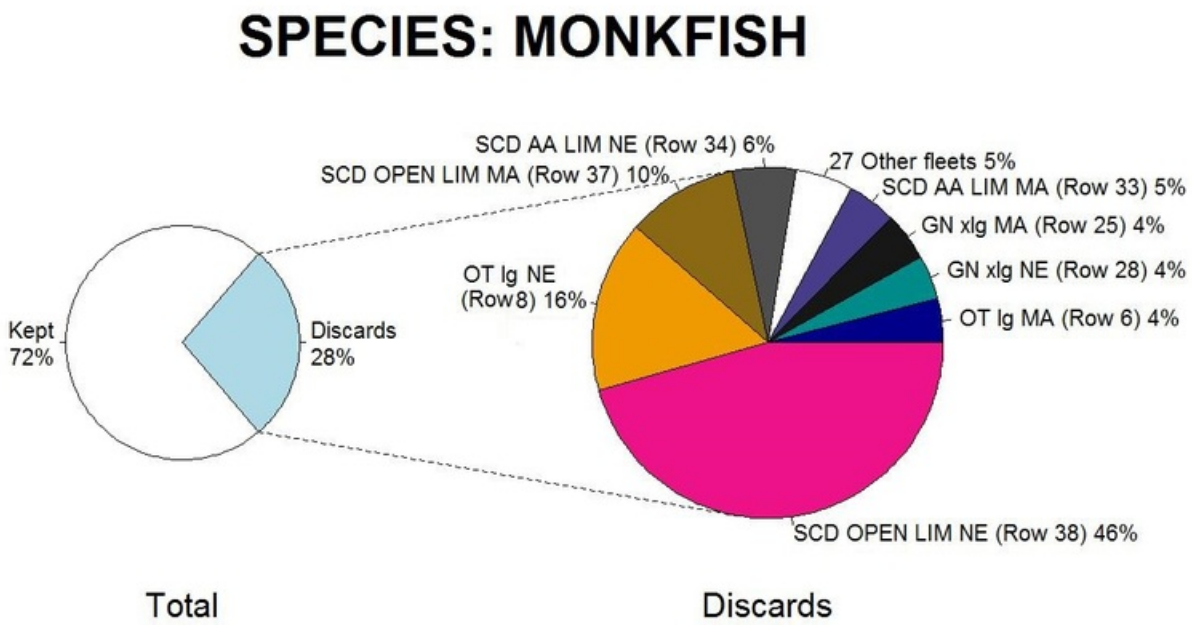


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: large mesh groundfish; bottom: monkfish (*Lophius americanus).*

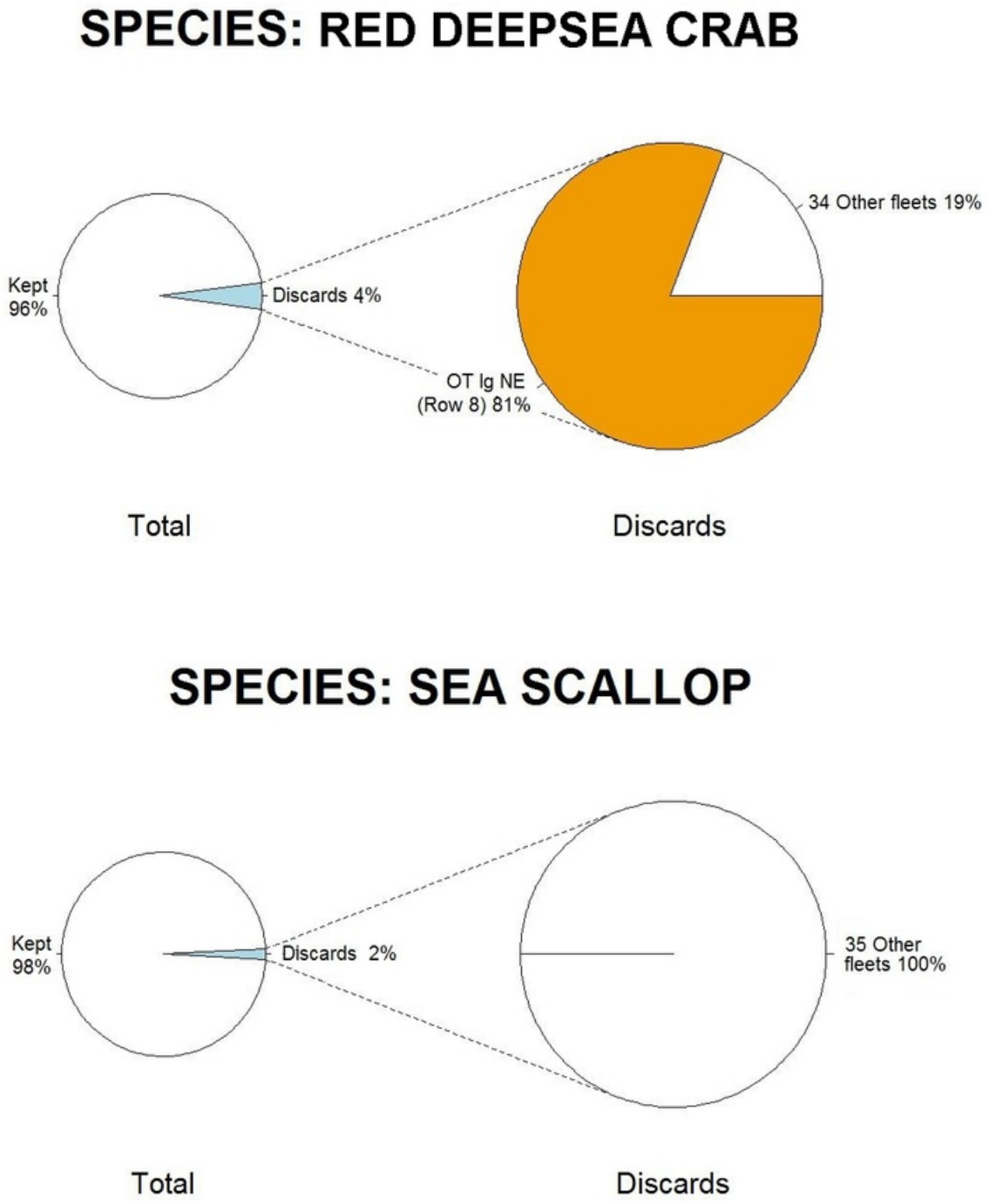
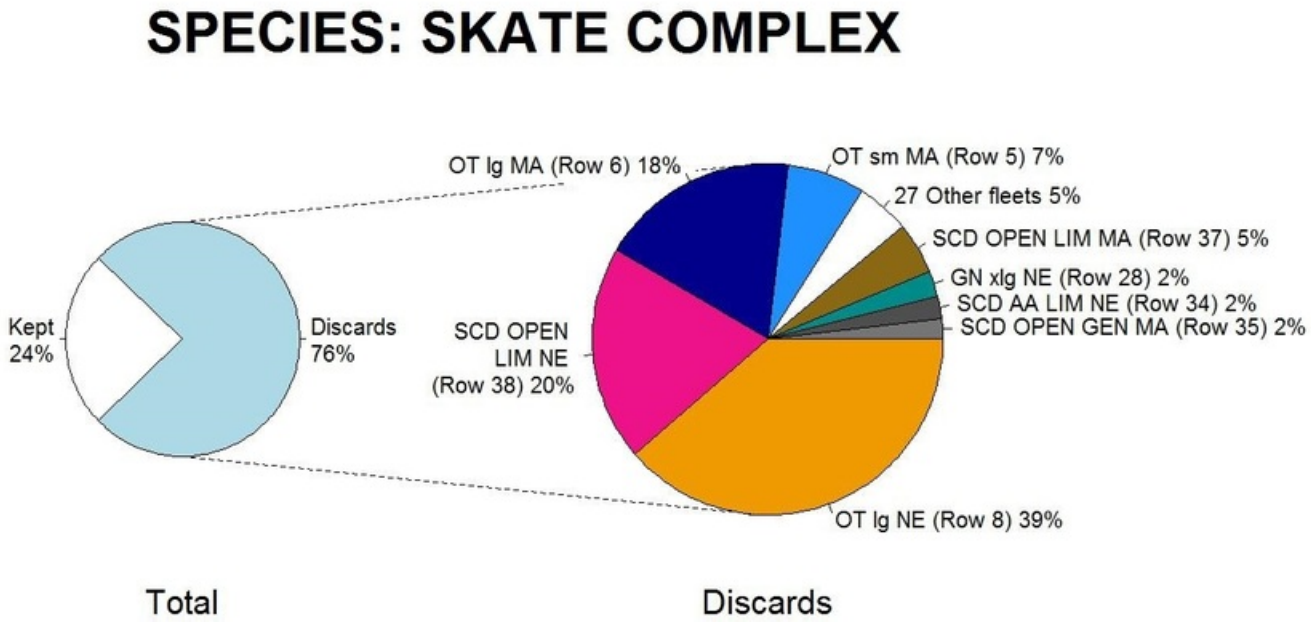


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: red deepsea crab (*Chaceon quinquedens*); bottom: sea scallop (*Placopecten magellanicus*).



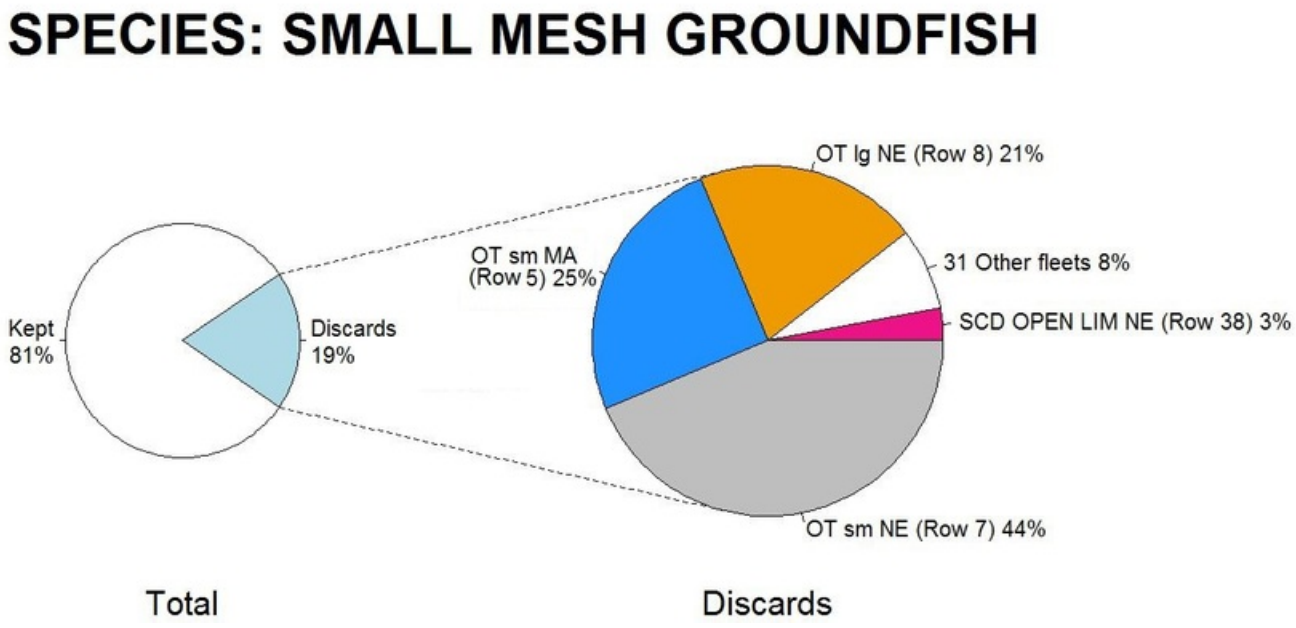
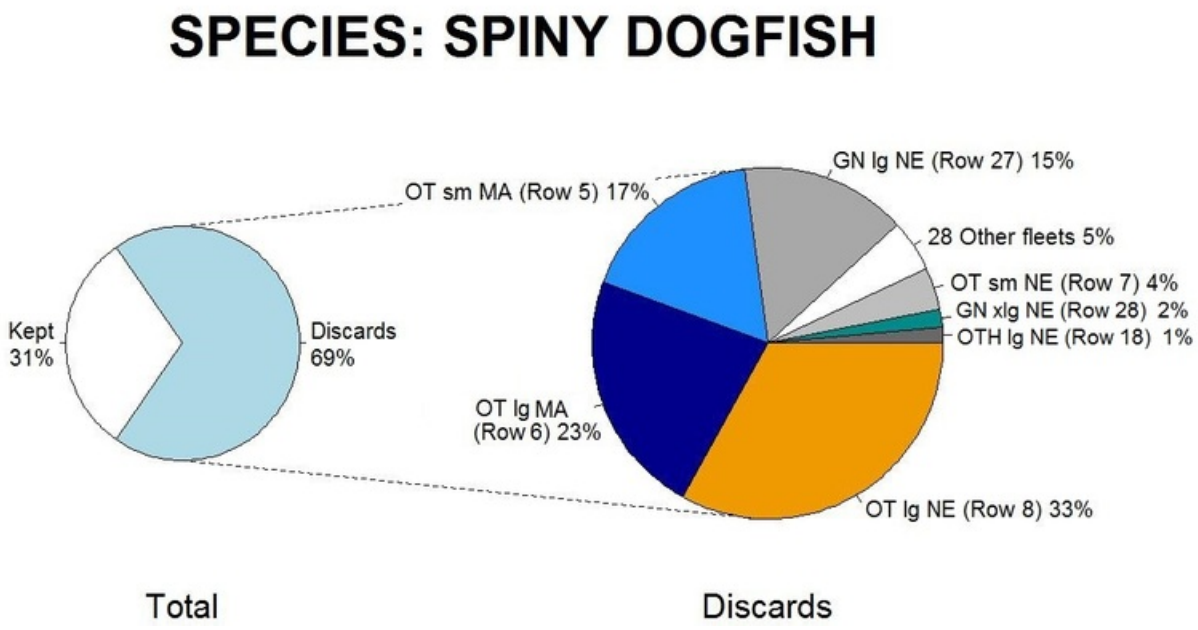


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: skate complex (Rajidae); bottom: small mesh groundfish.



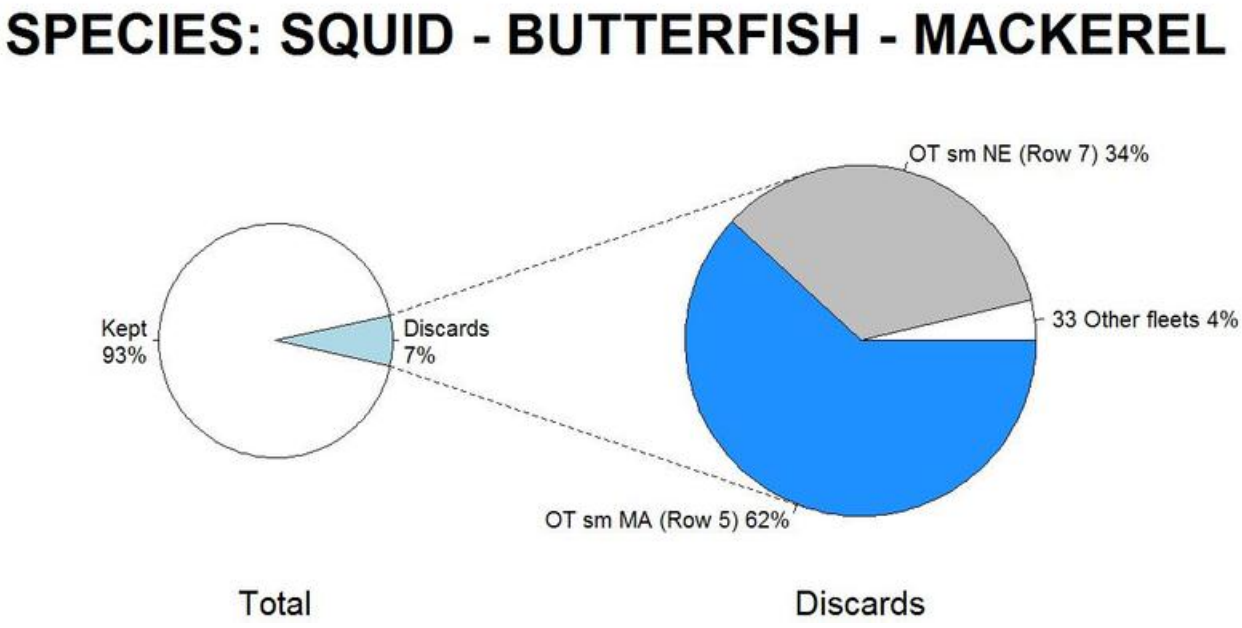
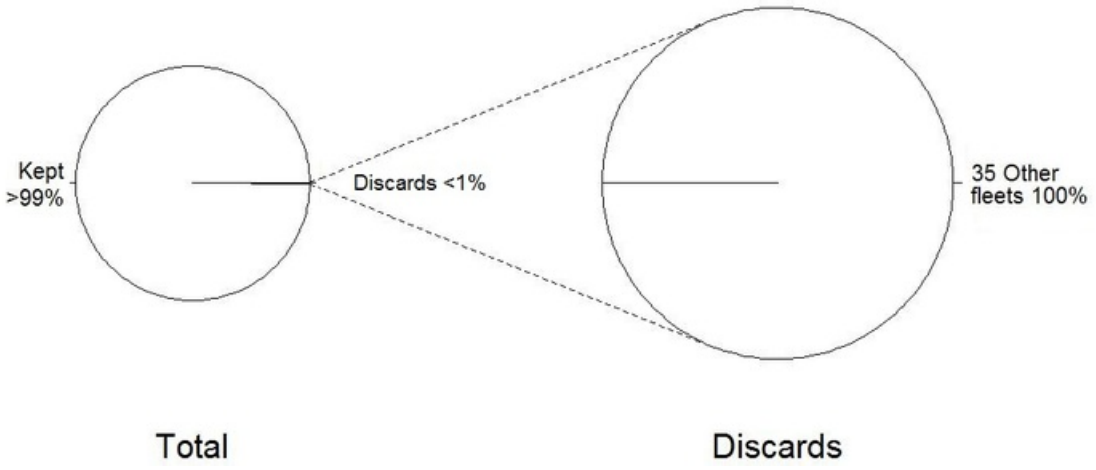


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: spiny dogfish (*Squalus acanthias*); bottom: squid (*Doryteuthis [Amerigo] pealeii, Illex illecebrosus*) – butterfish (*Peprilus triacanthus*) – Atlantic mackerel (*Scomber scombrus*).

SPECIES: SURFCLAM - OCEAN QUAHOG



SPECIES: TILEFISH

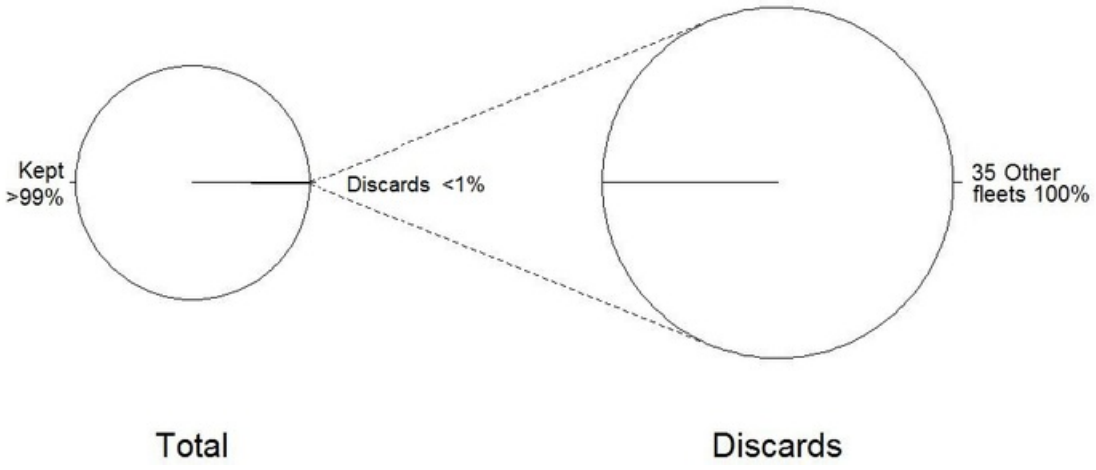
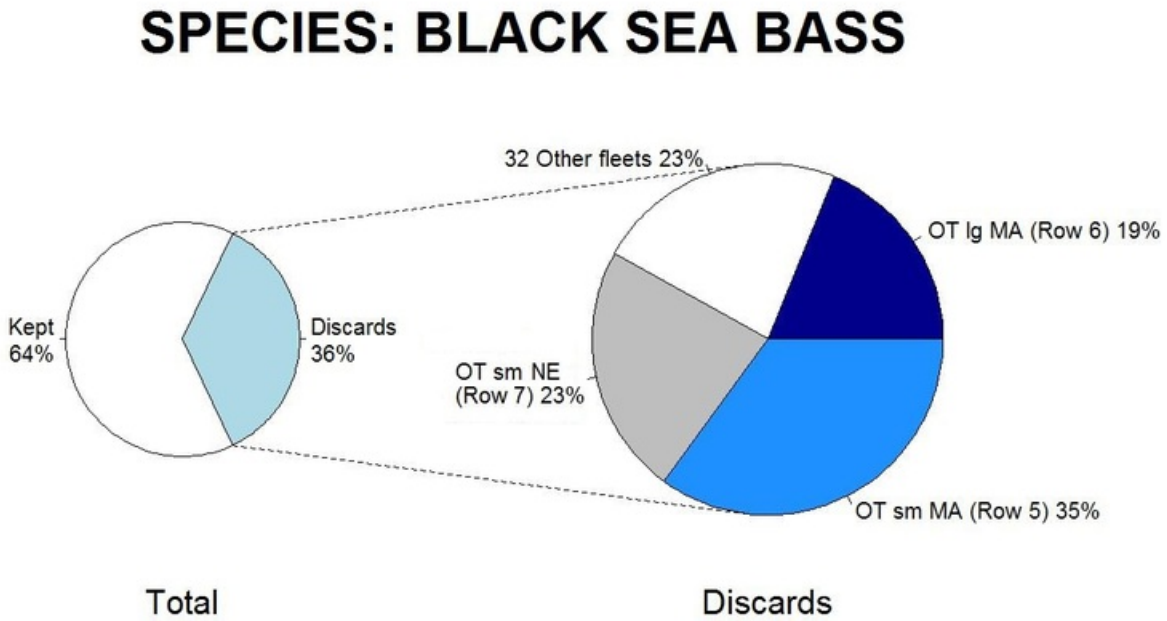


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: surfclam (*Spisula solidissima*) - ocean quahog (*Artica islandica*); bottom: tilefish (*Lopholatilus chamaeleonticeps*).



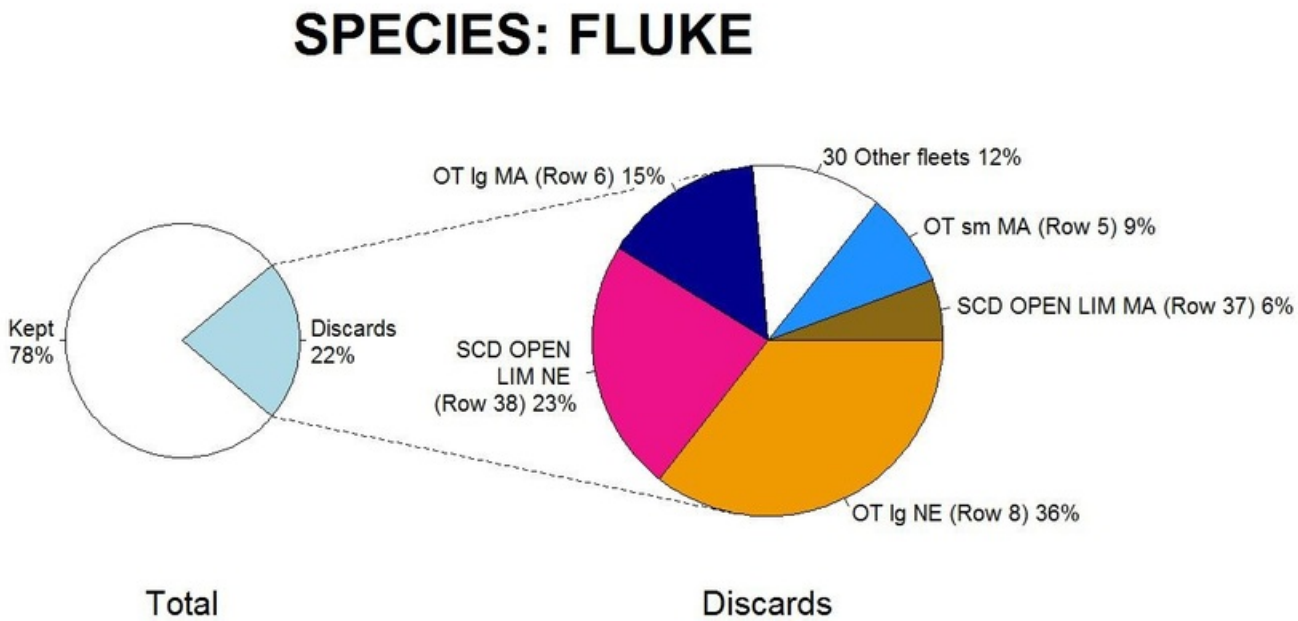
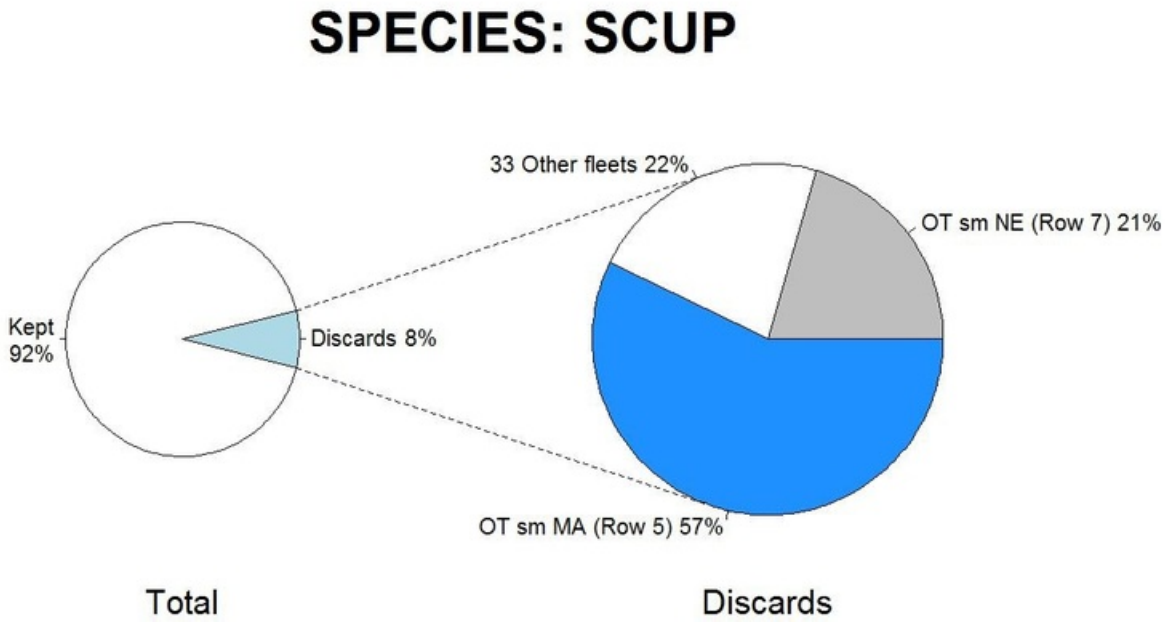


Figure 1B. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: black sea bass (*Centropristis striata*); bottom: fluke (*Paralichthys dentatus*).



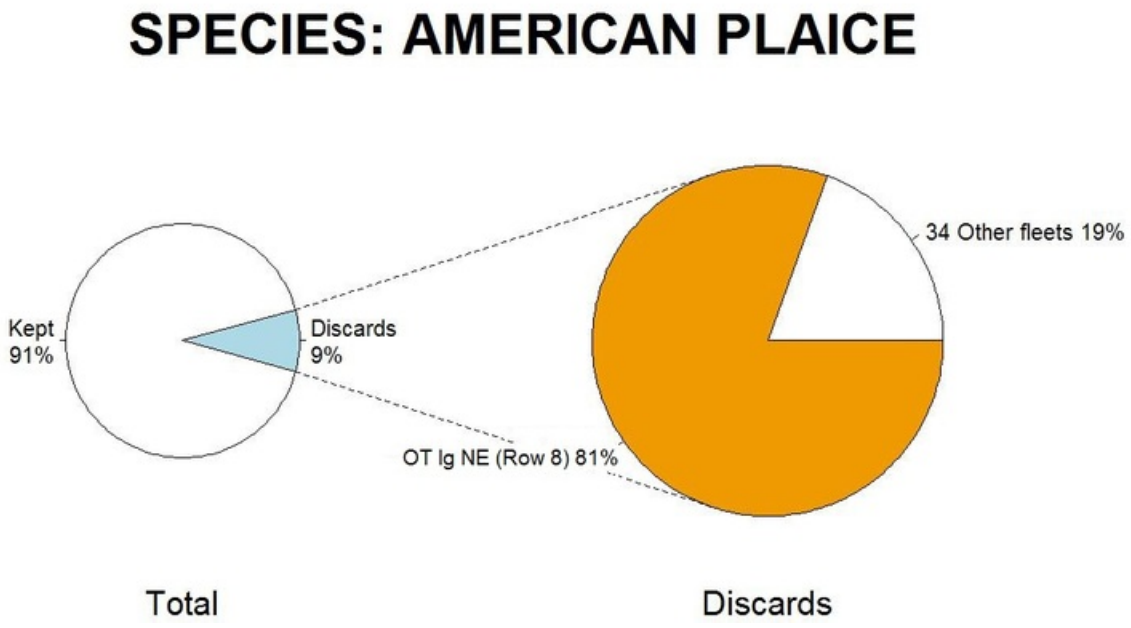
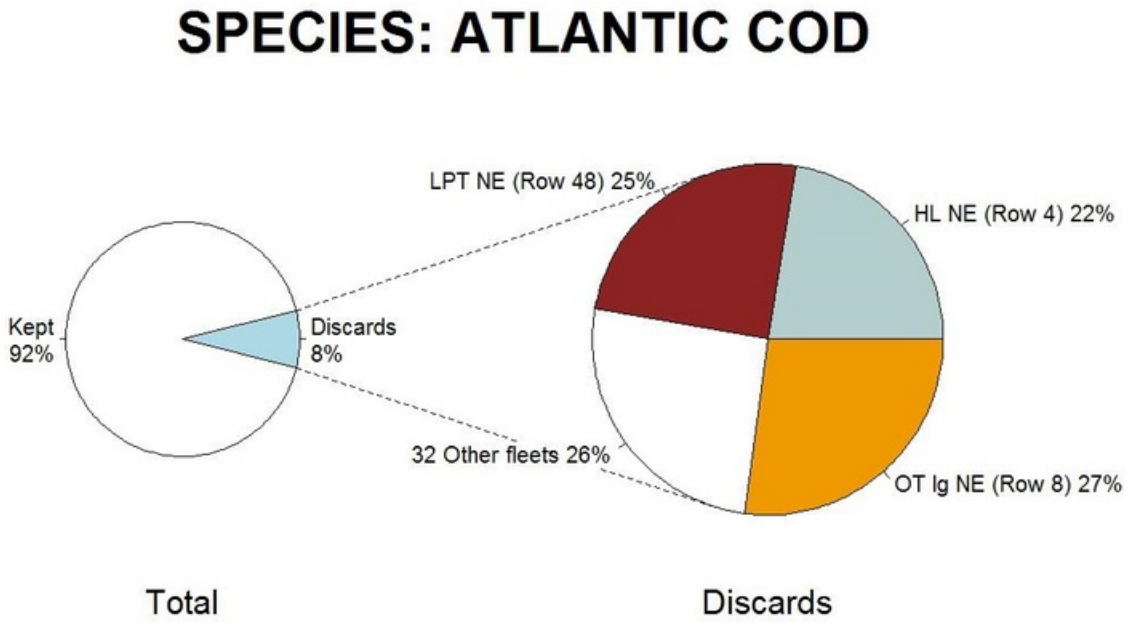


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: scup (*Stenotomus chrysops*); bottom: American plaice (*Hippoglossoides platessoides*).



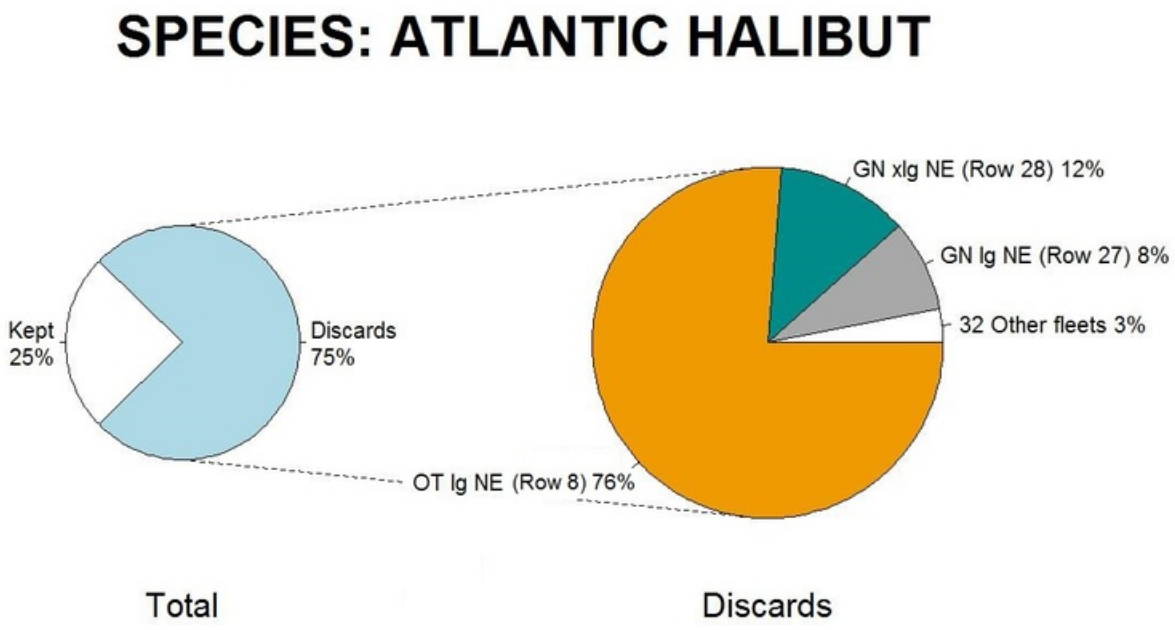
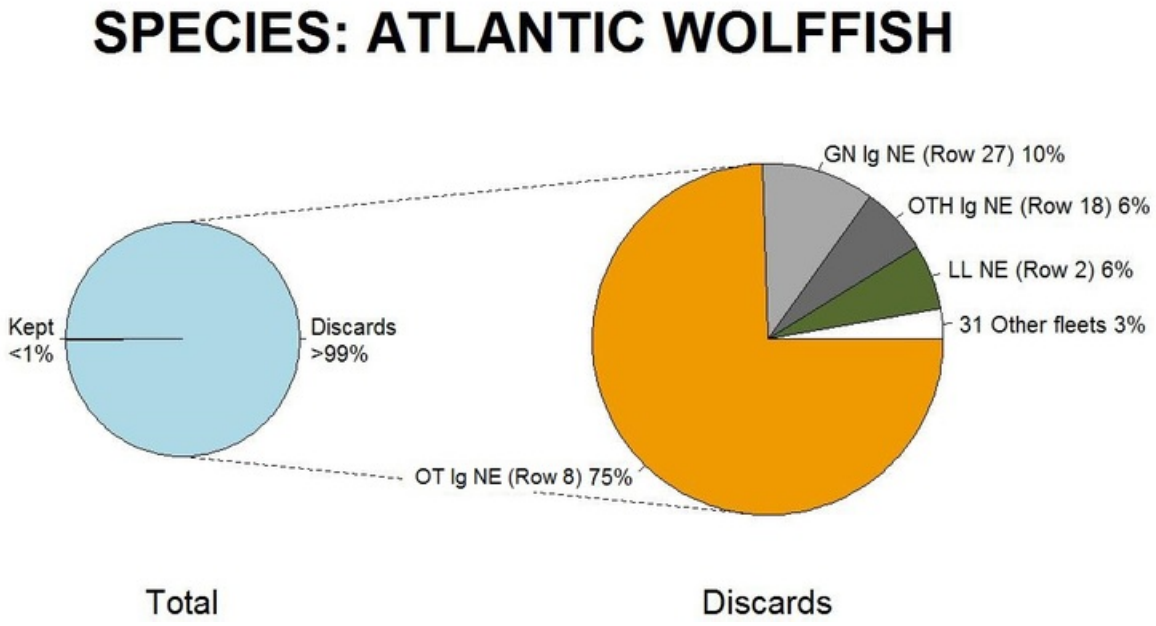


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: cod (*Gadus morhua*); bottom: Atlantic halibut (*Hippoglossus hippoglossus*).



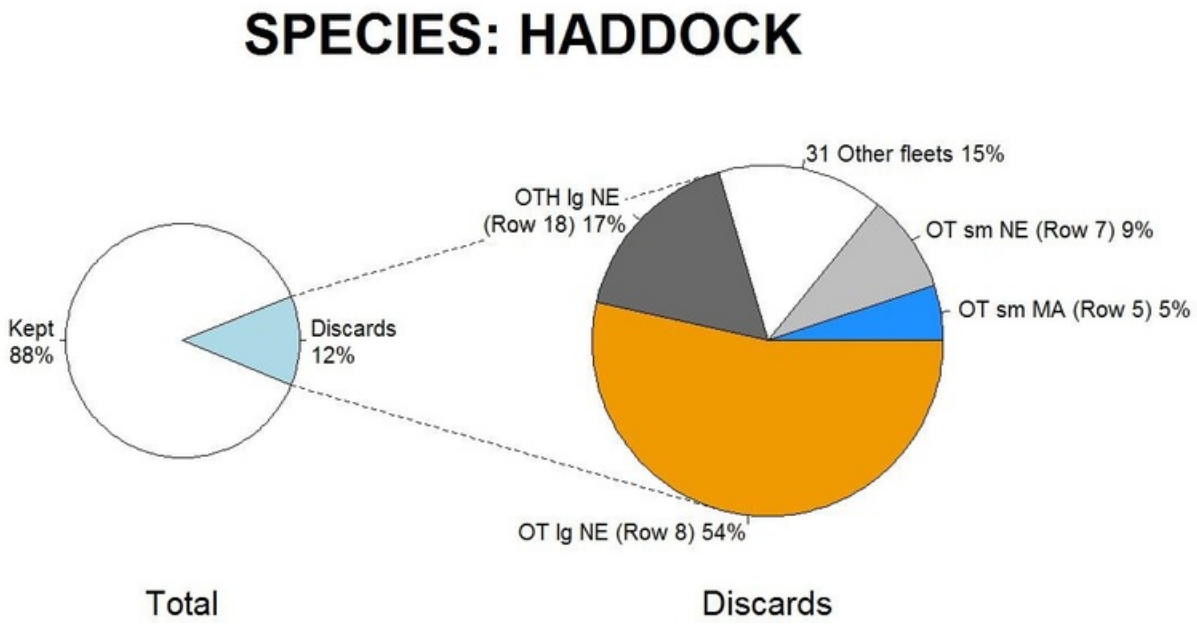
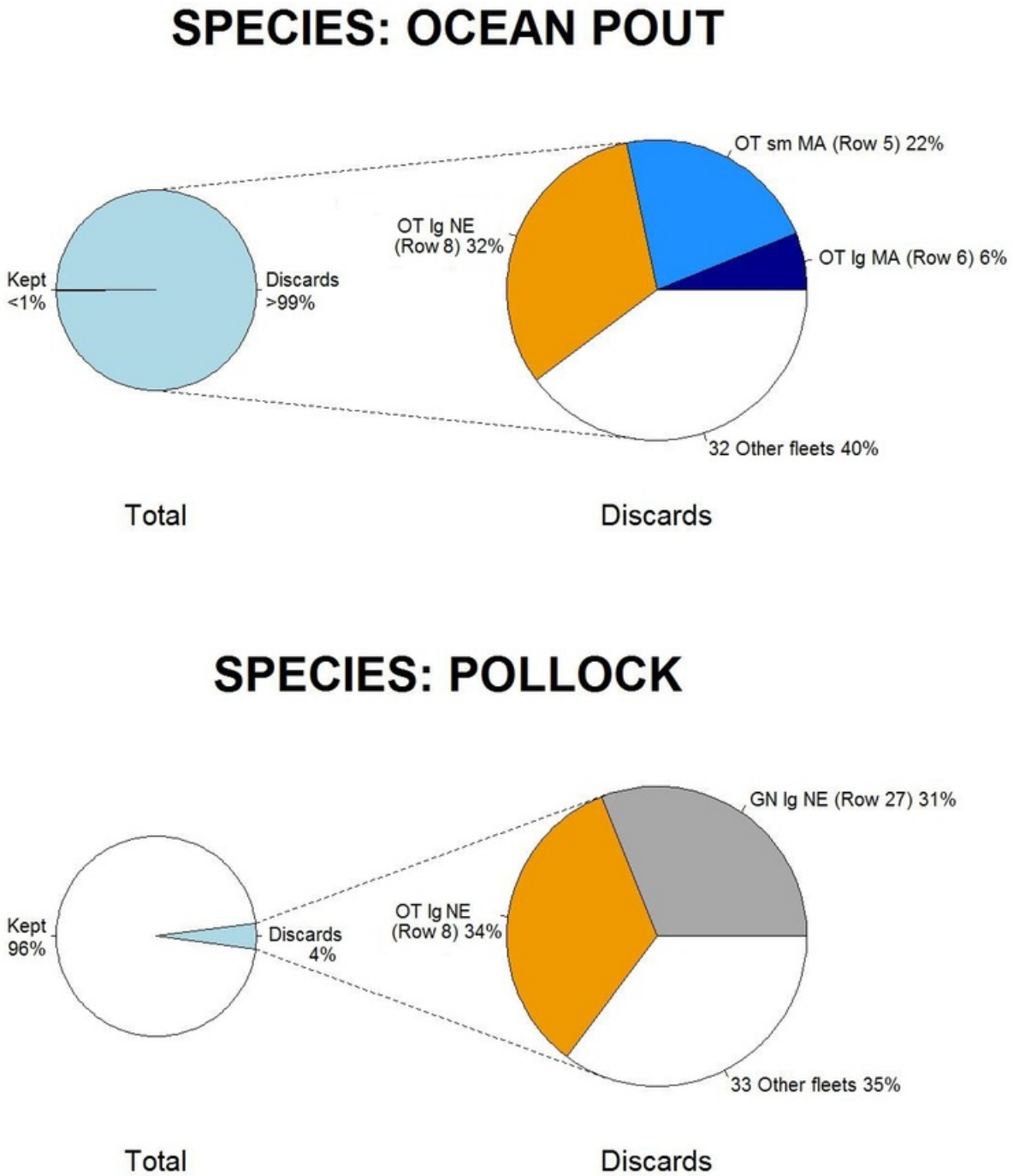


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: Atlantic wolffish (*Anarhichas lupus*); bottom: haddock (*Melanogrammus aeglefinus*).



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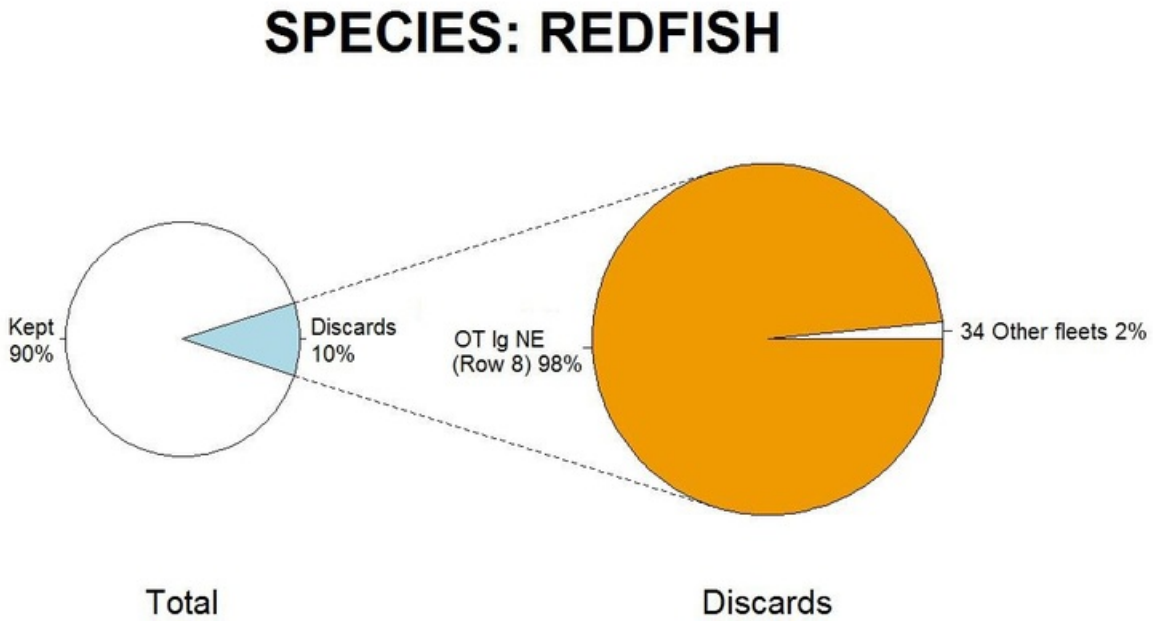

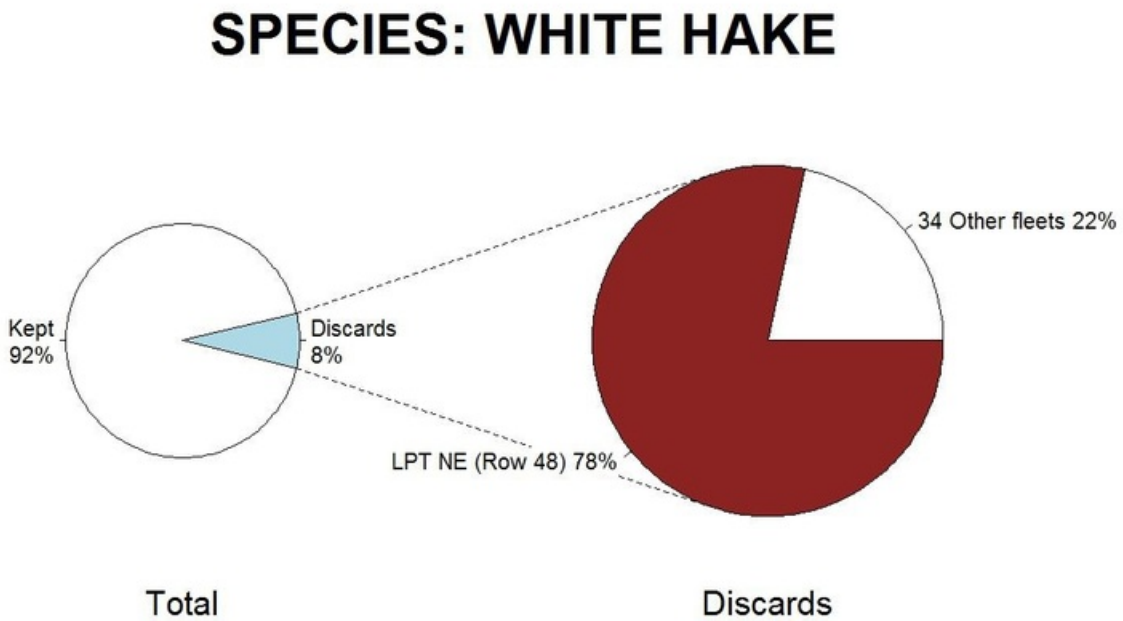

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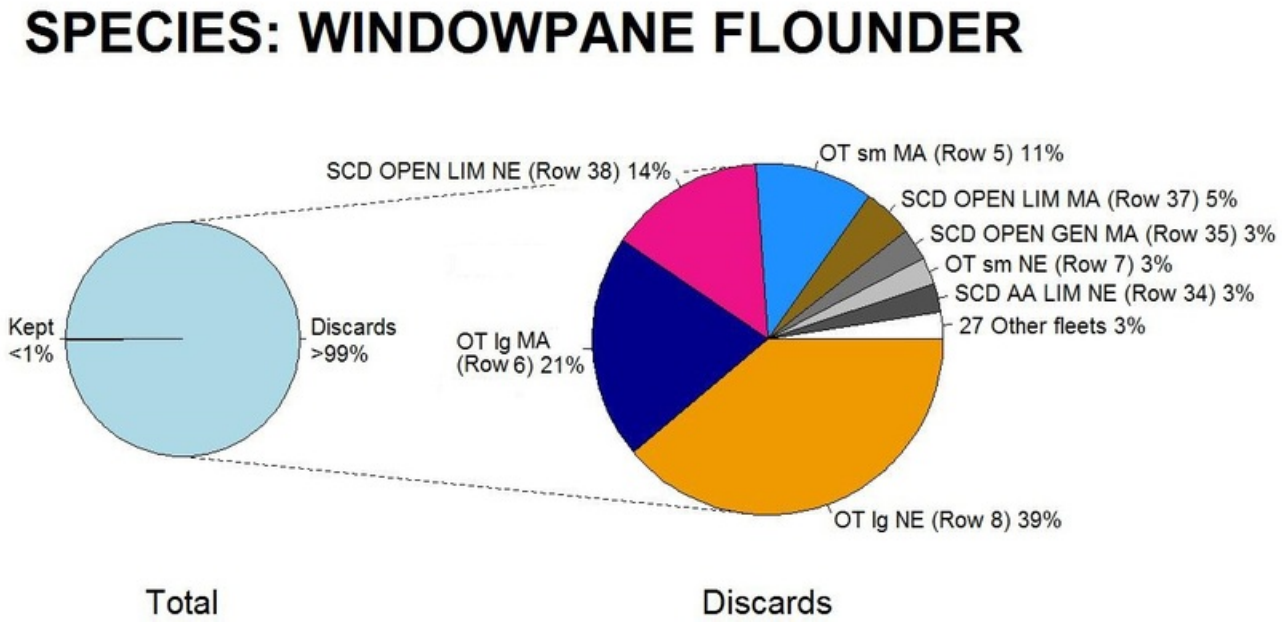


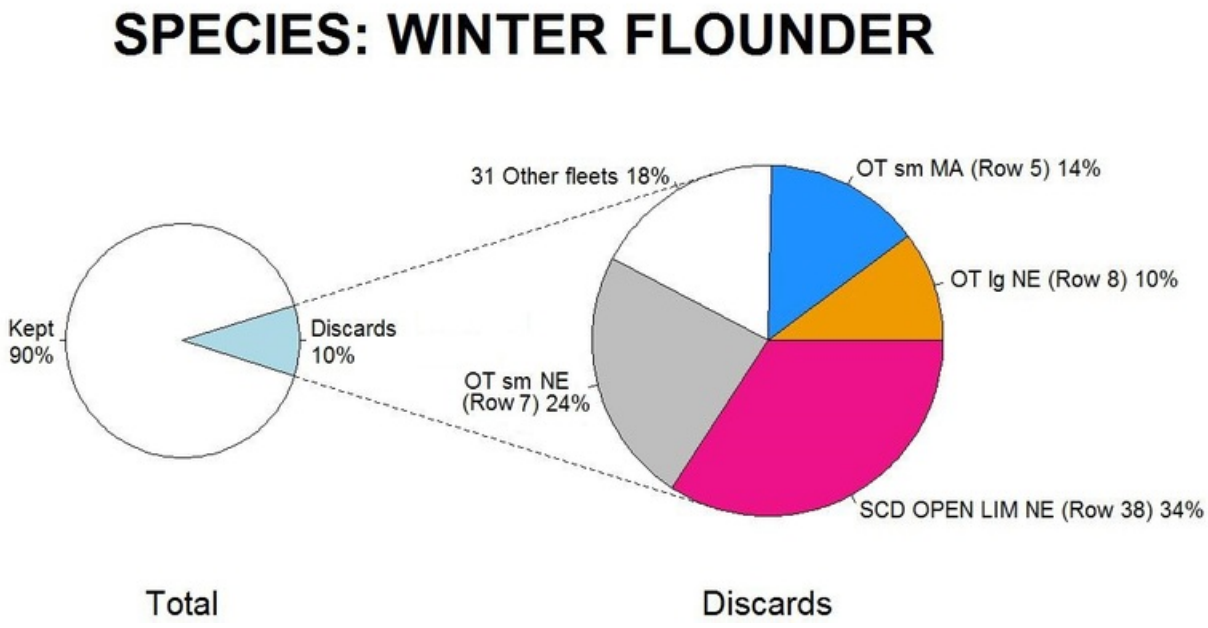
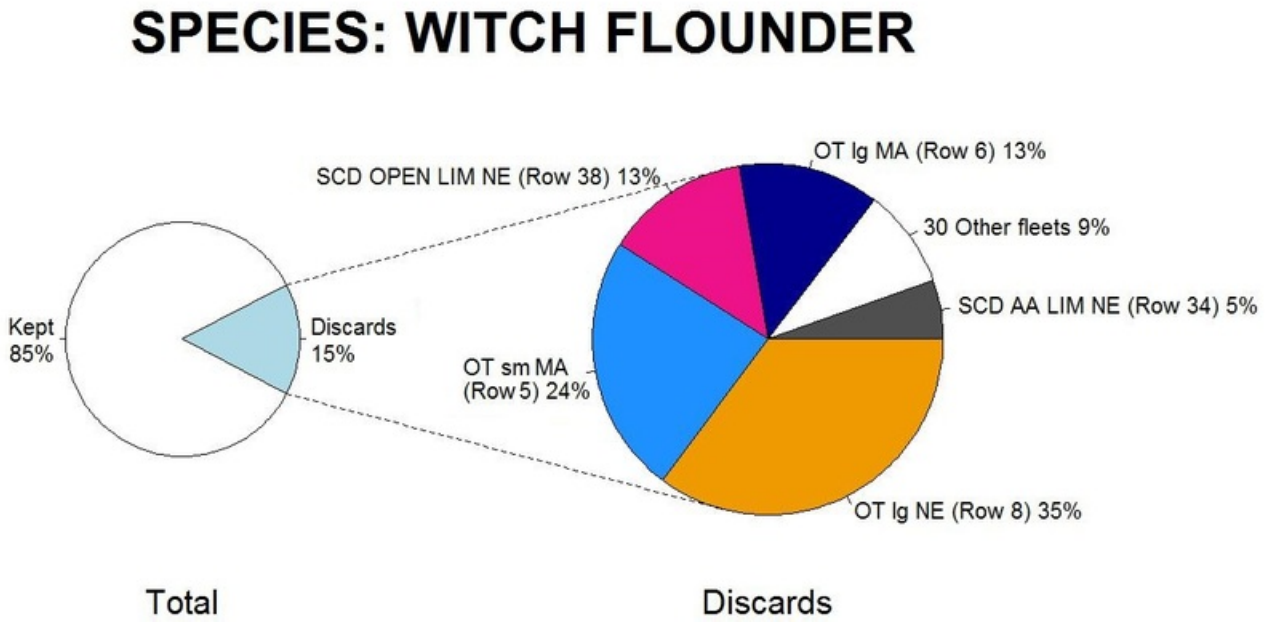
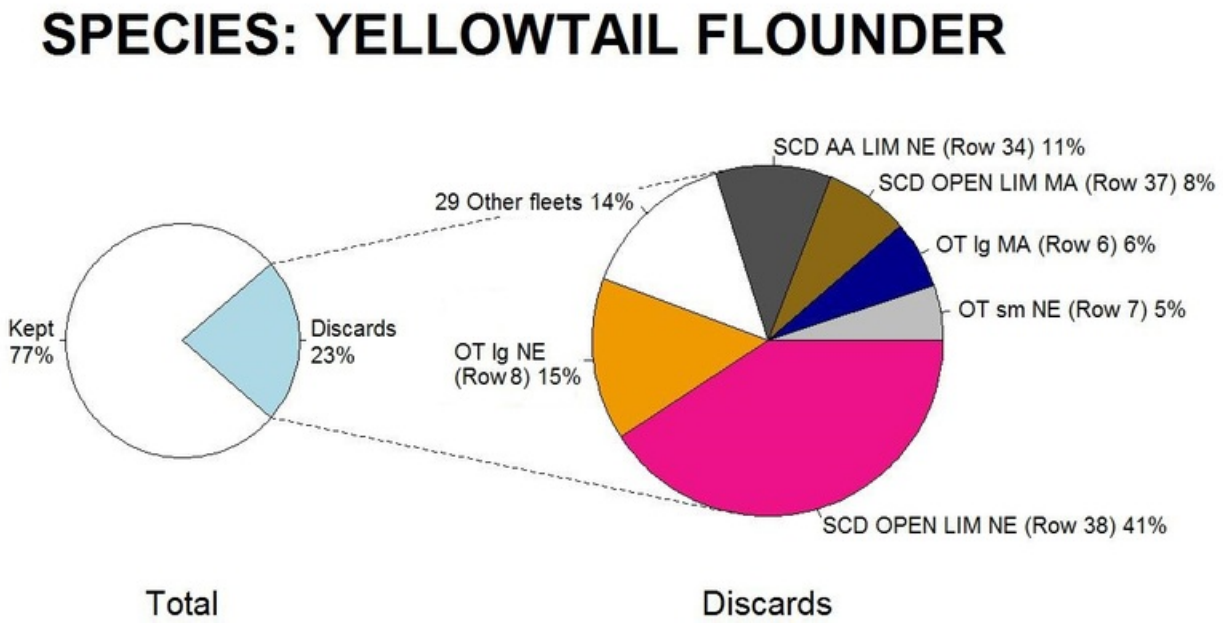


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: windowpane flounder (*Scophthalmus aquosus*); bottom: winter flounder (*Pseudopleuronectes americanus*).





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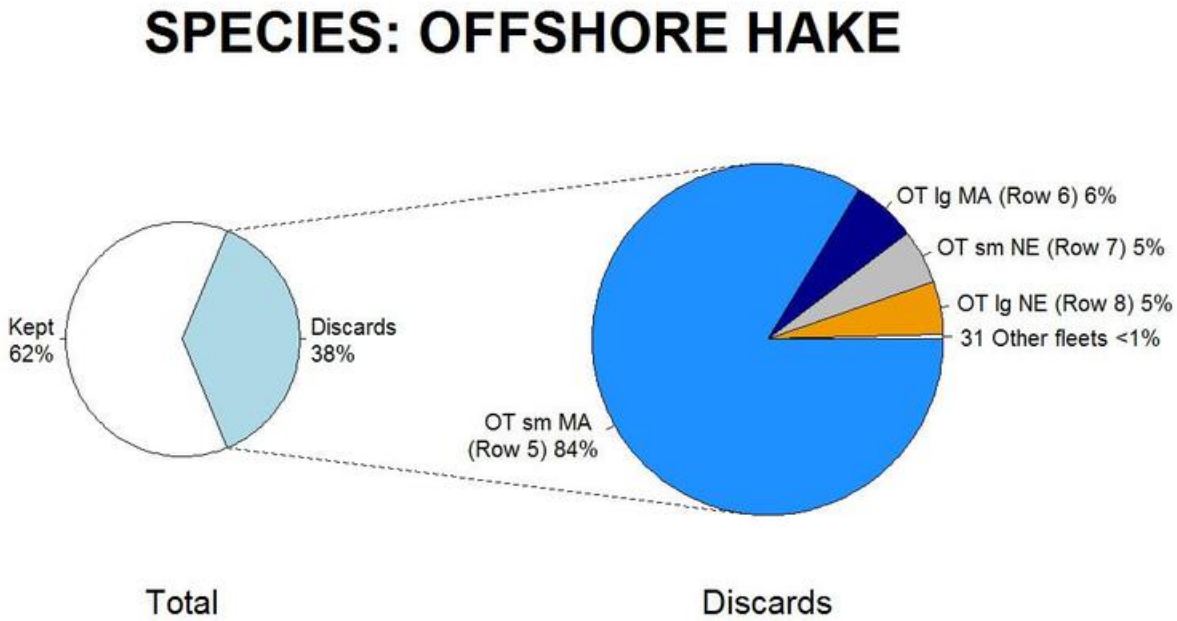

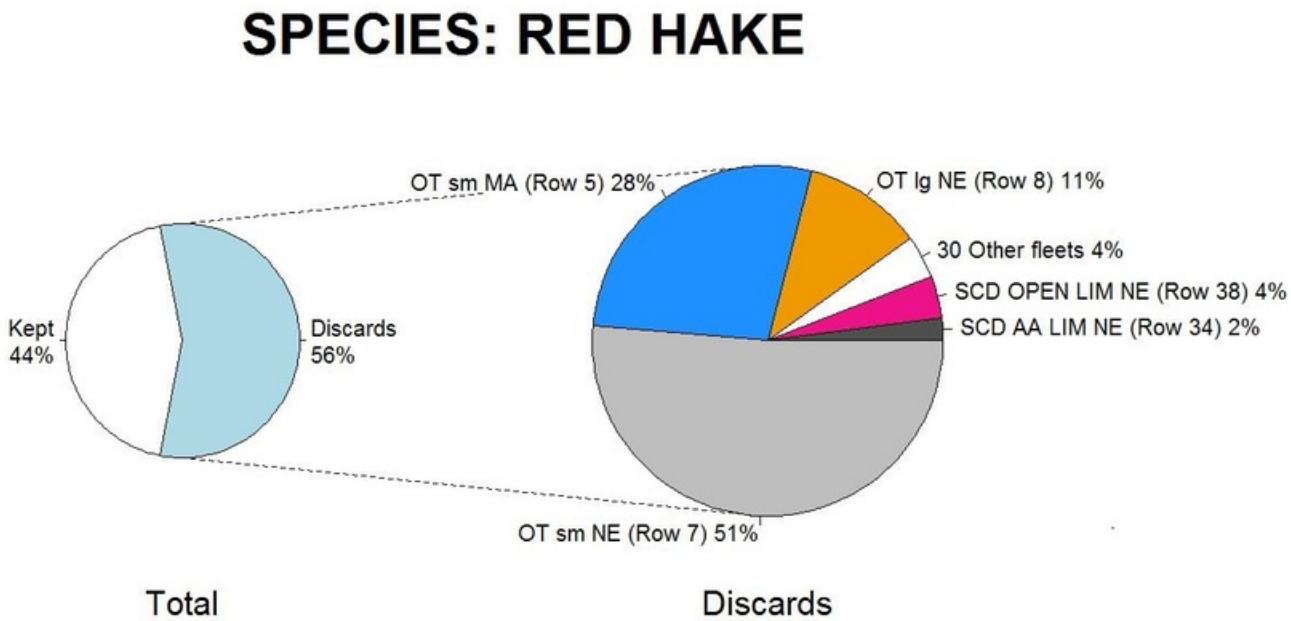

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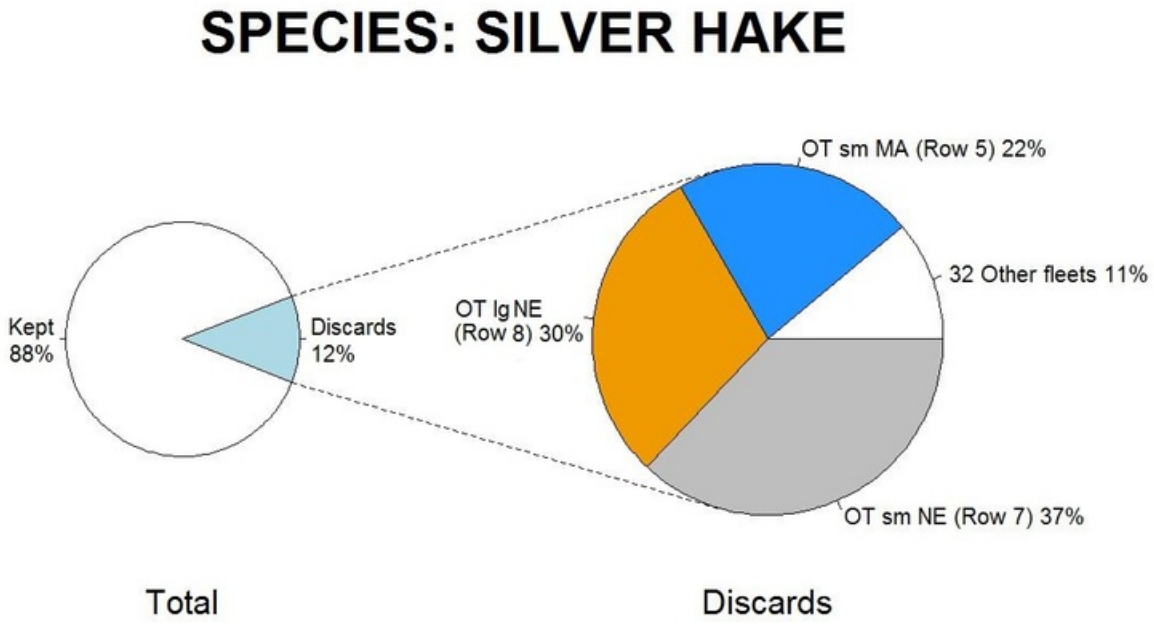


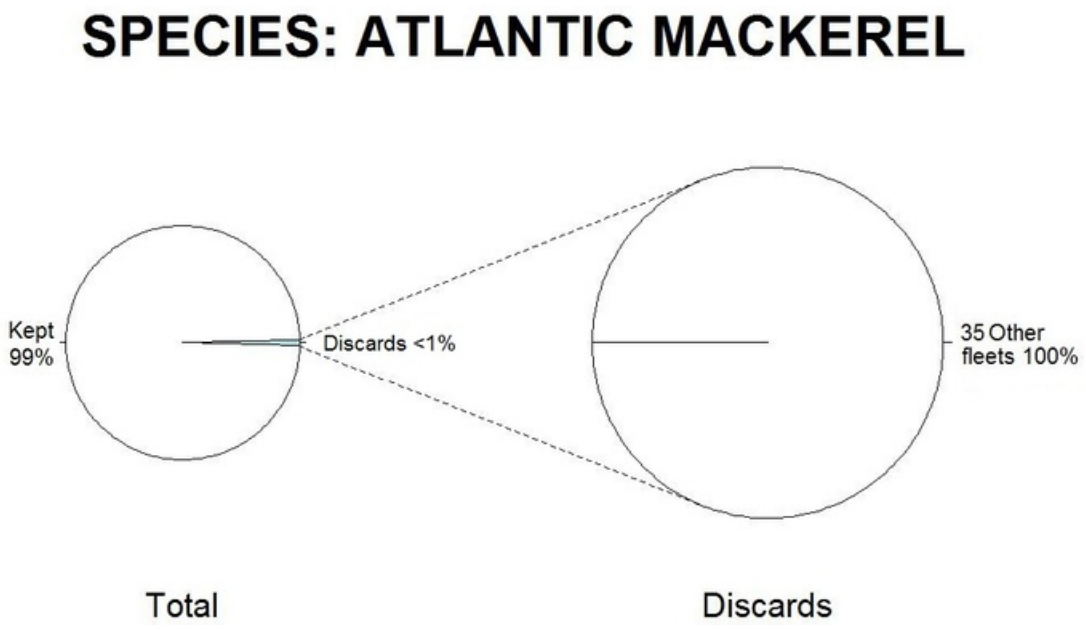


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: silver hake (*Merluccius bilinearis*); bottom: Atlantic mackerel (*Scomber scombrus*).

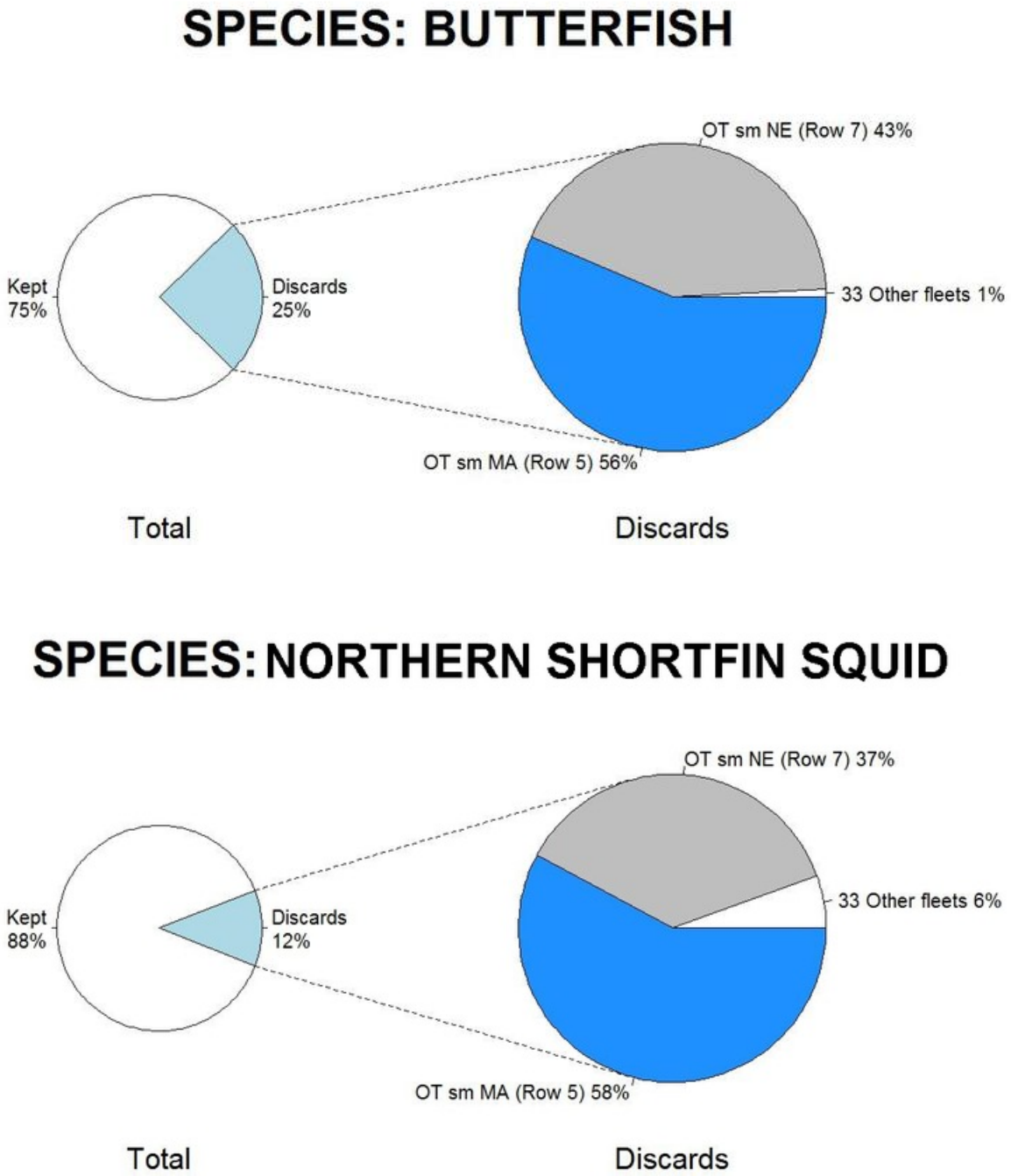


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: butterfish (*Peprilus triacanthus*); bottom: northern shortfin squid (*Illex illecebrosus*).

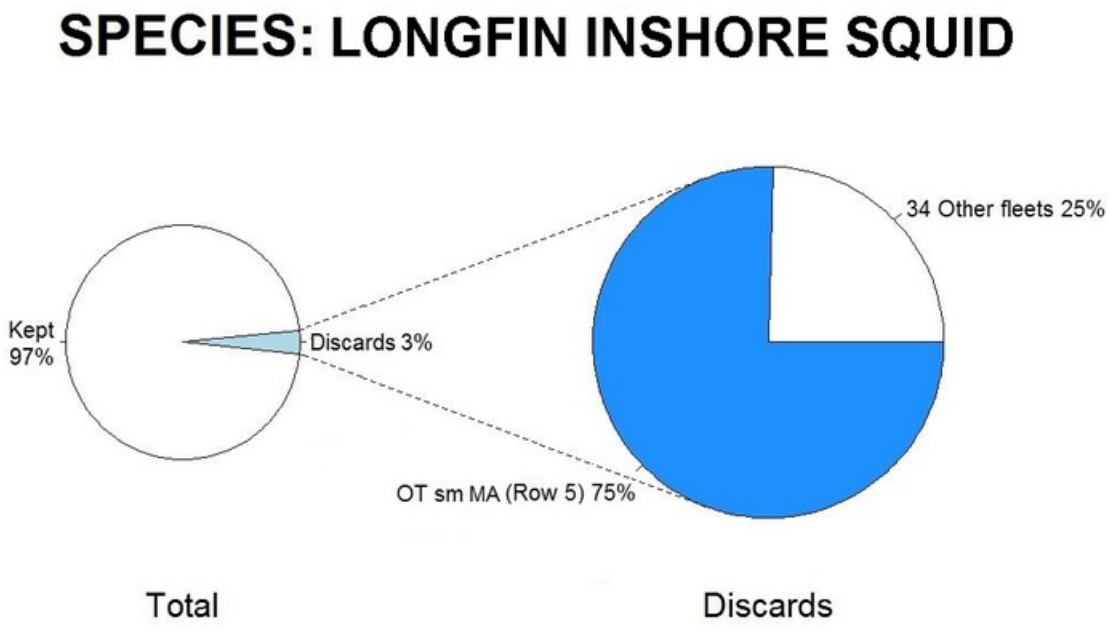


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: Longfin inshore squid (*Doryteuthis [Amerigo] pealeii*).

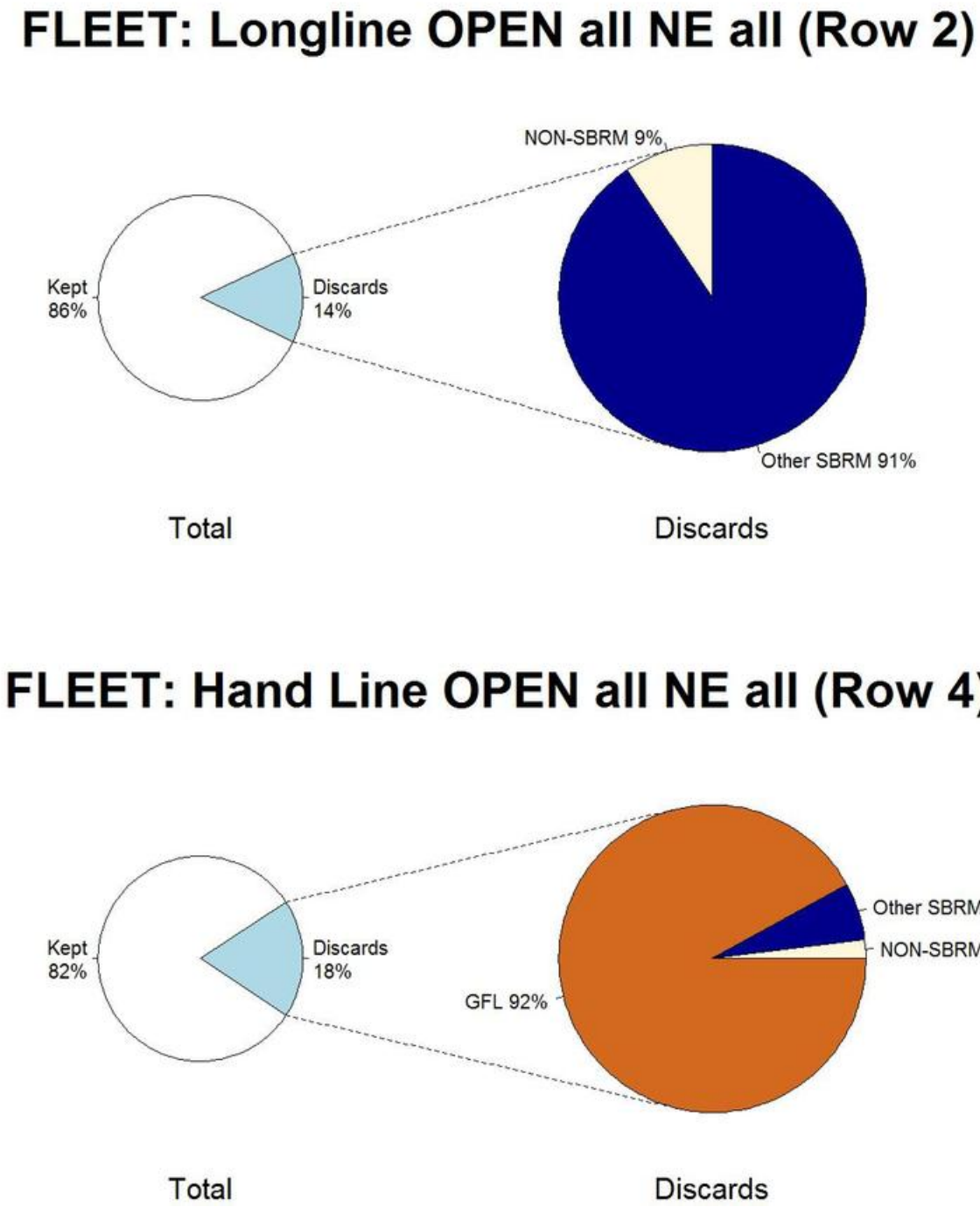
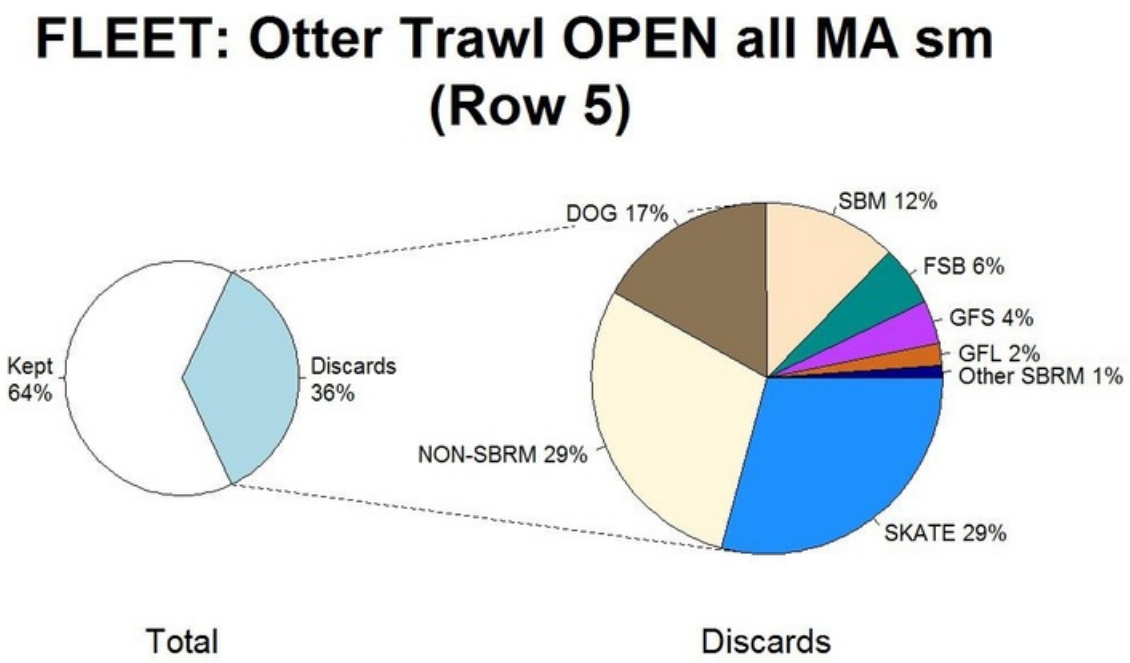


Figure 2. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 24 selected fleets, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; see text and Appendix Table 4 for fleet abbreviations. Standardized Bycatch Reporting Methodology (SBRM) species groups that were filtered out through the importance filter have been aggregated and labeled "Other SBRM;" non-SBRM species have been grouped and labeled "Non-SBRM." ***Note: Selected fleets include Rows 2, 4-8, 11, 18, 23-25, 27, 28, 30, 32-38, 41, 48, and 56; these represent fleets where discards were estimated in 2015 (Table 5A).***



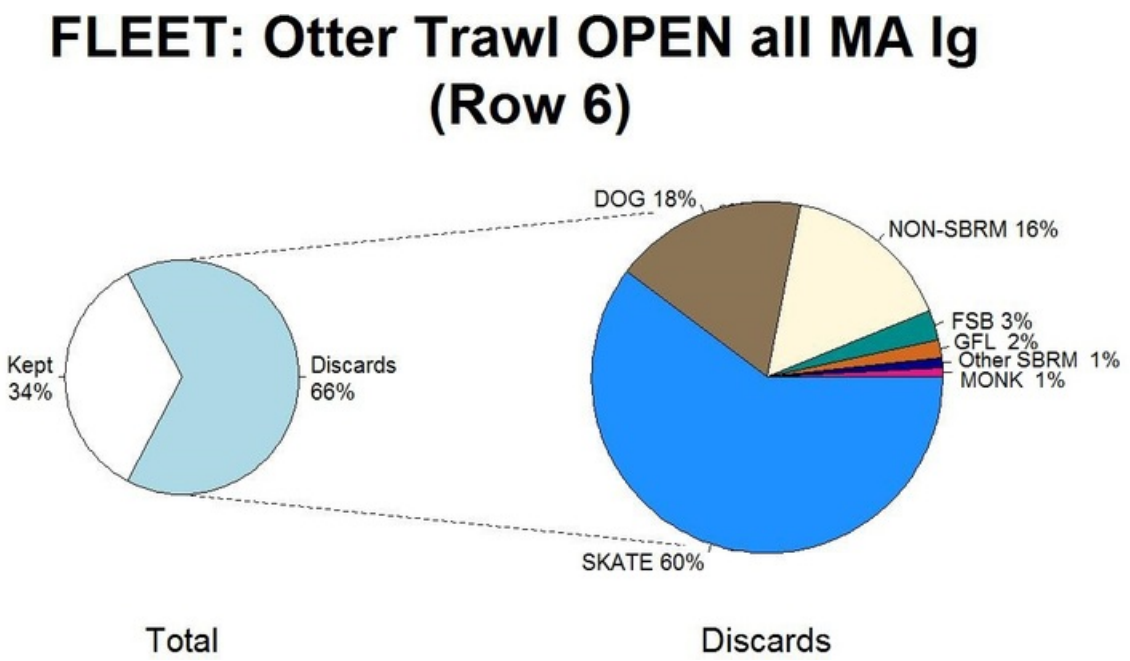
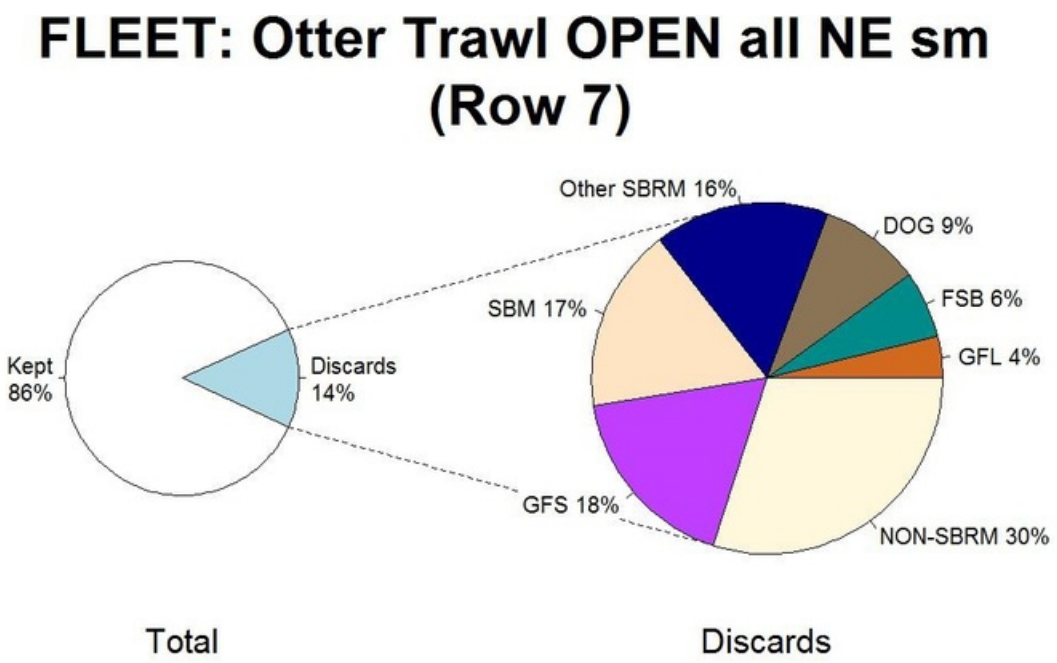


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 24 selected fleets, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; see text and Appendix Table 4 for fleet abbreviations. Standardized Bycatch Reporting Methodology (SBRM) species groups that were filtered out through the importance filter have been aggregated and labeled "Other SBRM;" non-SBRM species have been grouped and labeled "Non-SBRM." ***Note: Selected fleets include Rows 2, 4-8, 11, 18, 23-25, 27, 28, 30, 32-38, 41, 48, and 56; these represent fleets where discards were estimated in 2015 (Table 5A).***



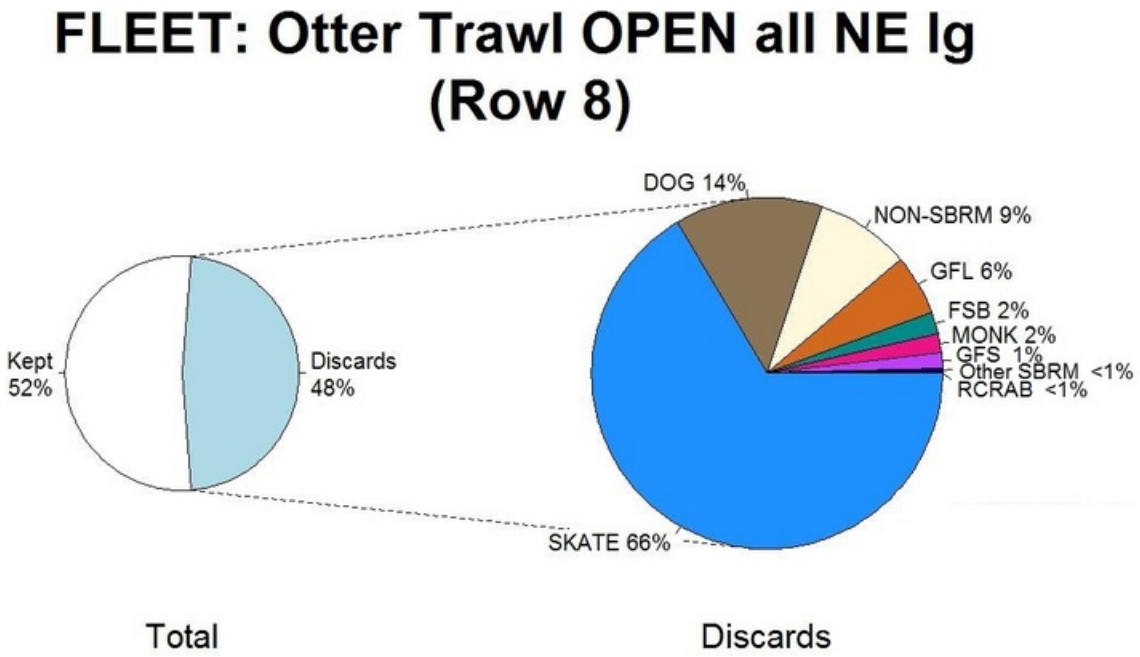
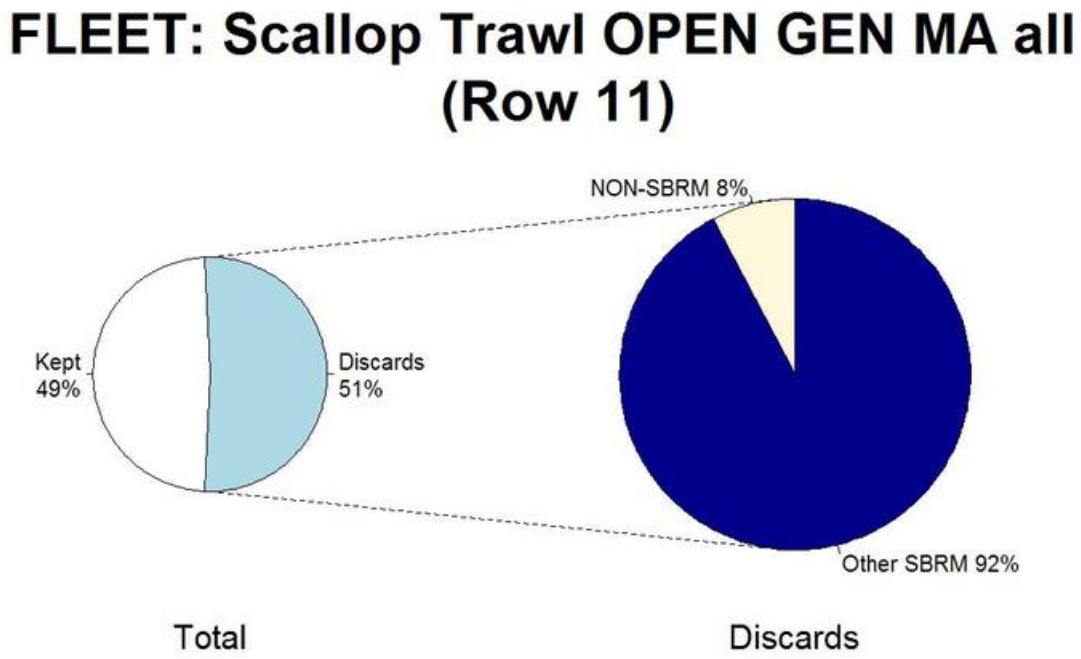


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 24 selected fleets, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; see text and Appendix Table 4 for fleet abbreviations. Standardized Bycatch Reporting Methodology (SBRM) species groups that were filtered out through the importance filter have been aggregated and labeled "Other SBRM;" non-SBRM species have been grouped and labeled "Non-SBRM." ***Note: Selected fleets include Rows 2, 4-8, 11, 18, 23-25, 27, 28, 30, 32-38, 41, 48, and 56; these represent fleets where discards were estimated in 2015 (Table 5A).***



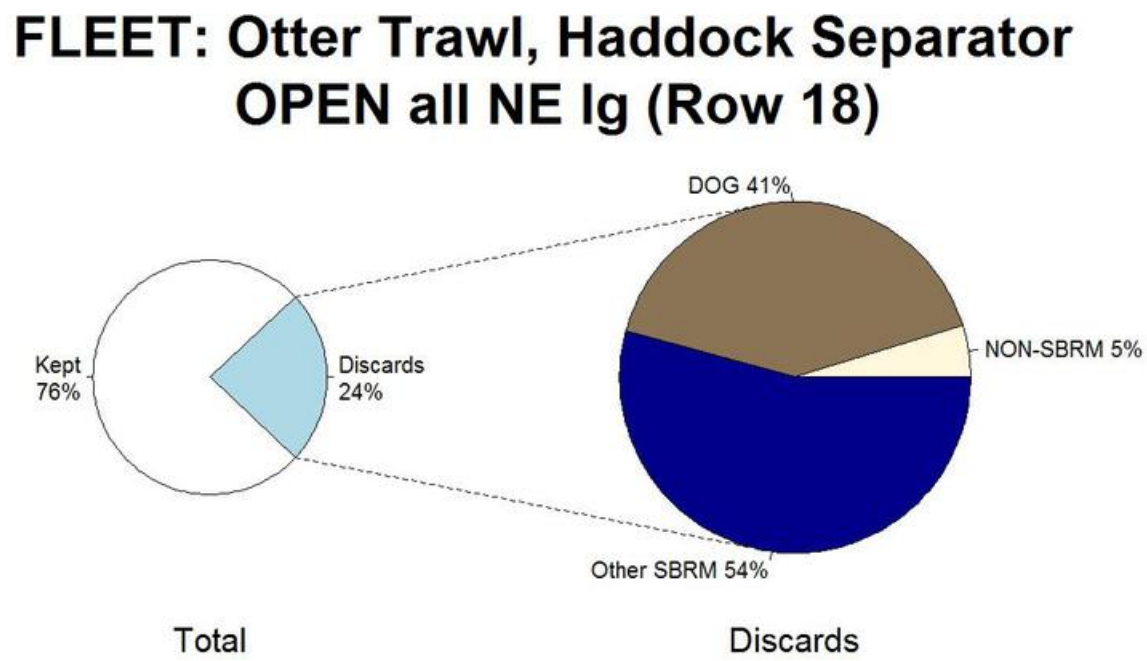
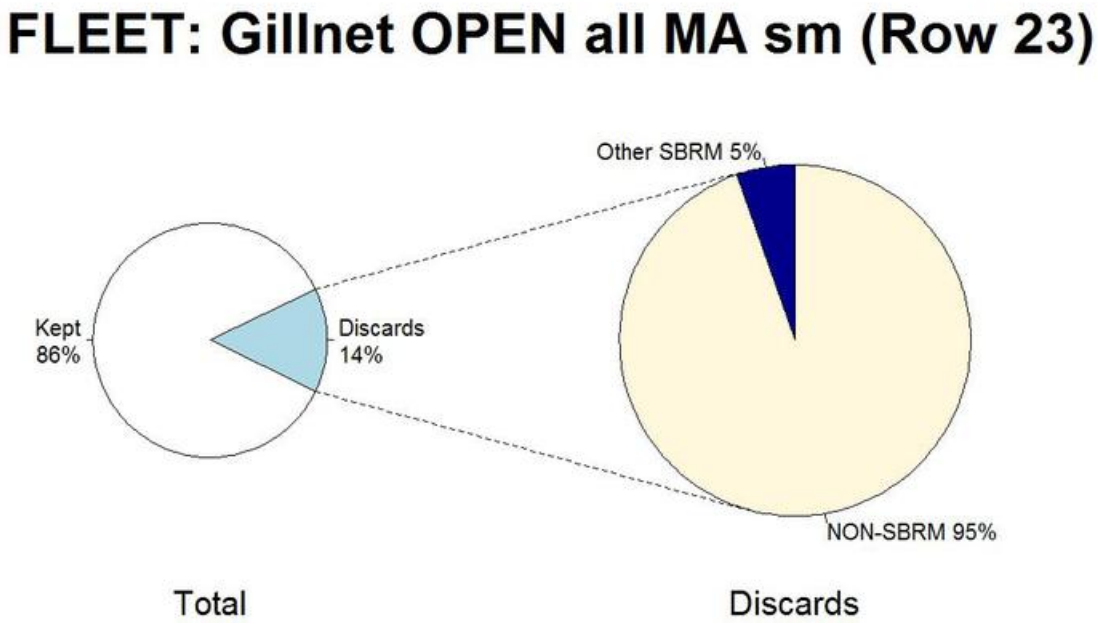


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 24 selected fleets, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; see text and Appendix Table 4 for fleet abbreviations. Standardized Bycatch Reporting Methodology (SBRM) species groups that were filtered out through the importance filter have been aggregated and labeled "Other SBRM;" non-SBRM species have been grouped and labeled "Non-SBRM." ***Note: Selected fleets include Rows 2, 4-8, 11, 18, 23-25, 27, 28, 30, 32-38, 41, 48, and 56; these represent fleets where discards were estimated in 2015 (Table 5A).***



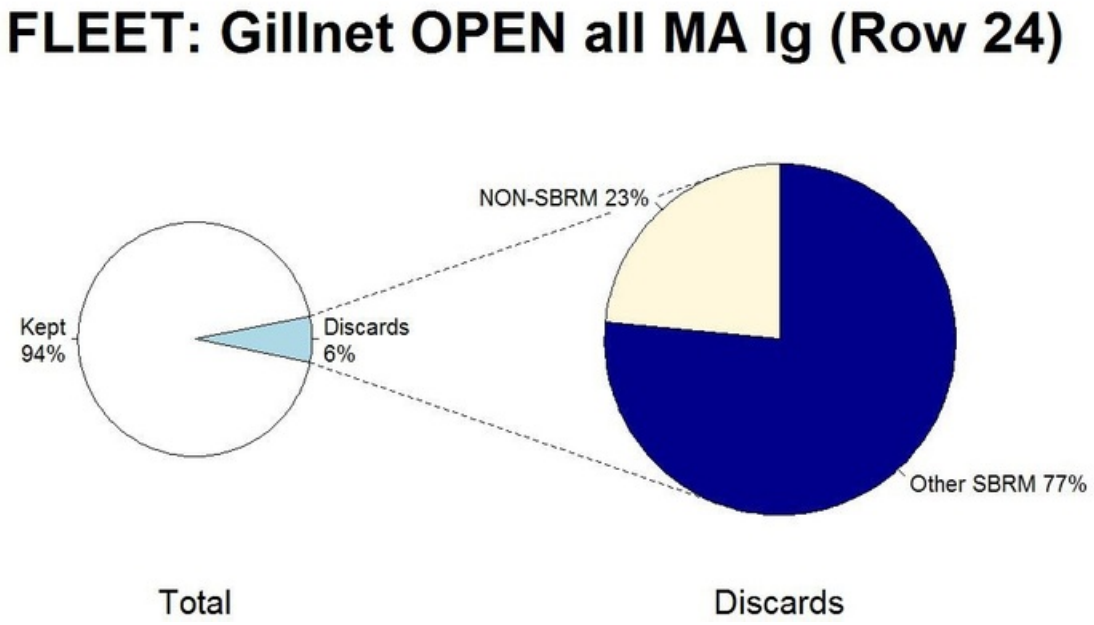
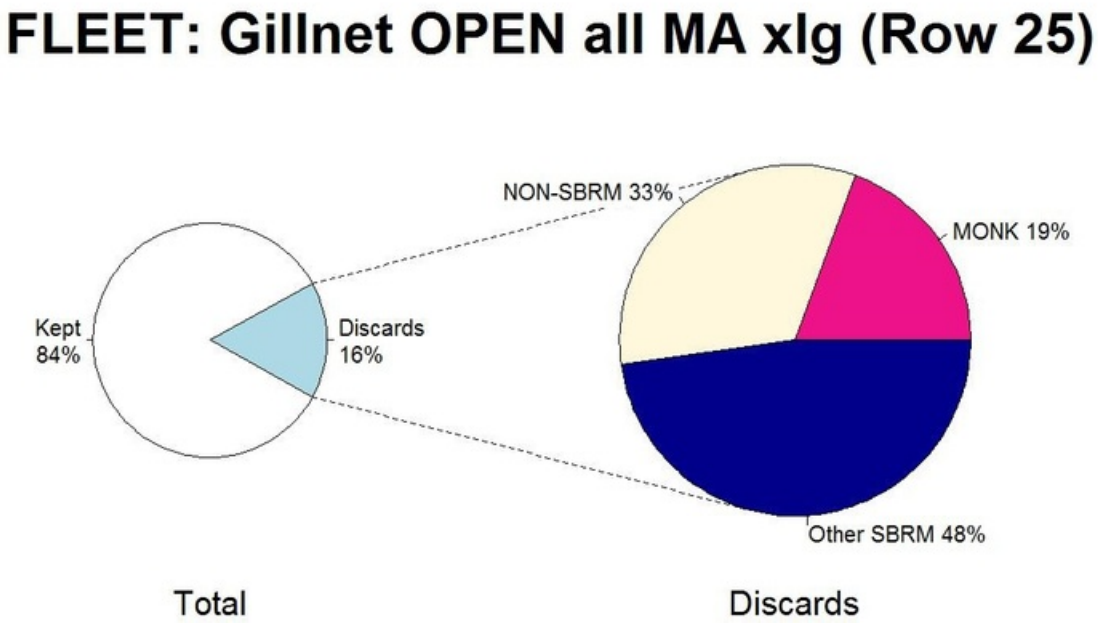
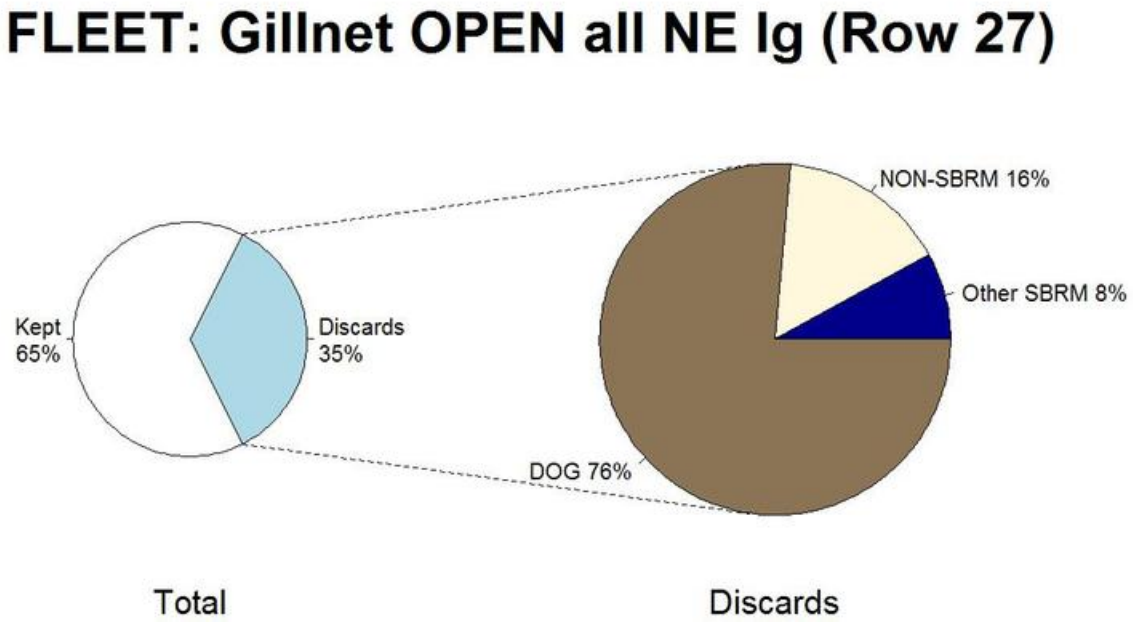


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 24 selected fleets, based on July 2013 through June 2014 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; see text and Appendix Table 4 for fleet abbreviations. Standardized Bycatch Reporting Methodology (SBRM) species groups that were filtered out through the importance filter have been aggregated and labeled "Other SBRM;" non-SBRM species have been grouped and labeled "Non-SBRM." ***Note: Selected fleets include Rows 2, 4-8, 11, 18, 23-25, 27, 28, 30, 32-38, 41, 48, and 56; these represent fleets where discards were estimated in 2015 (Table 5A).***





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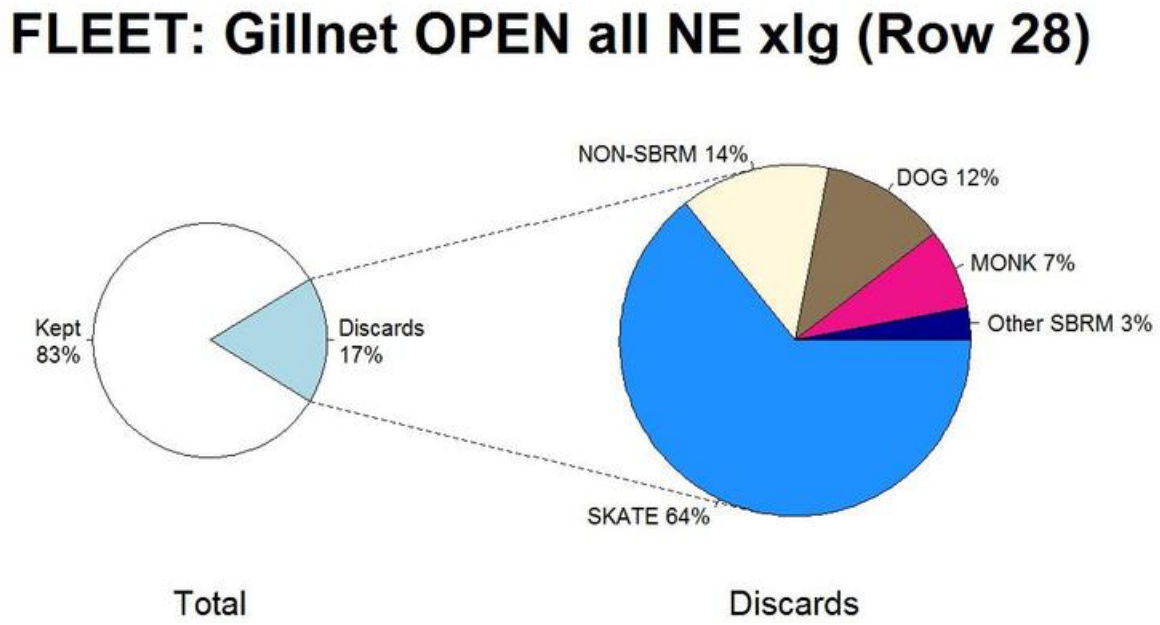

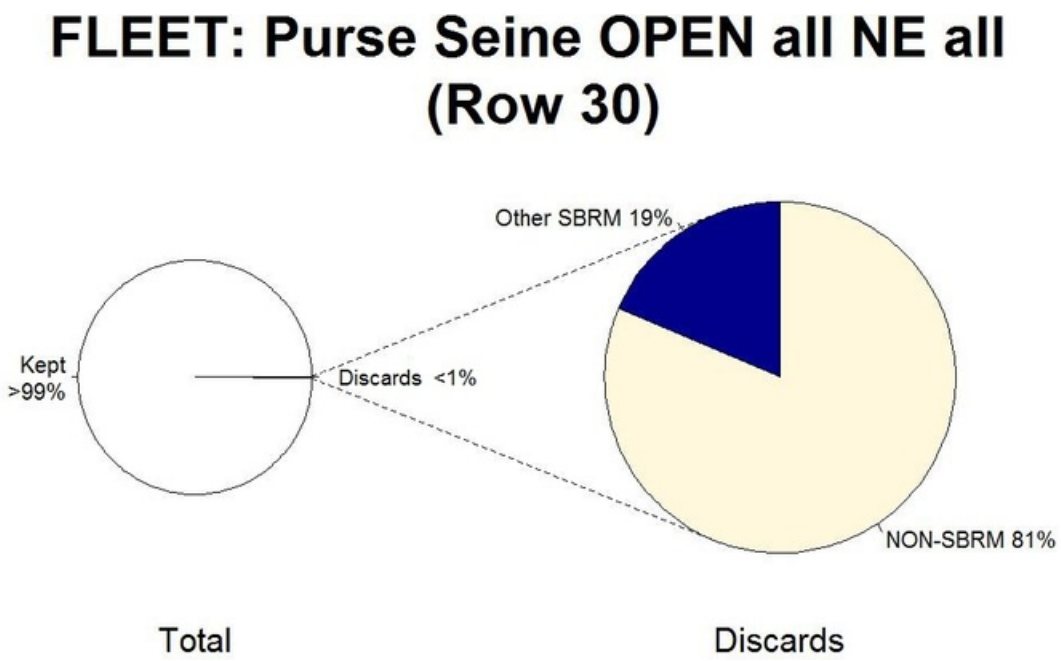

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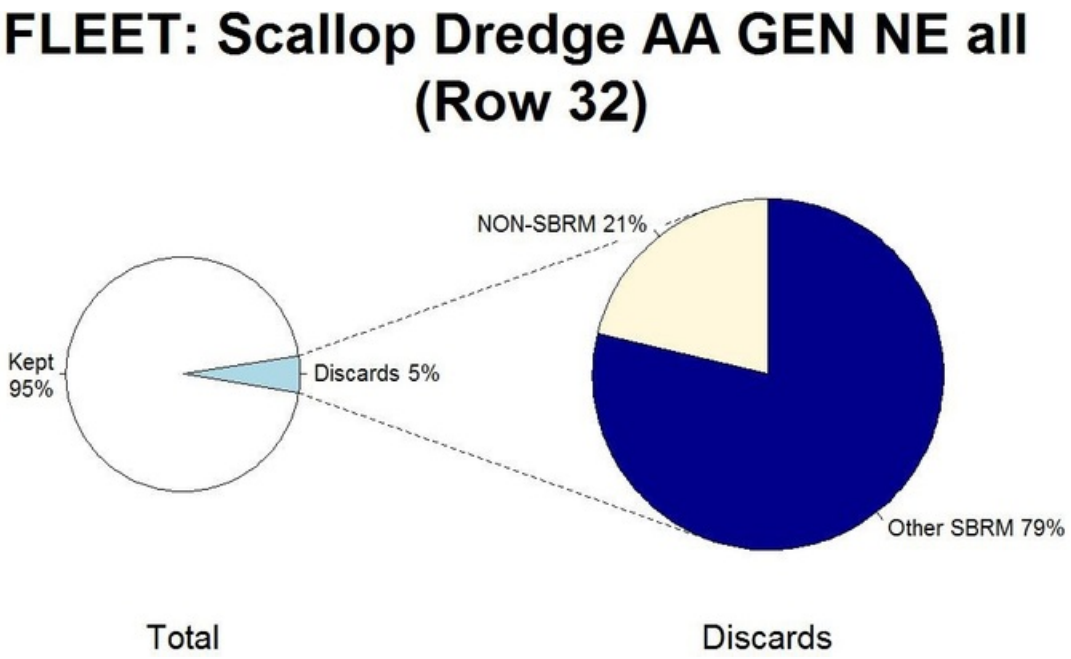

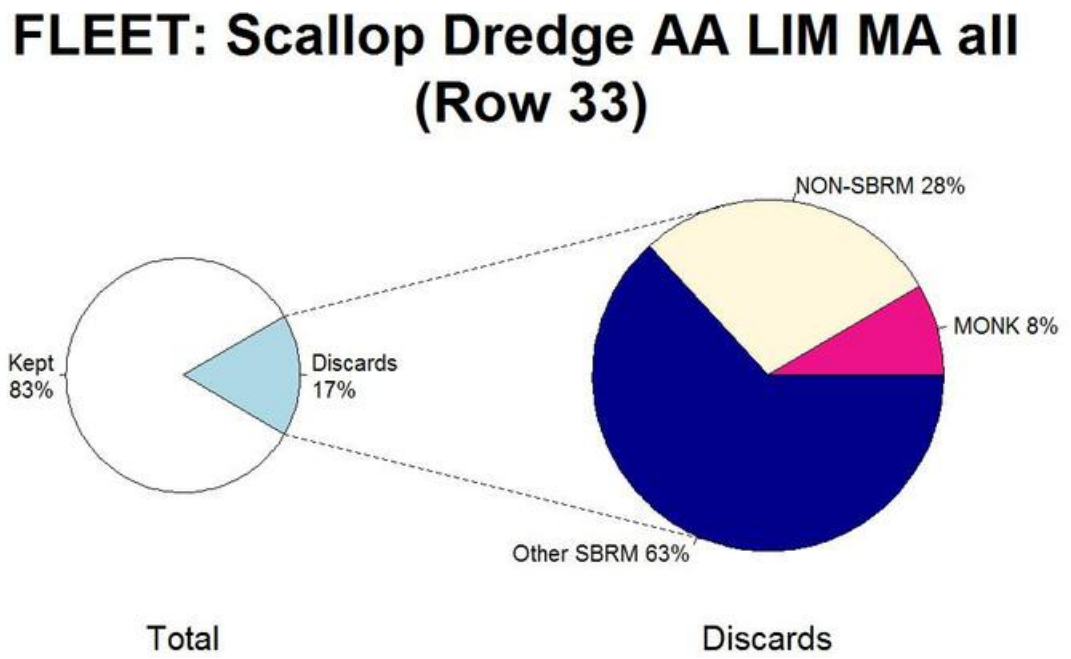

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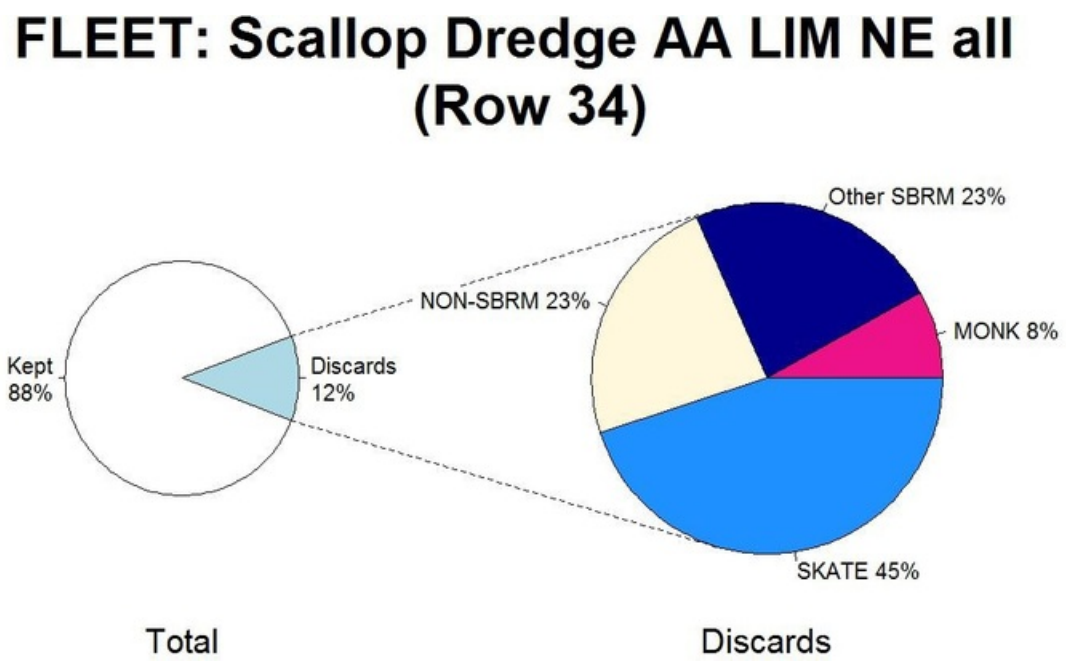

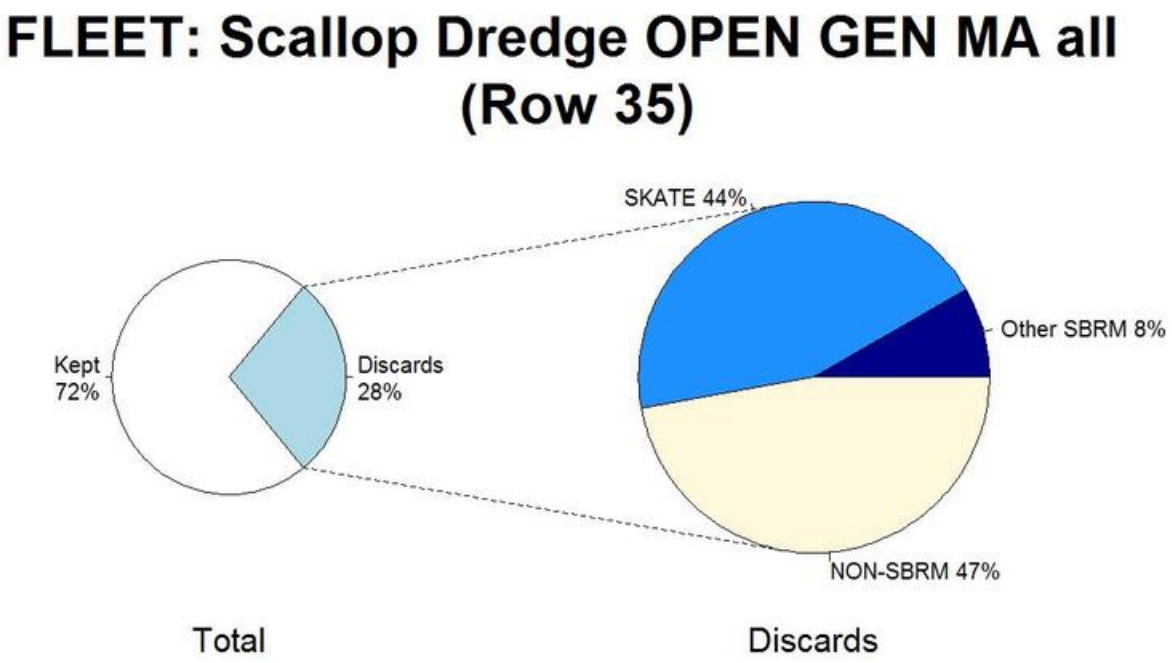

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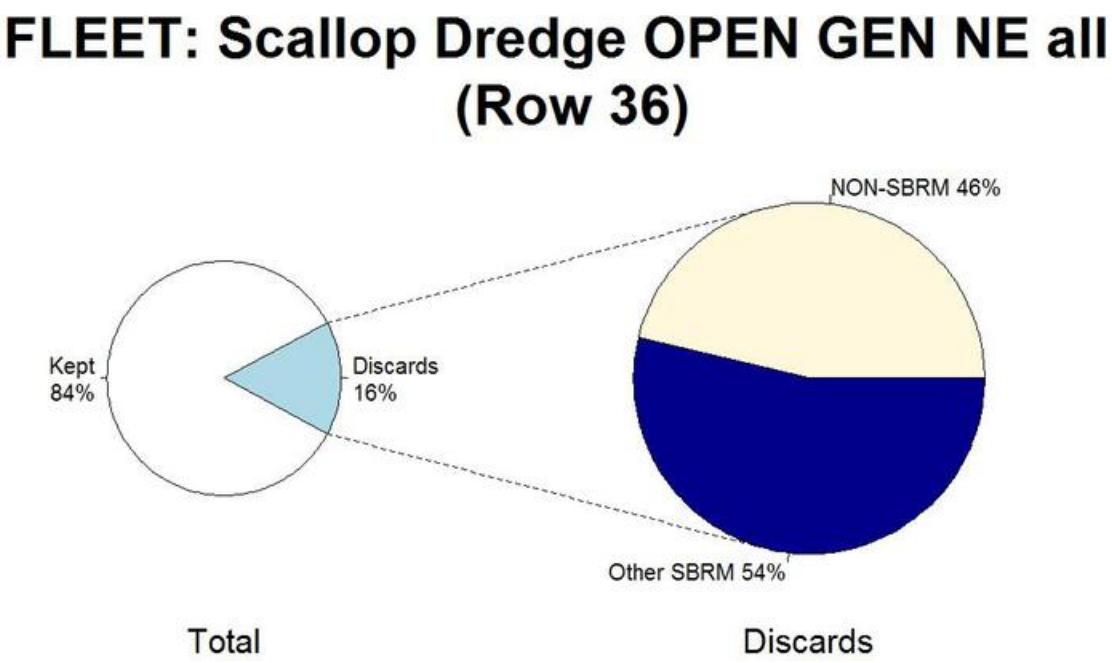

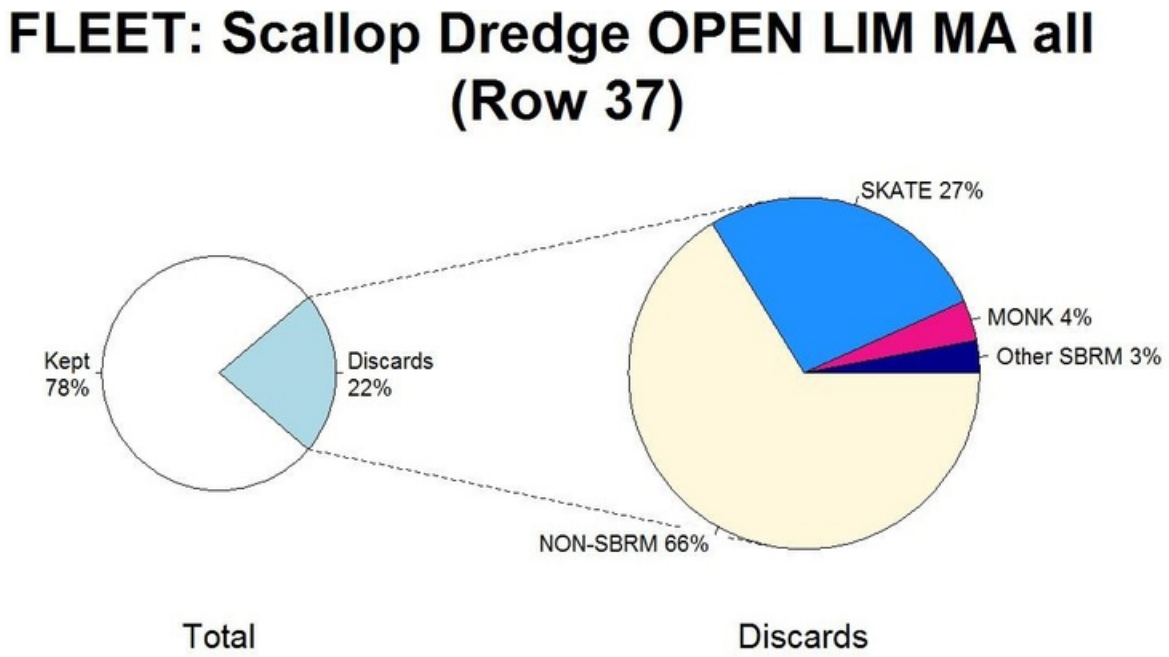

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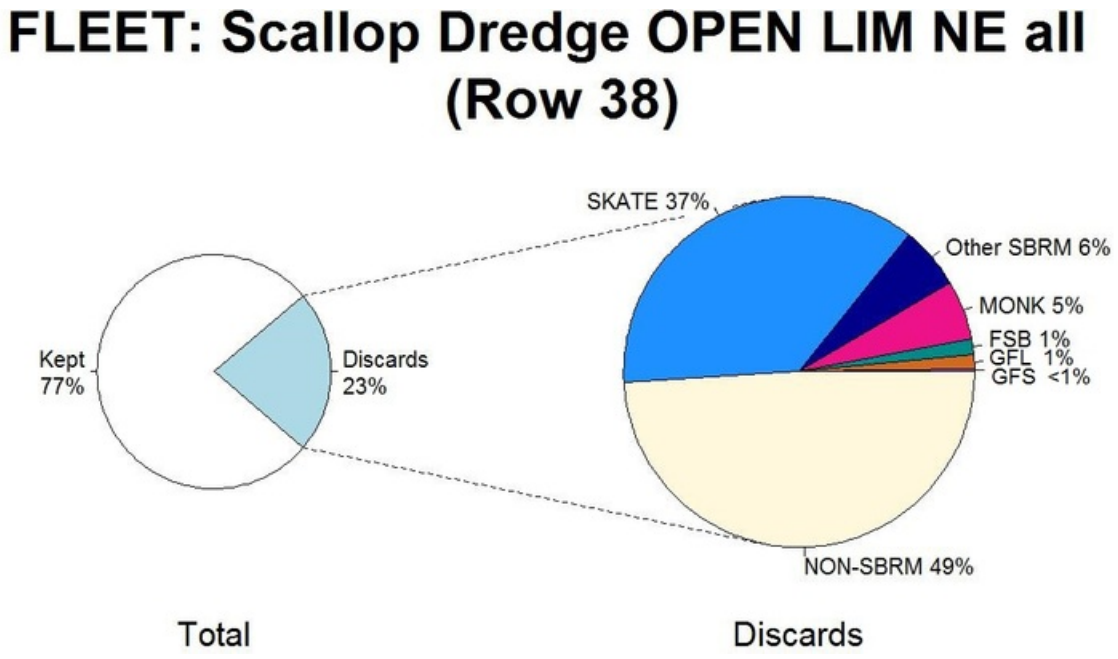

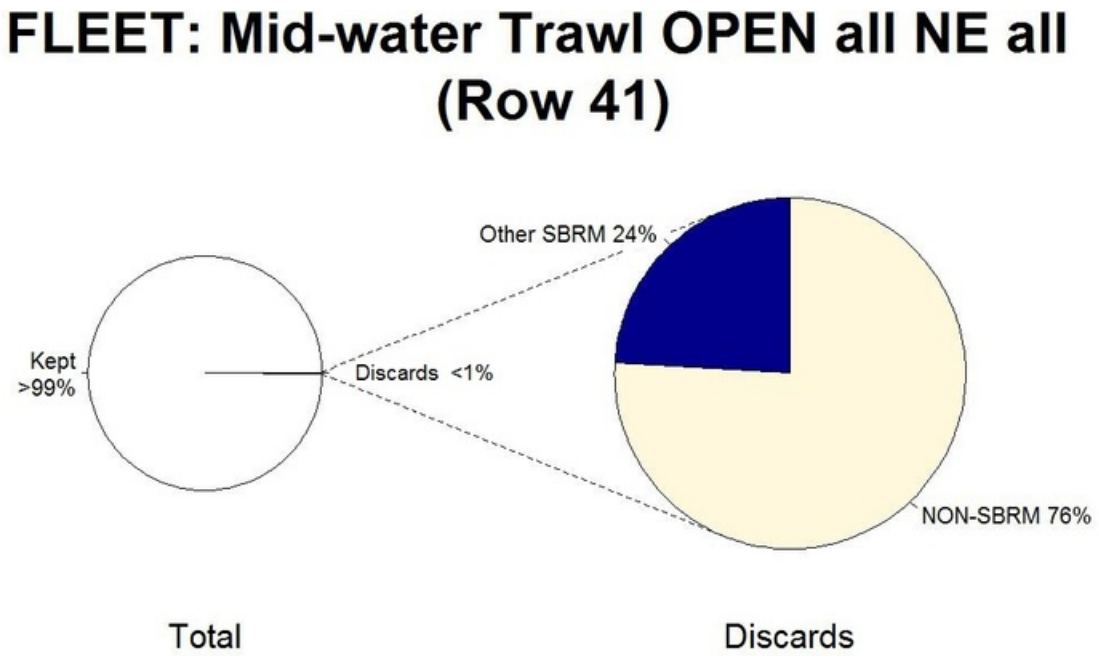

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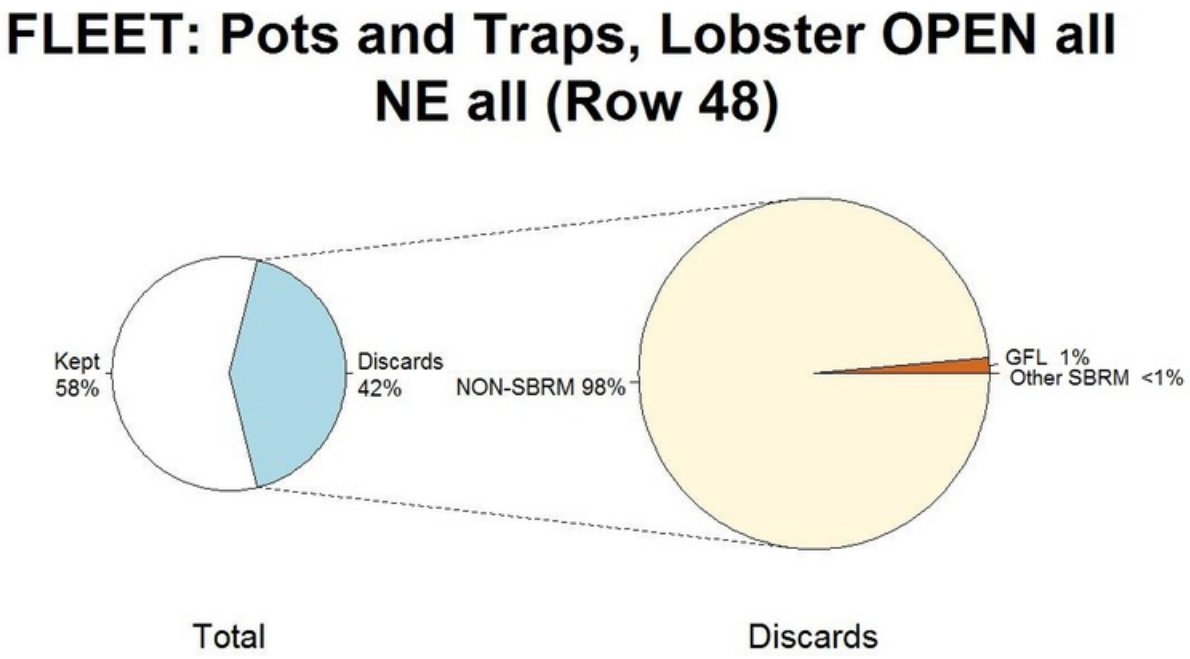

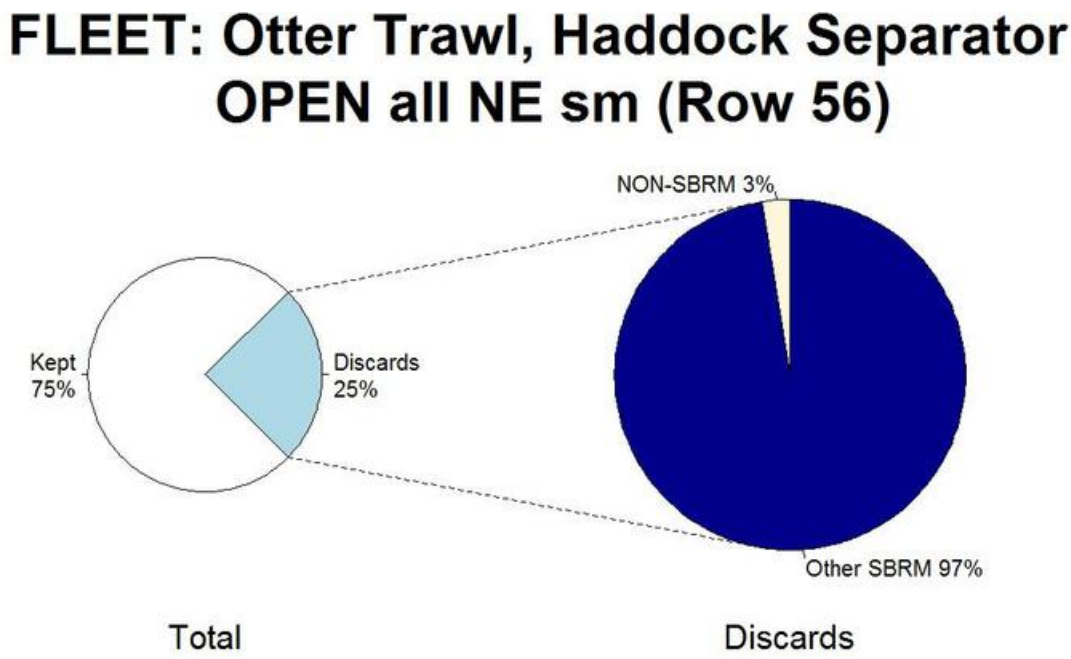

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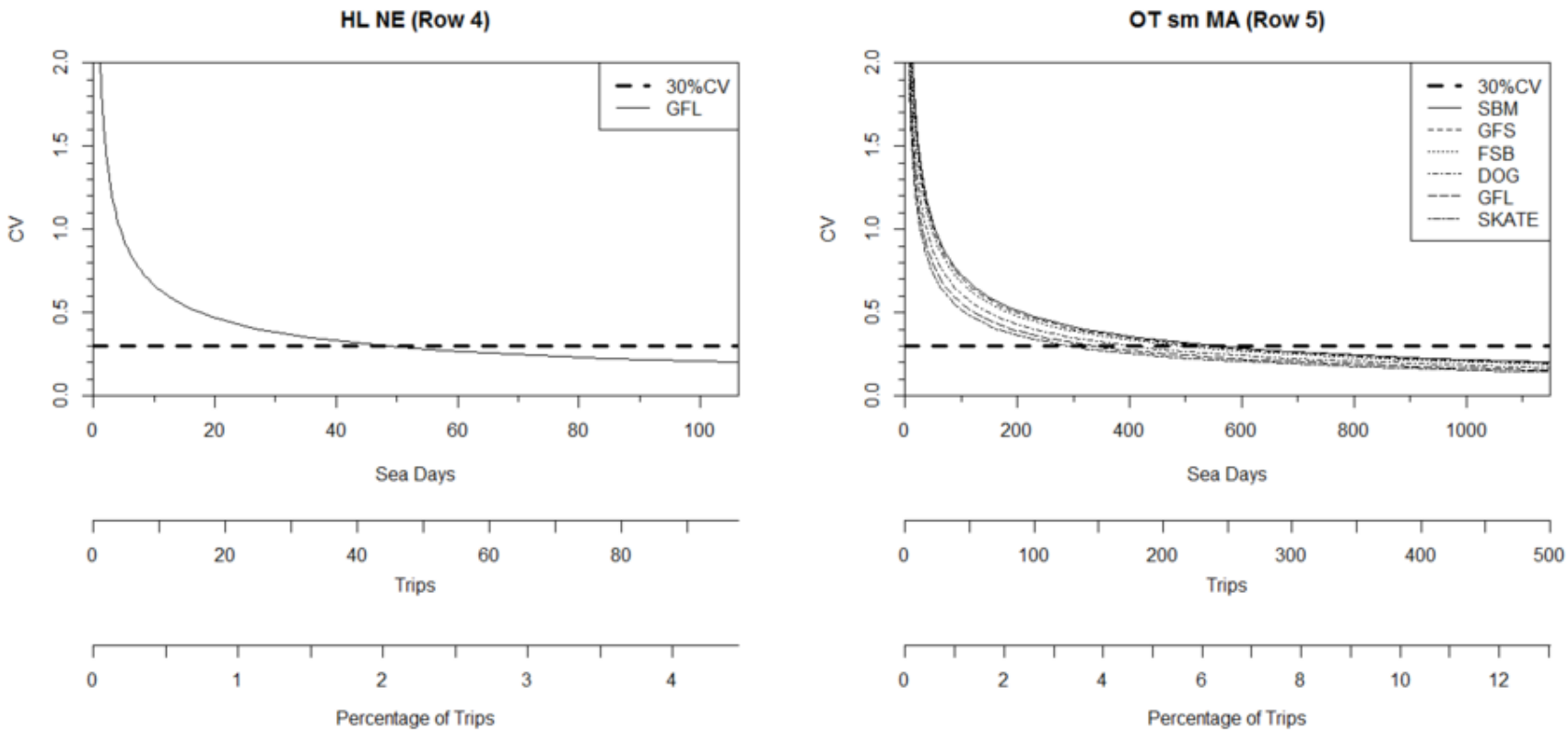
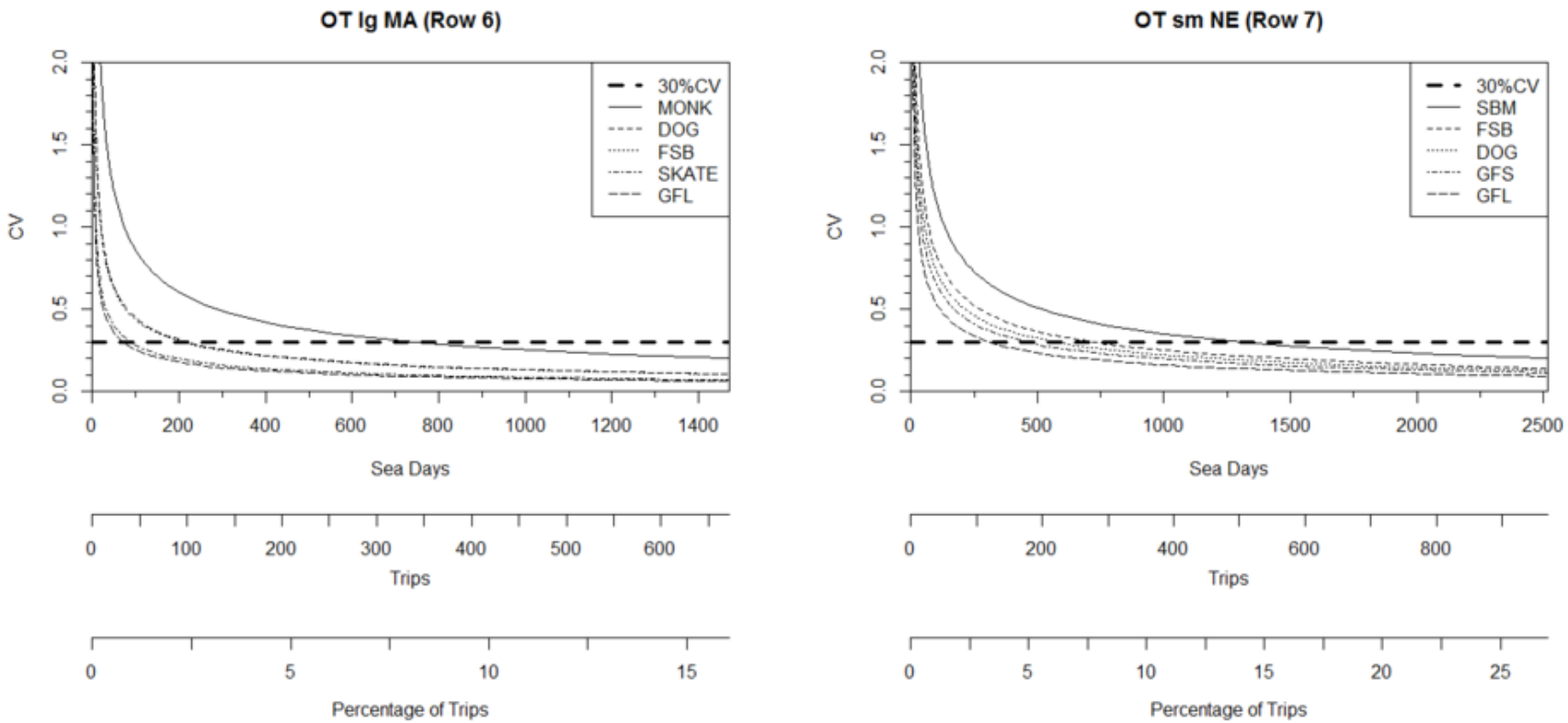


Figure 3. Results from the 2015 sample size analysis conducted for selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that was not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 4, respectively.



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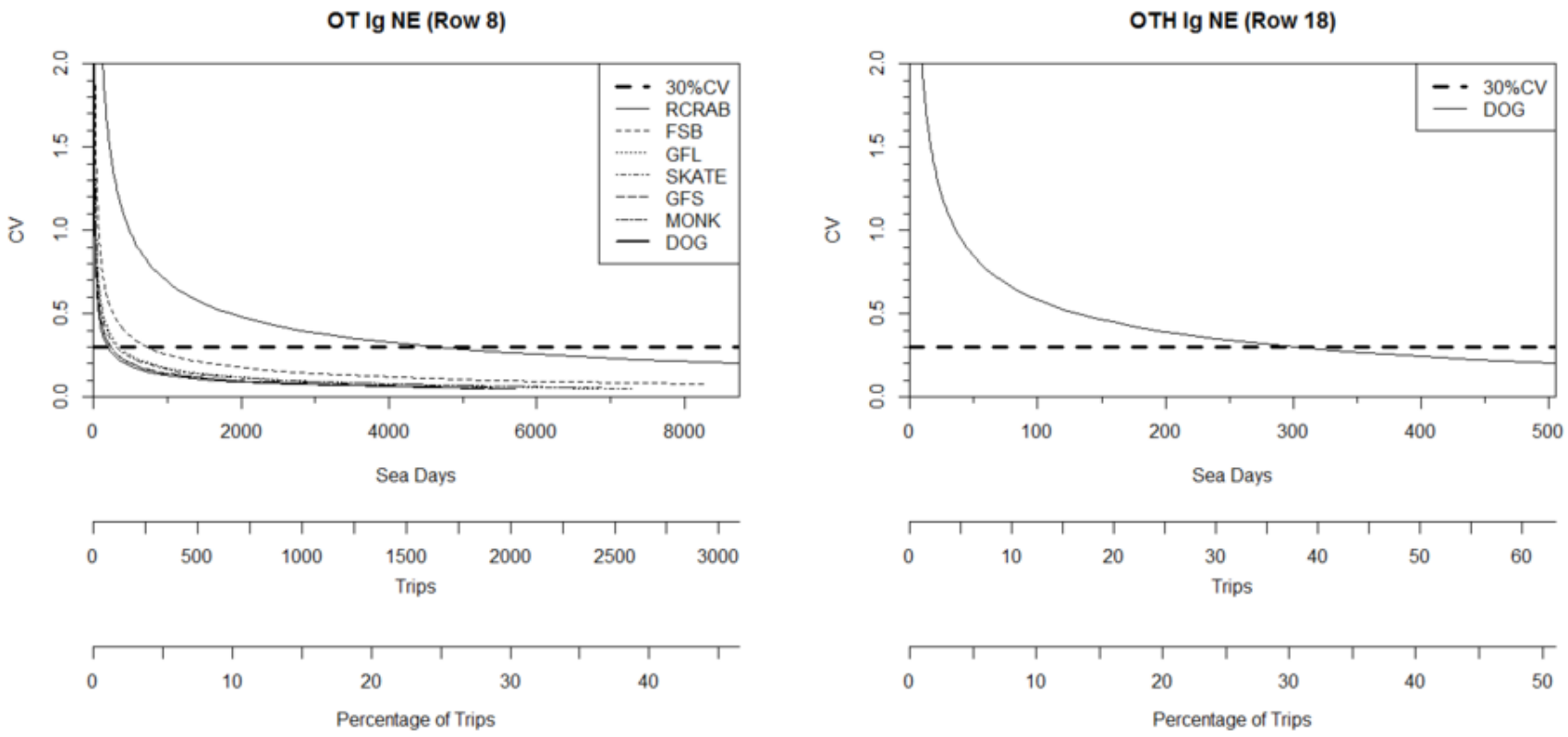

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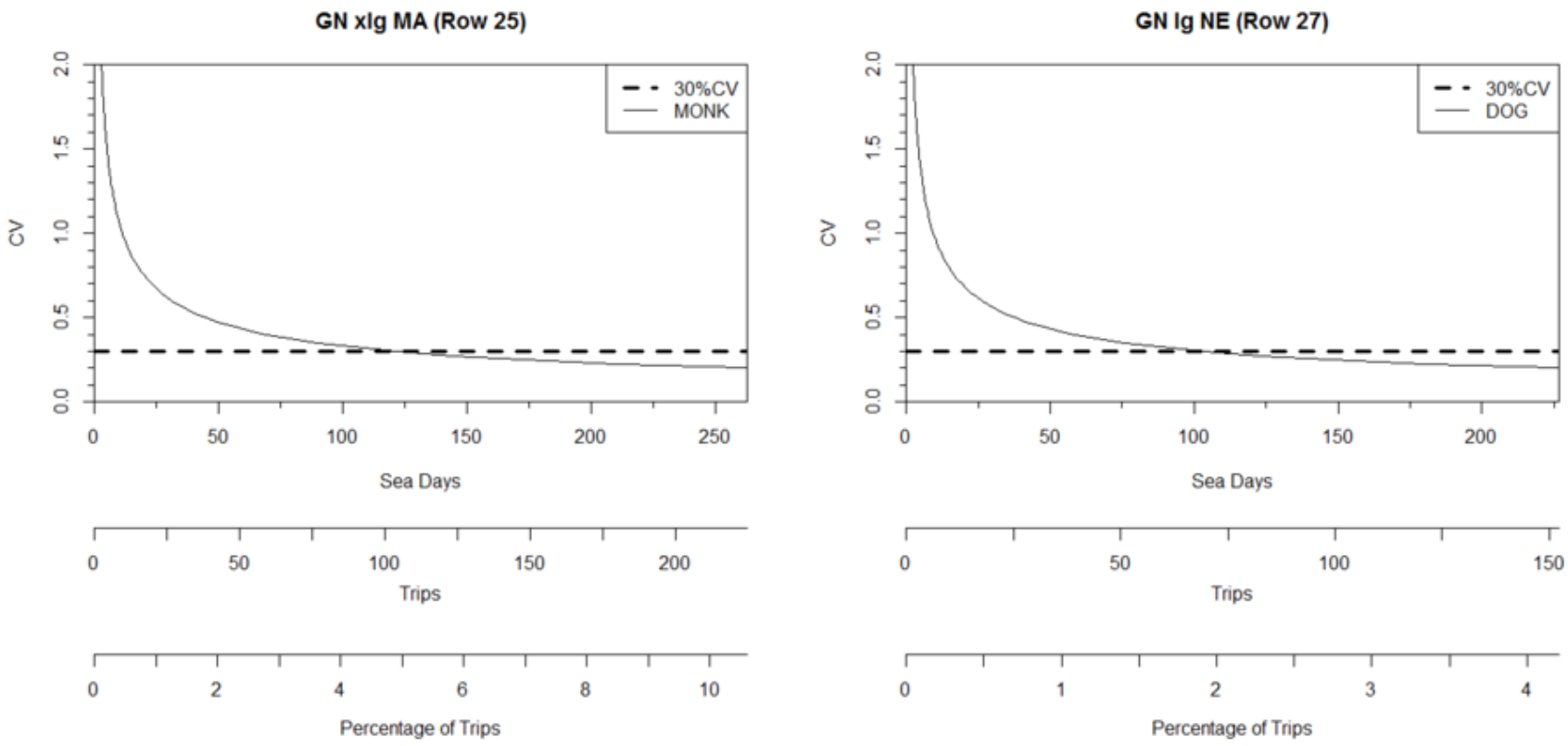

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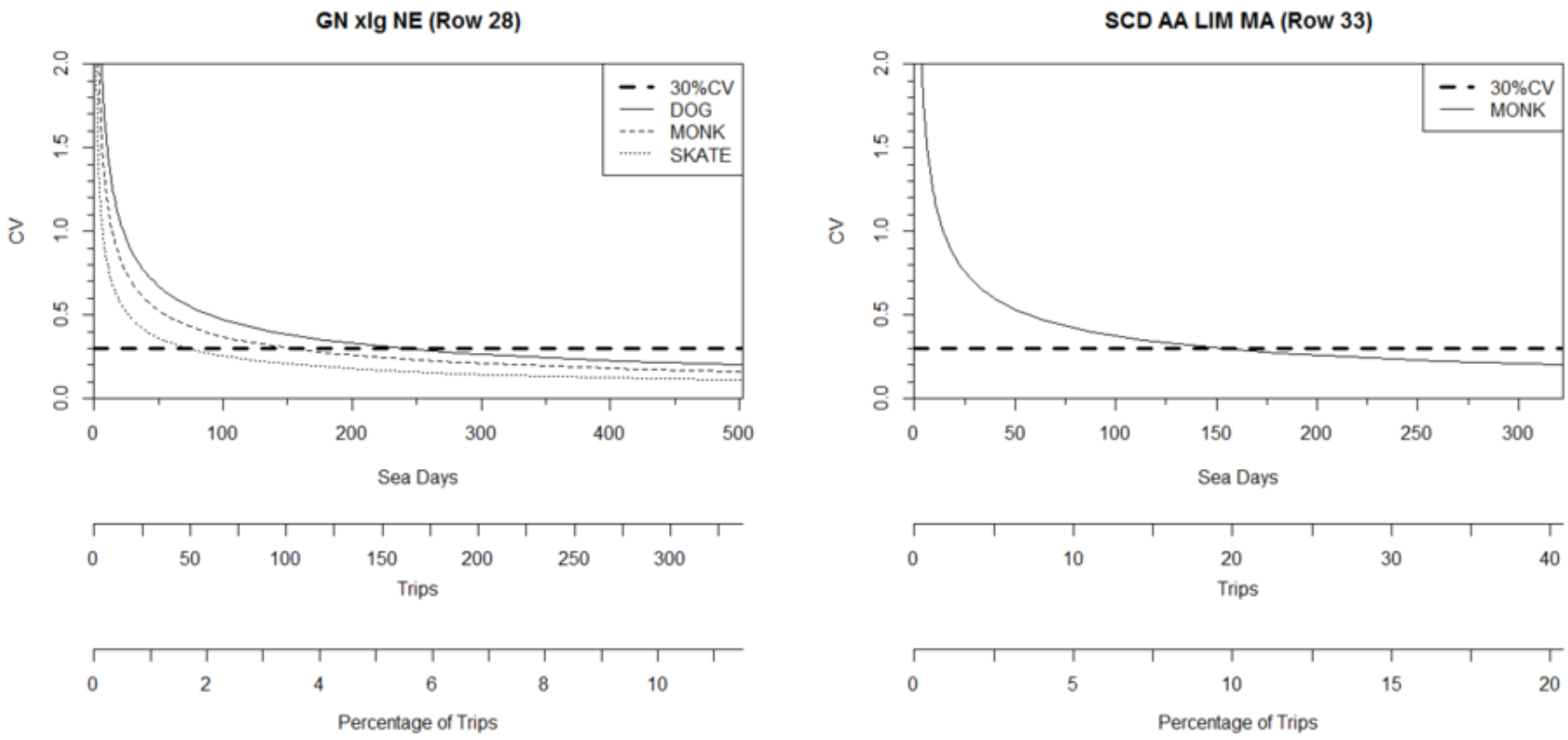

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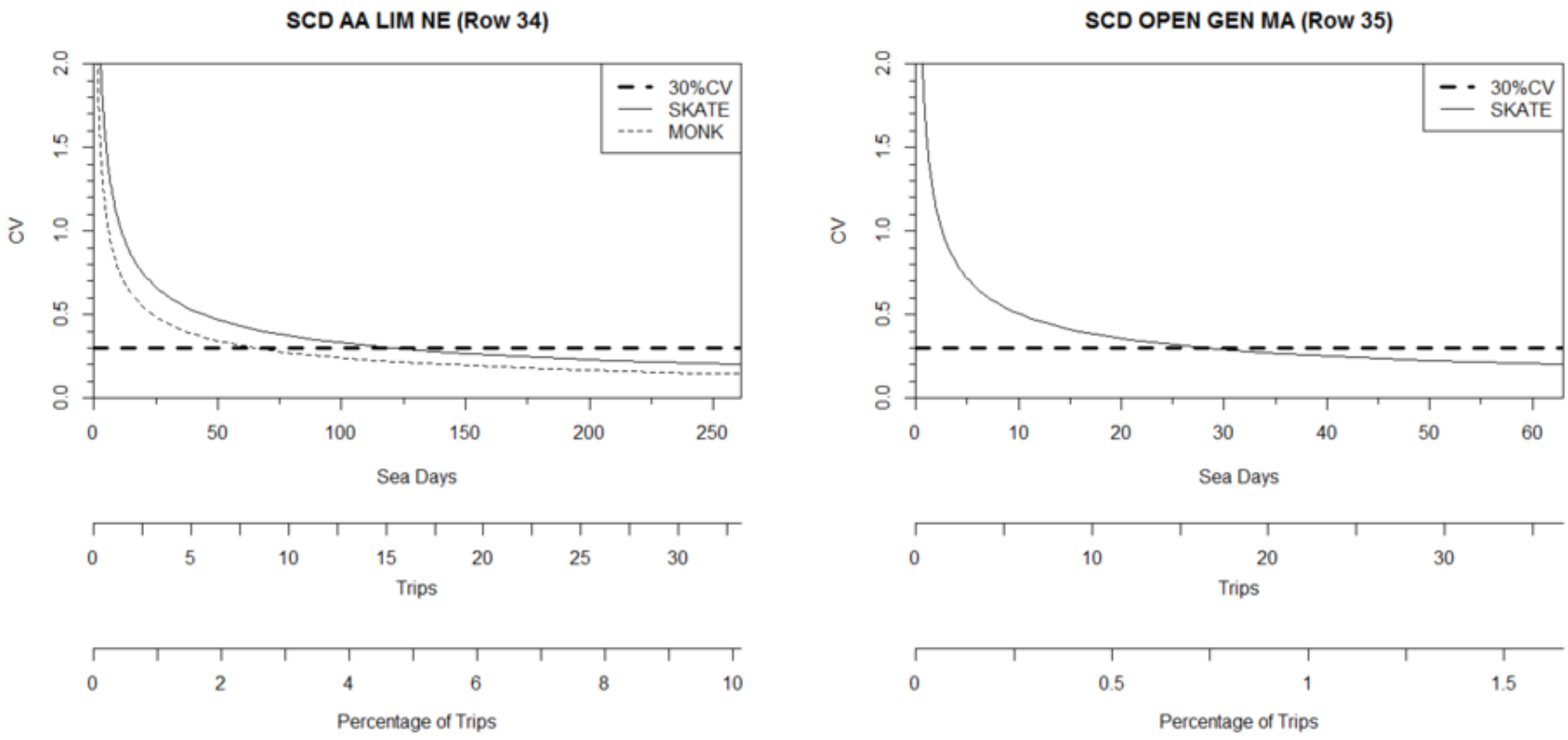

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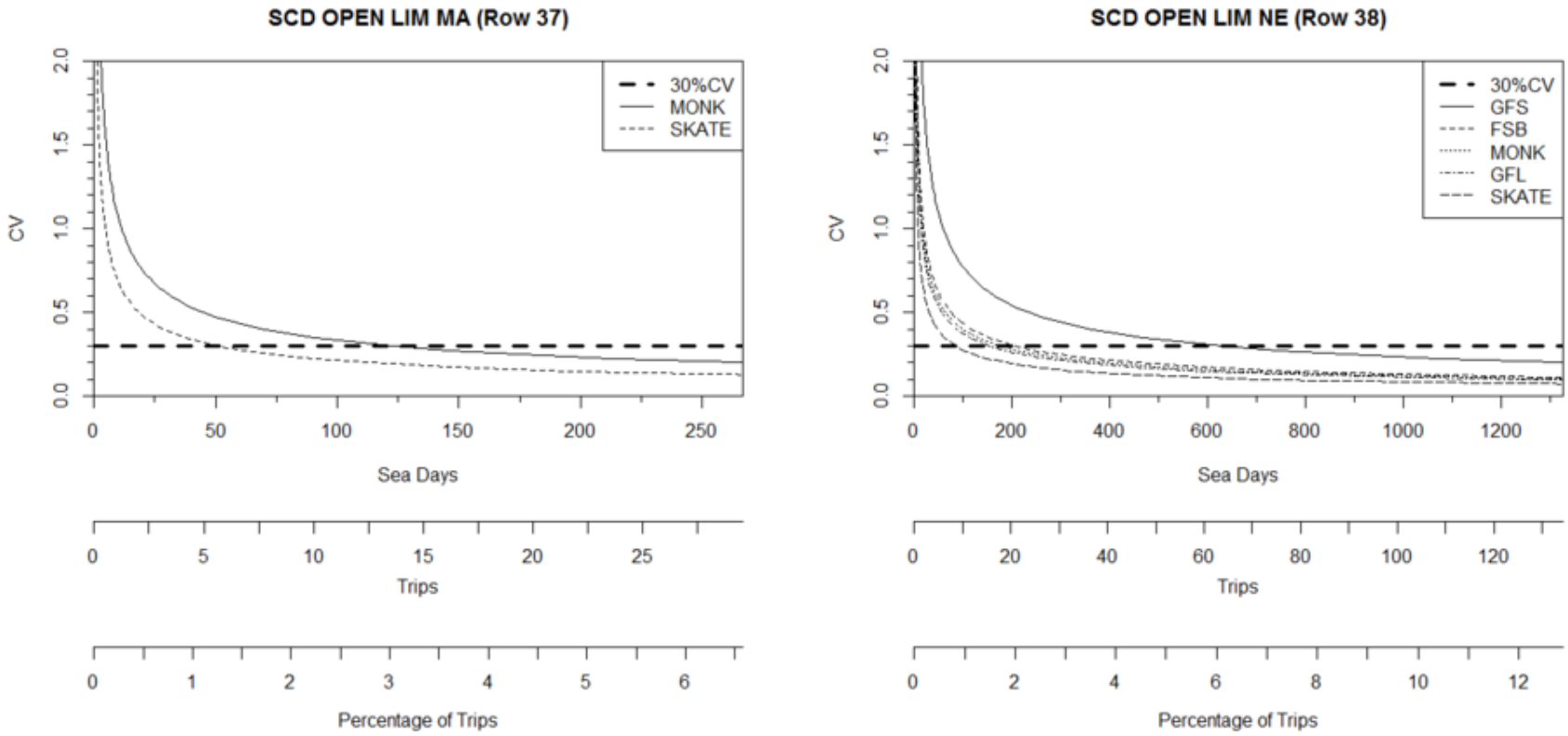

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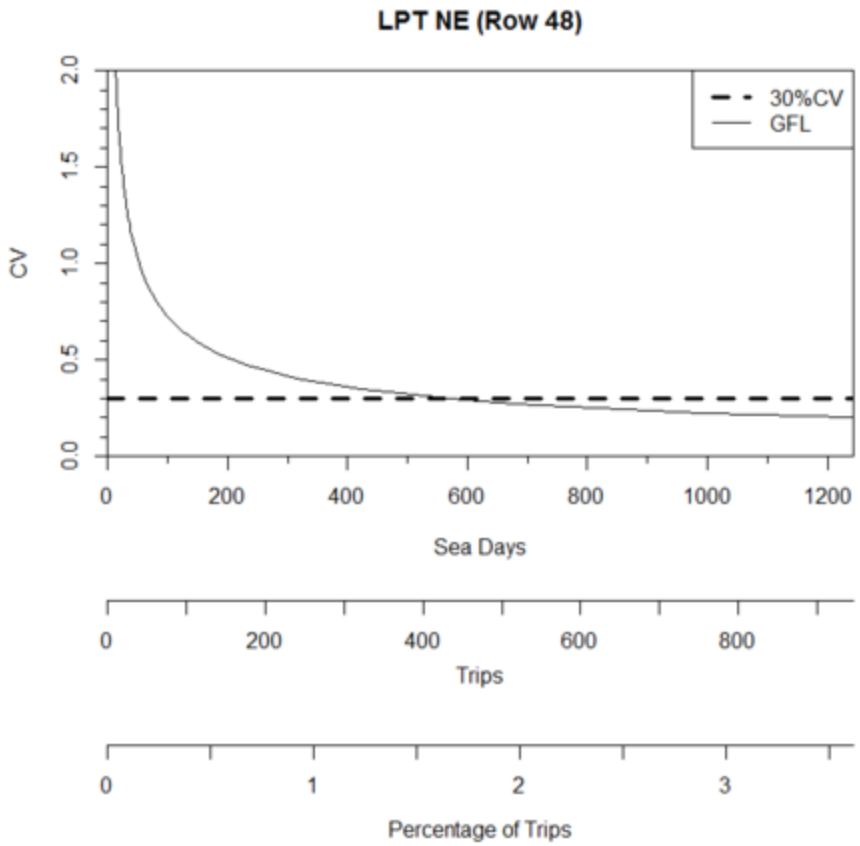

Figure 3, continued. Results from the 2015 sample size analysis conducted for selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips, and percent of trips) for each of the species groups that was not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Table 1 and Appendix Table 4, respectively.

Appendix Table 1. The number of fleets used in analyses and reported in the tables of this report.

```
56 fleets uniquely identified in Tables 2 & 3

   20 fleets with no observer coverage
       discard estimation not conducted
       pilot fleet designation for sample size analysis

         5 confidential fleets (Rows 9, 10, 15, 21, and 52)
            aggregated into “Confidential fleets” in Tables 4 & 5
        15 nonconfidential fleets

    12 fleets with sparse observer coverage
       discard estimation conducted
       pilot fleet designation for sample size analysis

         1 confidential fleet  (Row 14)
            aggregated into with “Other minor fleets”  in Tables 4 & 5.
            (This fleet is the only confidential fleets with some
            observer data, therefore this fleet cannot be aggregated into
            “Confidential fleets” [confidential information would be
            exposed])

         11 nonconfidential fleets

   24 fleets with sufficient observer coverage
       discard estimation conducted
       variance of discard used for sample size analysis
       nonpilot fleets

         0 confidential fleet
            aggregated into “Confidential fleets” in Tables 4 & 5
        24 nonconfidential fleets
```

```
Other minor fleets
     not uniquely identified
     includes 1 confidential fleet with sparse observer coverage
     aggregated into “Other minor fleets”  in Tables 4 & 5
```

Appendix Table 2. Discard reason categories used in Appendix Tables 3A and 3B and the associated discard fish dispositions.

Discard Reason Category	FISH DISPOSITIION Code	FISH DISPOSITIION 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
	008	NO MARKET, BROUGHT ONBOARD ONLY FOR THE PURPOSE OF OBSERVER SAMPLING
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
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, SHELL DISEASE
	038	POOR QUALITY, GEAR DAMAGE
Other	000	DISCARDED, UNKNOWN REASON
	040	NOT BROUGHT ON BOARD, OPERATIONAL DISCARDS
	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
	045	NOT BROUGHT ON BOARD, SAFETY REASON
	046	NOT BROUGHT ON BOARD, MECHANICAL FAILURE
	047	NOT BROUGHT ON BOARD, SPINY DOG CLOGGING PUMP
	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
	070	NOT BROUGHT ON BOARD, QUALITY OF FISH
	071	NOT BROUGHT ON BOARD, CLOGGED PUMP OTHER
	099	DISCARDED, OTHER

Note: Fish disposition code '039' = POOR QUALITY, PREVIOUSLY DISCARDED has been excluded from this report.

Appendix Table 3A. Estimated discards (live lb) and percentage by discard reason category for 14 species groups, based on July 2013 through June 2014 data.

Species Group: ATLANTIC SALMON (Salmo salar)

Fleet							Percentage by Discard 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
	35 Other fleets filtered out					33	0.0	0.0	100.0	0.0	0.0	0.0	100.0
					Total	33	0.0	0.0	100.0	0.0	0.0	0.0	100.0

Species Group: BLUEFISH (Pomatomus saltatrix)

Fleet							Percentage by Discard 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
	35 Other fleets filtered out					42,651	44.3	6.2	2.5	0.2	35.5	11.3	100.0
					Total	42,651	44.3	6.2	2.5	0.2	35.5	11.3	100.0

Species Group: FLUKE (Paralichthys dentatus) - SCUP (Stenotomus chrysops) - BLACK SEA BASS (Centropristis striata)

Fleet							Percentage by Discard 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	1,221,866	10.3	60.1	20.7	1.4	0.3	7.2	100.0
6	Otter Trawl	OPEN	all	MA	lg	748,419	4.6	48.7	40.6	0.2	1.2	4.7	100.0
7	Otter Trawl	OPEN	all	NE	sm	552,711	9.6	36.1	42.5	0.0	1.4	10.3	100.0
8	Otter Trawl	OPEN	all	NE	lg	1,065,120	6.5	6.9	79.9	1.1	0.1	5.5	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	681,158	65.2	0.0	33.6	1.2	0.0	0.0	100.0
	30 Other fleets filtered out					668,887	41.4	14.0	32.7	0.1	3.5	8.3	100.0
					Total	4,938,161	20.3	29.7	42.3	0.8	0.9	6.0	100.0

See text for fleet abbreviations.

Appendix Table 3A, continued. Estimated discards (live lb) and percentage by discard reason category for 14 species groups, based on July 2013 through June 2014 data.

Species Group: HERRING, ATLANTIC (Clupea harengus)

Fleet							Percentage by Discard 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
	35 Other fleets filtered out					161,166	40.8	0.0	53.2	0.0	5.2	0.8	100.0
					Total	161,166	40.8	0.0	53.2	0.0	5.2	0.8	100.0

Species Group: LARGE MESH GROUNDFISH

Fleet							Percentage by Discard 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
4	Hand Line	OPEN	all	NE	all	226,376	0.0	100.0	0.0	0.0	0.0	0.0	100.0
5	Otter Trawl	OPEN	all	MA	sm	437,758	22.8	5.0	71.6	0.6	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	457,016	37.9	3.9	57.3	0.2	0.0	0.7	100.0
7	Otter Trawl	OPEN	all	NE	sm	343,984	3.1	7.2	89.7	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	2,954,983	23.0	57.3	18.6	0.0	0.6	0.5	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	674,632	74.9	1.6	21.0	2.5	0.0	0.0	100.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	301,425	58.4	0.0	41.6	0.0	0.0	0.0	100.0
	28 Other fleets filtered out					1,093,975	33.4	34.2	18.2	0.1	14.0	0.1	100.0
					Total	6,490,149	31.0	36.5	29.3	0.3	2.6	0.3	100.0

See text for fleet abbreviations.

Appendix Table 3A, continued. Estimated discards (live lb) and percentage by discard reason category for 14 species groups, based on July 2013 through June 2014 data.

Species Group: MONKFISH (Lophius americanus)

Fleet							Percentage by Discard 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	lg	233,350	13.4	43.7	38.7	0.0	0.0	4.1	100.0
8	Otter Trawl	OPEN	all	NE	lg	922,250	4.6	95.1	0.3	0.0	0.1	0.0	100.0
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	256,066	0.0	3.2	6.4	0.0	90.4	0.0	100.0
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	236,520	1.3	0.9	0.1	0.0	95.4	2.4	100.0
33	Scallop Dredge	AA	LIM	MA	all	266,789	63.8	15.6	20.6	0.0	0.0	0.0	100.0
34	Scallop Dredge	AA	LIM	NE	all	338,137	74.5	23.3	1.9	0.0	0.4	0.0	100.0
37	Scallop Dredge	OPEN	LIM	MA	all	590,872	73.1	26.2	0.1	0.0	0.7	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	2,640,687	79.2	16.2	2.7	0.0	0.5	1.3	100.0
	27 Other fleets filtered out					304,138	39.7	35.7	19.6	2.5	2.0	0.5	100.0
					Total	5,788,810	54.3	31.1	5.2	0.1	8.3	0.9	100.0

Species Group: RED DEEPSEA CRAB (Chaceon quinquedens)

Fleet							Percentage by Discard 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	81,977	100.0	0.0	0.0	0.0	0.0	0.0	100.0
	34 Other fleets filtered out					19,501	71.4	0.0	28.6	0.0	0.0	0.0	100.0
					Total	101,478	94.5	0.0	5.5	0.0	0.0	0.0	100.0

Species Group: SEA SCALLOP (Placopecten magellanicus)

Fleet							Percentage by Discard 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
	35 Other fleets filtered out					5,239,579	77.8	0.0	7.2	0.2	12.3	2.5	100.0
					Total	5,239,579	77.8	0.0	7.2	0.2	12.3	2.5	100.0

See text for fleet abbreviations.

Appendix Table 3A, continued. Estimated discards (live lb) and percentage by discard reason category for 14 species groups, based on July 2013 through June 2014 data.

*Species Group: SKATE COMPLEX (*Rajidae*)*

Fleet							Percentage by Discard 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	6,478,280	91.4	0.0	7.7	0.3	0.0	0.5	100.0
6	Otter Trawl	OPEN	all	MA	lg	16,601,168	93.2	0.3	4.2	0.0	0.0	2.4	100.0
8	Otter Trawl	OPEN	all	NE	lg	34,975,028	90.0	0.1	9.6	0.0	0.0	0.3	100.0
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	2,064,308	44.3	0.6	38.8	0.0	14.5	1.8	100.0
34	Scallop Dredge	AA	LIM	NE	all	1,880,014	97.6	0.0	2.4	0.0	0.0	0.0	100.0
35	Scallop Dredge	OPEN	GEN	MA	all	1,723,487	80.7	0.0	19.3	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	MA	all	4,353,141	97.4	0.0	2.6	0.0	0.0	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	17,901,678	97.4	0.0	2.6	0.0	0.0	0.0	100.0
	27 Other fleets filtered out					4,433,493	87.1	0.0	12.6	0.0	0.3	0.0	100.0
					Total	90,410,596	91.3	0.1	7.6	0.0	0.3	0.6	100.0

Species Group: SMALL MESH GROUNDFISH

Fleet							Percentage by Discard 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	897,963	95.4	0.2	0.0	0.0	1.8	2.6	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,568,100	71.3	4.9	14.1	0.0	5.3	4.4	100.0
8	Otter Trawl	OPEN	all	NE	lg	742,872	95.1	2.2	0.4	2.0	0.3	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	107,224	94.4	0.0	5.6	0.0	0.0	0.0	100.0
	31 Other fleets filtered out					271,896	92.6	0.2	3.8	0.0	3.3	0.0	100.0
					Total	3,588,055	84.6	2.6	6.7	0.4	3.1	2.6	100.0

See text for fleet abbreviations.

Appendix Table 3A, continued. Estimated discards (live lb) and percentage by discard reason category for 14 species groups, based on July 2013 through June 2014 data.

Species Group: SPINY DOGFISH (Squalus acanthias)

Fleet							Percentage by Discard 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	3,710,470	85.5	0.0	0.1	0.5	0.0	13.8	100.0
6	Otter Trawl	OPEN	all	MA	lg	4,900,440	99.5	0.0	0.5	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	838,472	99.2	0.6	0.2	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	7,159,486	98.1	0.0	1.5	0.0	0.3	0.1	100.0
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	308,898	100.0	0.0	0.0	0.0	0.0	0.0	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,323,179	88.9	0.0	8.9	0.0	1.8	0.4	100.0
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	369,943	75.0	0.0	2.4	0.0	17.2	5.3	100.0
	28 Other fleets filtered out					1,039,064	88.7	0.1	8.6	0.0	0.4	2.1	100.0
					Total	21,649,953	94.1	0.0	2.5	0.1	0.7	2.7	100.0

Species Group: SQUID (Doryteuthis [Amerigo] pealeii, Illex illecebrosus)- BUTTERFISH (Peprilus triacanthus) - MACKEREL (Scomber scombrus)

Fleet							Percentage by Discard 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	2,729,625	84.9	13.9	0.1	0.0	1.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,517,028	77.3	8.4	2.6	0.0	1.7	10.1	100.0
	33 Other fleets filtered out					164,327	92.3	2.6	4.2	0.3	0.6	0.0	100.0
					Total	4,410,980	82.6	11.6	1.1	0.0	1.2	3.5	100.0

Species Group: SURFCLAM (Spisula solidissima) - OCEAN QUAHOG (Artica islandica)

Fleet							Percentage by Discard 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
	35 Other fleets filtered out					23,214	94.4	0.0	5.6	0.0	0.0	0.0	100.0
					Total	23,214	94.4	0.0	5.6	0.0	0.0	0.0	100.0

See text for fleet abbreviations.

Appendix Table 3A, continued. Estimated discards (live lb) and percentage by discard reason category for 14 species groups, based on July 2013 through June 2014 data.

Species Group: TILEFISH (Lopholatilus chamaeleonticeps)

Fleet						Percentage by Discard 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
35 Other fleets filtered out						4,078	51.6	8.5	15.7	0.0	24.2	0.0	100.0
					Total	4,078	51.6	8.5	15.7	0.0	24.2	0.0	100.0

See text for fleet abbreviations.

Appendix Table 3B. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: BLACK SEA BASS (Centropristis striata)

Fleet							Percentage by Discard 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	363,041	4.5	55.0	22.4	2.2	0.0	15.8	100.0
6	Otter Trawl	OPEN	all	MA	lg	195,427	0.2	61.7	37.1	0.8	0.0	0.1	100.0
7	Otter Trawl	OPEN	all	NE	sm	238,710	1.2	18.7	66.5	0.0	0.0	13.7	100.0
	32 Other fleets filtered out					238,340	29.6	17.2	30.5	0.3	0.0	22.3	100.0
					Total	1,035,518	8.7	39.2	37.2	1.0	0.0	13.9	100.0

Species: FLUKE (Paralichthys dentatus)

Fleet							Percentage by Discard 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	246,957	1.3	21.9	65.4	1.7	0.6	9.1	100.0
6	Otter Trawl	OPEN	all	MA	lg	417,711	2.0	37.2	50.5	0.0	1.9	8.5	100.0
8	Otter Trawl	OPEN	all	NE	lg	1,007,579	4.5	2.8	85.6	1.1	0.1	5.9	100.0
37	Scallop Dredge	OPEN	LIM	MA	all	160,469	63.3	2.8	33.8	0.0	0.1	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	660,475	64.6	0.0	34.2	1.2	0.0	0.0	100.0
	30 Other fleets filtered out					340,763	33.3	9.6	47.4	0.2	7.7	1.8	100.0
					Total	2,833,953	24.6	9.7	59.2	0.8	1.3	4.4	100.0

Species: SCUP (Stenotomus chrysops)

Fleet							Percentage by Discard 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	611,868	17.1	77.7	2.7	0.9	0.4	1.3	100.0
7	Otter Trawl	OPEN	all	NE	sm	219,855	19.6	62.4	8.3	0.0	0.4	9.3	100.0
	33 Other fleets filtered out					236,967	24.8	63.6	8.6	0.0	2.9	0.0	100.0
					Total	1,068,690	19.3	71.4	5.1	0.5	0.9	2.7	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: AMERICAN PLAICE (Hippoglossoides platessoides)

Fleet							Percentage by Discard 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	200,291	1.8	96.4	0.0	0.0	1.8	0.0	100.0
	34 Other fleets filtered out					48,407	26.0	12.0	60.8	0.0	1.2	0.0	100.0
					Total	248,697	6.6	80.0	11.8	0.0	1.6	0.0	100.0

Species: ATLANTIC COD (Gadus morhua)

Fleet							Percentage by Discard 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
4	Hand Line	OPEN	all	NE	all	84,524	0.0	100.0	0.0	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	102,329	0.0	99.0	0.0	0.0	1.0	0.0	100.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	93,480	56.4	0.0	43.6	0.0	0.0	0.0	100.0
	32 Other fleets filtered out					96,965	6.0	57.9	11.9	0.2	23.6	0.4	100.0
					Total	377,299	15.5	64.1	13.9	0.0	6.3	0.1	100.0

Species: ATLANTIC HALIBUT (Hippoglossus hippoglossus)

Fleet							Percentage by Discard 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	67,996	0.5	74.6	22.8	0.3	0.1	1.6	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,507	0.0	83.7	13.4	0.2	1.5	1.1	100.0
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	10,852	4.0	75.2	0.0	0.0	16.9	3.9	100.0
	32 Other fleets filtered out					2,827	11.9	45.1	43.0	0.0	0.0	0.0	100.0
					Total	89,182	1.3	74.5	19.9	0.2	2.3	1.8	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: ATLANTIC WOLFFISH (Anarhichas lupus)

Fleet							Percentage by Discard 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	2,369	5.5	0.0	94.5	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	28,886	3.5	0.0	96.4	0.0	0.0	0.1	100.0
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	2,428	0.0	0.0	100.0	0.0	0.0	0.0	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,992	3.5	0.0	96.5	0.0	0.0	0.0	100.0
	31 Other fleets filtered out					1,071	48.2	0.0	51.8	0.0	0.0	0.0	100.0
					Total	38,746	4.6	0.0	95.3	0.0	0.0	0.1	100.0

Species: HADDOCK (Melanogrammus aeglefinus)

Fleet							Percentage by Discard 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	50,419	42.1	22.9	34.9	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	88,286	0.3	15.6	84.1	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	524,739	0.2	99.0	0.0	0.0	0.8	0.0	100.0
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	166,569	0.0	99.4	0.0	0.0	0.6	0.0	100.0
	31 Other fleets filtered out					150,624	7.3	64.6	25.0	0.0	3.0	0.0	100.0
					Total	980,638	3.4	82.4	13.2	0.0	1.0	0.0	100.0

Species: OCEAN POUT (Zoarces americanus)

Fleet							Percentage by Discard 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	50,653	15.5	0.0	84.5	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	14,250	83.6	0.0	16.4	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	73,449	43.3	0.0	56.7	0.0	0.0	0.0	100.0
	32 Other fleets filtered out					91,721	94.4	0.0	5.6	0.0	0.0	0.0	100.0
					Total	230,073	60.0	0.0	40.0	0.0	0.0	0.0	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: POLLOCK (Pollachius virens)

Fleet							Percentage by Discard 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	130,434	0.3	98.9	0.0	0.0	0.7	0.1	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	119,579	0.0	28.1	0.0	0.0	71.9	0.0	100.0
	33 Other fleets filtered out					135,669	0.4	91.2	4.3	0.0	4.1	0.0	100.0
					Total	385,682	0.2	74.2	1.5	0.0	24.0	0.0	100.0

Species: REDFISH (Sebastes fasciatus)

Fleet							Percentage by Discard 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	966,322	44.2	54.8	0.0	0.0	0.2	0.9	100.0
	34 Other fleets filtered out					15,144	24.8	43.6	29.9	0.0	1.7	0.0	100.0
					Total	981,465	43.9	54.6	0.5	0.0	0.2	0.9	100.0

Species: WHITE HAKE (Urophycis tenuis)

Fleet							Percentage by Discard 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
48	Pots and Traps, Lobster	OPEN	all	NE	all	201,847	61.1	0.0	38.9	0.0	0.0	0.0	100.0
	34 Other fleets filtered out					55,637	23.1	14.9	3.6	0.0	58.3	0.2	100.0
					Total	257,484	52.9	3.2	31.3	0.0	12.6	0.0	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: WINDOWPANE FLOUNDER (Scophthalmus aquosus)

Fleet							Percentage by Discard 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	177,081	28.3	1.0	70.1	0.6	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	337,187	37.8	0.0	62.2	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	42,170	9.5	0.2	90.3	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	634,876	20.9	0.0	79.1	0.0	0.0	0.0	100.0
34	Scallop Dredge	AA	LIM	NE	all	41,515	59.8	0.0	40.2	0.0	0.0	0.0	100.0
35	Scallop Dredge	OPEN	GEN	MA	all	47,522	53.9	0.0	46.1	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	MA	all	76,025	88.2	0.0	11.8	0.0	0.0	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	236,075	81.3	0.0	18.7	0.0	0.0	0.0	100.0
	27 Other fleets filtered out					41,213	59.4	0.2	40.3	0.0	0.0	0.0	100.0
					Total	1,633,664	39.7	0.1	60.2	0.1	0.0	0.0	100.0

Species: WINTER FLOUNDER (Pseudopleuronectes americanus)

Fleet							Percentage by Discard 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	79,890	10.8	0.5	87.4	1.2	0.1	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	130,341	2.4	6.7	90.8	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	56,251	5.3	75.8	9.2	0.0	8.6	1.1	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	188,664	72.7	0.1	18.8	8.5	0.0	0.0	100.0
	31 Other fleets filtered out					96,791	46.6	1.9	48.1	0.8	0.6	2.1	100.0
					Total	551,938	35.7	9.7	49.9	3.2	1.0	0.5	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: WITCH FLOUNDER (Glyptocephalus cynoglossus)

Fleet							Percentage by Discard 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	54,345	19.1	0.3	80.4	0.2	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	29,467	57.6	8.4	33.9	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	79,849	2.6	95.3	1.0	0.0	1.0	0.0	100.0
34	Scallop Dredge	AA	LIM	NE	all	12,270	48.1	0.0	51.9	0.0	0.0	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	30,149	81.4	0.0	18.6	0.0	0.0	0.0	100.0
	30 Other fleets filtered out					20,957	29.5	12.1	58.2	0.0	0.2	0.0	100.0
					Total	227,037	29.1	35.8	34.6	0.1	0.4	0.0	100.0

Species: YELLOWTAIL FLOUNDER (Limanda ferruginea)

Fleet							Percentage by Discard 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	lg	30,228	0.0	30.3	67.0	0.3	0.0	2.5	100.0
7	Otter Trawl	OPEN	all	NE	sm	24,987	0.3	0.5	99.2	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	72,960	2.8	91.3	1.2	0.0	0.7	3.9	100.0
34	Scallop Dredge	AA	LIM	NE	all	52,262	53.8	14.5	31.7	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	MA	all	38,248	62.0	1.4	36.6	0.0	0.0	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	199,184	69.0	4.5	25.7	0.8	0.0	0.0	100.0
	29 Other fleets filtered out					70,375	38.8	15.4	43.4	1.6	0.7	0.0	100.0
					Total	488,244	44.8	21.3	32.4	0.6	0.2	0.7	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: OFFSHORE HAKE (Merluccius albidus)

Fleet							Percentage by Discard 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	12,013	87.9	12.1	0.0	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	854	100.0	0.0	0.0	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	714	100.0	0.0	0.0	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	709	100.0	0.0	0.0	0.0	0.0	0.0	100.0
	31 Other fleets filtered out					62	100.0	0.0	0.0	0.0	0.0	0.0	100.0
					Total	14,353	89.9	10.1	0.0	0.0	0.0	0.0	100.0

Species: RED HAKE (Urophycis chuss)

Fleet							Percentage by Discard 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	471,469	95.0	0.0	0.0	0.0	0.0	5.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	873,551	66.4	7.2	18.8	0.0	0.0	7.6	100.0
8	Otter Trawl	OPEN	all	NE	lg	186,619	95.9	3.0	1.1	0.0	0.0	0.0	100.0
34	Scallop Dredge	AA	LIM	NE	all	36,016	100.0	0.0	0.0	0.0	0.0	0.0	100.0
38	Scallop Dredge	OPEN	LIM	NE	all	65,326	91.9	0.0	8.1	0.0	0.0	0.0	100.0
	30 Other fleets filtered out					68,333	91.4	0.3	8.2	0.0	0.1	0.0	100.0
					Total	1,701,314	80.2	4.1	10.4	0.0	0.0	5.3	100.0

Species: SILVER HAKE (Merluccius bilinearis)

Fleet							Percentage by Discard 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	414,480	96.1	0.1	0.0	0.0	3.8	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	693,835	77.3	2.0	8.5	0.0	11.8	0.4	100.0
8	Otter Trawl	OPEN	all	NE	lg	555,545	94.9	2.0	0.2	2.6	0.4	0.0	100.0
	32 Other fleets filtered out					208,529	93.0	0.2	2.5	0.1	4.3	0.0	100.0
					Total	1,872,389	88.4	1.4	3.5	0.8	5.8	0.2	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: ATLANTIC MACKEREL (Scomber scombrus)

Fleet							Percentage by Discard 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
	35 Other fleets filtered out					59,548	71.2	0.0	26.6	0.1	2.2	0.0	100.0
					Total	59,548	71.2	0.0	26.6	0.1	2.2	0.0	100.0

Species: BUTTERFISH (Peprilus triacanthus)

Fleet							Percentage by Discard 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	958,959	62.3	37.4	0.2	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	726,408	72.5	17.1	2.5	0.0	0.2	7.7	100.0
	33 Other fleets filtered out					13,876	88.5	7.6	0.5	3.4	0.0	0.0	100.0
					Total	1,699,244	66.9	28.5	1.2	0.1	0.1	3.3	100.0

Species: NORTHERN SHORTFIN SQUID (Illex illecebrosus)

Fleet							Percentage by Discard 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	853,188	98.6	0.0	0.1	0.0	1.4	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	539,734	98.3	0.0	0.1	0.0	1.7	0.0	100.0
	33 Other fleets filtered out					81,252	99.8	0.0	0.2	0.0	0.0	0.0	100.0
					Total	1,474,174	98.5	0.0	0.1	0.0	1.4	0.0	100.0

See text for fleet abbreviations.

Appendix Table 3B, continued. Estimated discards (live lb) and percentage by discard reason category for 23 individual species that compose the 14 species groups, based on July 2013 through June 2014 data.

Species: LONGFIN INSHORE SQUID (Doryteuthis [Amerigo] pealeii)

Fleet							Percentage by Discard 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	882,821	97.2	0.8	0.0	0.0	2.0	0.0	100.0
	34 Other fleets filtered out					287,836	56.2	2.4	3.1	0.0	4.8	33.7	100.0
					Total	1,170,657	87.1	1.2	0.8	0.0	2.7	8.3	100.0

See text for fleet abbreviations.

Appendix Table 4. Fleet abbreviations used in Figures 1A, 1B, 2, 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	Fleet Gear Type	Access Area	Trip Category	Region	Mesh Group	Fleet Abbreviation
1	Longline	OPEN	all	MA	all	LL MA (Row 1)
2	Longline	OPEN	all	NE	all	LL NE (Row 2)
3	Hand Line	OPEN	all	MA	all	HL MA (Row 3)
4	Hand Line	OPEN	all	NE	all	HL NE (Row 4)
5	Otter Trawl	OPEN	all	MA	sm	OT sm MA (Row 5)
6	Otter Trawl	OPEN	all	MA	lg	OT lg MA (Row 6)
7	Otter Trawl	OPEN	all	NE	sm	OT sm NE (Row 7)
8	Otter Trawl	OPEN	all	NE	lg	OT lg NE (Row 8)
9	Scallop Trawl	AA	GEN	MA	all	SCT AA GEN MA (Row 9)
10	Scallop Trawl	AA	LIM	MA	all	SCT AA LIM MA (Row 10)
11	Scallop Trawl	OPEN	GEN	MA	all	SCT OPEN GEN MA (Row 11)
12	Scallop Trawl	OPEN	LIM	MA	all	SCT OPEN LIM MA (Row 12)
13	Otter Trawl, Twin	OPEN	all	MA	all	OTT MA (Row 13)
14	Otter Trawl, Twin	OPEN	all	NE	all	OTT NE (Row 14)
15	Otter Trawl, Ruhle	OPEN	all	MA	lg	OTR lg MA (Row 15)
16	Otter Trawl, Ruhle	OPEN	all	NE	sm	OTR sm NE (Row 16)
17	Otter Trawl, Ruhle	OPEN	all	NE	lg	OTR lg NE (Row 17)
18	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	OTH lg NE (Row 18)
19	Shrimp Trawl	OPEN	all	MA	all	SHT MA (Row 19)
20	Shrimp Trawl	OPEN	all	NE	all	SHT NE (Row 20)
21	Floating Trap	OPEN	all	MA	all	FT MA (Row 21)
22	Floating Trap	OPEN	all	NE	all	FT NE (Row 22)
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	GN sm MA (Row 23)
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	GN lg MA (Row 24)
25	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	GN xlg MA (Row 25)
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	GN sm NE (Row 26)
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	GN lg NE (Row 27)
28	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	GN xlg NE (Row 28)
29	Purse Seine	OPEN	all	MA	all	PS MA (Row 29)
30	Purse Seine	OPEN	all	NE	all	PS NE (Row 30)
31	Scallop Dredge	AA	GEN	MA	all	SCD AA GEN MA (Row 31)
32	Scallop Dredge	AA	GEN	NE	all	SCD AA GEN NE (Row 32)
33	Scallop Dredge	AA	LIM	MA	all	SCD AA LIM MA (Row 33)
34	Scallop Dredge	AA	LIM	NE	all	SCD AA LIM NE (Row 34)
35	Scallop Dredge	OPEN	GEN	MA	all	SCD OPEN GEN MA (Row 35)
36	Scallop Dredge	OPEN	GEN	NE	all	SCD OPEN GEN NE (Row 36)
37	Scallop Dredge	OPEN	LIM	MA	all	SCD OPEN LIM MA (Row 37)
38	Scallop Dredge	OPEN	LIM	NE	all	SCD OPEN LIM NE (Row 38)
39	Danish Seine	OPEN	all	MA	all	DS MA (Row 39)
40	Mid-water Paired & Single Trawl	OPEN	all	MA	all	MWT MA (Row 40)
41	Mid-water Paired & Single Trawl	OPEN	all	NE	all	MWT NE (Row 41)
42	Pots and Traps, Fish	OPEN	all	MA	all	FPT MA (Row 42)
43	Pots and Traps, Fish	OPEN	all	NE	all	FPT NE (Row 43)

See text for fleet abbreviations.

Appendix Table 4, continued. Fleet abbreviations used in Figures 1A, 1B, 2, 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	Fleet Gear Type	Access Area	Trip Category	Region	Mesh Group	Fleet Abbreviation
44	Pots and Traps, Conch	OPEN	all	MA	all	CPT MA (Row 44)
45	Pots and Traps, Conch	OPEN	all	NE	all	CPT NE (Row 45)
46	Pots and Traps, Hagfish	OPEN	all	NE	all	HPT NE (Row 46)
47	Pots and Traps, Lobster	OPEN	all	MA	all	LPT MA (Row 47)
48	Pots and Traps, Lobster	OPEN	all	NE	all	LPT NE (Row 48)
49	Pots and Traps, Crab	OPEN	all	MA	all	CRPT MA (Row 49)
50	Pots and Traps, Crab	OPEN	all	NE	all	CRPT NE (Row 50)
51	Beam Trawl	OPEN	all	MA	all	BT MA (Row 51)
52	Beam Trawl	OPEN	all	NE	all	BT NE (Row 52)
53	Dredge, Other	OPEN	all	MA	all	DRO MA (Row 53)
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	CDR MA (Row 54)
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	CDR NE (Row 55)
56	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	OTH sm NE (Row 56)
	Other fleets filtered out					Other fleets

See text for fleet abbreviations.

APPENDIX: EQUATIONS USED IN DISCARD ESTIMATION AND SAMPLE SIZE ANALYSES

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 vessel trip report (VTR) total kept pounds of all species 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*. A stratum represents a fleet (i.e., gear type, access area, trip category, region, mesh group combination). 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) $$V(\hat{D}_j) = \sum_{q=1}^{4} K_{qh}^2 \left(\frac{N_{qh} - n_{qh}}{n_{qh} N_{qh}} \right) \frac{1}{\left(\frac{\sum_{i=1}^{n_{qh}} k_{iqh}}{n_{qh}} \right)^2} \left[\frac{\sum_{i=1}^{n_{qh}} \left(d_{jiqh}^2 + \left(r_{c,j}\right)^2 k_{iqh}^2 - 2 r_{c,j}\, d_{jiqh} k_{iqh} \right)}{n_{qh} - 1} \right]$$

where $\hat{D}_j$ is total discarded pounds for species *j*; K_{qh} is VTR total kept pounds of all species 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*.

Standard Error of the discard estimate is defined as:

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

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

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

The number of sea days and trips needed to achieve a 30% coefficient of variation (CV) is 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

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

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

where δ_{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. 6 is defined in Eq. 2 where the summation is over quarters within a given stratum 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:

(8) $$\hat{T}D_{30\,jh} = \frac{\sum_{q=1}^{4} \left(\frac{K^2_{qh}}{\bar{k}^2_{qh}} \hat{S}^2_{jqh} \frac{1}{\delta_{qh}} \right)}{(0.09)\hat{D}_{jh}{}^2 + \frac{\sum_{q=1}^{4} \frac{K^2_{qh}}{\bar{k}^2_{qh}} \hat{S}^2_{jqh}}{N_h}}$$

where $0.09 = 0.30^2$, the square of the 30% CV, the given 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:

(9) $$\hat{S}D_{30\,jh} = \hat{T}D_{30\,jh} * \overline{DA_h}$$

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 because of 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.

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

where $\hat{T}_{hq}$ is 2% of the VTR trips in stratum *h* and quarter *q*, and 3 <= $\hat{T}_{hq}$ <= 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, $\hat{TF}_h$ for stratum *h* is defined as:

(11) $\hat{TF}_h = \hat{SF}_h / \overline{DA_h}$

where $\hat{SF}_h$ 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 rewriting Eq. 8.

From Eq. 8, let

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

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