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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
MPC = minimum pilot coverage
MRFSS = Marine Recreational Fisheries Statistical Survey
MRIP = Marine Recreational Information Program
NE = New England
NEFOP = Northeast Fisheries Observer Program
NEFSC = Northeast Fisheries Science Center
NMFS = National Marine Fisheries Service
OPEN = Non-access area
SBRM = Standardized Bycatch Reporting Methodology
SE = standard error of the estimate
sm = small mesh
smR = small mesh redfish exemption
VTR = Vessel Trip Report
xlg = extra large mesh

EXECUTIVE SUMMARY

This report describes the analysis of the expected coverage needed by at-sea observers for northeastern US fisheries for the April 2014 through March 2015 period using the Standardized Bycatch Reporting Methodology. The sea days needed to achieve a precision-based performance standard (30% coefficient of variation of the discard estimate) were updated by using July 2012 through June 2013 data.

To monitor 14 federally managed fish and invertebrate species groups across 56 fleets, a total of 14,529 sea days are needed. 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. Based upon this analysis, an estimated 65,054 mt (143,419,913 lb) of federally regulated species were discarded during the July 2012 through June 2013 time period. The predominant species groups discarded are skates (Rajidae), spiny dogfish (*Squalus acanthias*), and sea scallops (*Placopecten magellanicus*). Across all species groups examined, "No Market" is the reason reported for the majority of discards. 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.

BACKGROUND

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

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 2014 are similar to those conducted in 2013 (Wigley et al. 2013).

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 summarized. This document and Wigley et al. (2013, 2012b) 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.

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

[2] The Proposed 2013 Observer Sea Day Allocation (March 23, 2012) document is available on-line at: http://www.nefsc.noaa.gov/femad/fsb/SBRM/2012/Proposed_2012_Observer_Sea_Day_Allocation_3-23-2012_v3.pdf. When available, the Proposed 2014 Observer Sea Day Allocation document will be posted on the SBRM website under Additional Documents.

METHODS

Data Sources

The data sets used include July 2012 through June 2013 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 NOAA Marine Recreational Information Program[4] (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 2010, 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 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 this analysis along with 1 trip fishing in a statistical area associated with the Southeast Region (statistical area "702"), 1 trip landing outside the Greater Atlantic Region[5] (formerly Northeast Region), and 12 "carrier" trips (*fleet type* = "050"; no fishing effort occurred on these trips). Additionally, hauls with no catch report and species hail weight with discard reason "039" ("previously discarded") were excluded.

The same broad stratification scheme used in SBRM analyses was employed in this analysis, in which trips were partitioned into fleets by using 6 classification variables: calendar quarter, geographic region, gear type, mesh, access area, and trip category. Calendar quarter was based on landed date and used to capture seasonal variations in fishing activity and discard rates. Two broad geographical regions were defined: New England (NE) and Mid-Atlantic (MA) based on port of departure[6]; ports from Maine to Rhode Island constituted the NE region, and ports in states from Connecticut southward constituted the MA region. Gear type was based on Northeast gear codes (*negear)*. Some gear codes were combined: sink, anchored, and drift gillnets, and single and paired midwater 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

[3] There were 1,844 At-Sea Monitoring Program (ASM) trips associated with NE hand line, longline, otter trawl, and gillnet fleets in the July 2012 through June 2013 data. A comparison of discard rates derived from observer and at-sea monitor data in 2010, 2011, and 2012 revealed there were generally similar discard rates between the 2 data collection programs for the 18 fish species for 4 gear types (longline, large mesh otter 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 (2011, 2013) for more information on ASM. The Atlantic States Marine Fisheries Commission (ASMFC) funded 157 otter trawl trips in the July 2012 through June 2013 data. A comparison of discard rates derived from NEFOP-allocated and ASMFC-allocated trips reveals there were generally similar discard rates for the 2 fleets where ASMFC-allocated trips exist (MA small mesh otter trawl fleet and NE small mesh otter trawl fleet); hence, these data have been pooled.

[4] Marine Recreational Information Program (MRIP) was implemented in 2012 and supersedes the NOAA Marine Recreational Fisheries Statistics Survey (MRFSS).

[5] For more information, see http://www.nero.noaa.gov/stories/2014/07_nero_name_change.html

[6] 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).

formed: small (mesh less than 5.5 in) and large (5.5 in mesh and greater). For gillnets, 3 mesh groups were formed: small (mesh less than 5.5 in), large (mesh between 5.5 and 7.99 in), and extra large (mesh 8 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 a small mesh redfish exempted fishery where 100% observer coverage was required for trips using otter trawl with 4.5 in mesh. These exempted trips have been grouped together into a mesh group labeled "smR." For more information on the small mesh redfish exemption, see http://www.gpo.gov/fdsys/pkg/FR-2013-03-05/html/2013-05044.htm.

Stratification abbreviations used are given below.

Abbreviation	Definition
MA	Mid-Atlantic ports (CT and southward)
NE	New England ports (RI and northward)
sm	Small mesh (less than 5.5 in)
smR	Small mesh redfish exemption (4.5 in)
lg	Large mesh (5.5 to 7.99 in for gillnet; 5.5 in and greater for otter trawl)
xlg	Extra large mesh (8 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 [formerly Northeast Regional Office] http://www.nero.noaa.gov/ro/fso/vtr_inst.pdf). These self-reported data[7] constitute the basis of the fishing activity of the commercial fleets. Because dealer data do not contain mesh size and area fished information, the dealer data could not be used to expand discard ratios by fleet for the annual analyses. The VTR data were used as a surrogate for dealer data and were used to expand the NEFOP discard ratios to total discards. For this analysis, the commercial VTR trips (excluding NY state [nonfederal] vessels) were used. Conversion factors were applied to convert various units of measure to pounds and all weight to live weight. VTR trip data were 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 group is given in Table 1. Summaries of the data

[7] See Wigley et al. 2007 for more details on self-reported VTR 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[8] 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 48 individual fleets and 7 confidential fleets combined into "Confidential fleets"), "Other minor fleets" (that also include 1 confidential fleet and 6 observed twin trawl trips), 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 2012 through June 2013 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. 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.

Simple imputation methods were used to fill quarterly cells for which there were 1 or no observed trips. Data from adjoining strata were pooled to impute estimates for cells with zero or one trip. In this imputation only the temporal stratification (calendar quarter) was relaxed to 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[9]. 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

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

[9] 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).

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” would be 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 included in “Other fleets filtered out” (an aggregated group 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. For each fleet included in “Other fleets filtered out,” 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 the 2013 and 2012 sea day analyses (Wigley et al. 2012b, 2013) 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.

Some fleet/species combinations contribute very little to the total mortality or discard of the species but may require significant resources to characterize the precision of the estimate. For example, a high variance estimate for a rare event within a fleet would require high levels of

sampling, even though the total discard in that fleet was unimportant with respect to either the total discard or total mortality of the resource. To address this, a modification of the filtering approach developed for SBRM was employed. Similar to the SBRM analyses (Wigley et al. 2007), importance filters were used to provide a standardized protocol to further refine the number of baseline sea days based on: (a) the importance of the discarded species relative to the total amount of discards by a fleet and (b) the total fishing mortality due to discards. In the 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, 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).

The 2014 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 mortality.

To determine the number of sea days (referred to as the "2014 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.

RESULTS

There were 56 fleets uniquely identified in the July 2012 through June 2013 data (Tables 2 and 3; Appendix Table 1). Based upon the industry activity during this time period, the NE LIM OPEN scallop trawl (Row 13) and the NE otter trawl small mesh exempted redfish 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 2013 sea day analysis, there were 2 fleets (MA large mesh haddock separator trawl and MA hagfish pots and traps) 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 7 unique fleets (MA GEN Access area scallop trawl [Row 9], MA LIM Access area scallop trawl [Row 10], NE small mesh Ruhle trawl [Row 15], NE large mesh Ruhle trawl [Row 16], MA floating trap [Row 20], MA Danish seine [Row 38], 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 LIM OPEN scallop trawl (Row 13; 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, 34 fleets had little or no observer data: 6 fleets had sparse observer data across all quarters, while 28 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 crab [*Chaceon quinquedens*], conch [*Busycon carica*, *Busyotypus canaliculatus*], shrimp [*Pandalus borealis*], and hagfish [Myxinidae]). No discard estimation was performed for the 28 fleets with no observer coverage, and they were designated as fleets in need of pilot coverage (Tables 2 and 3; Appendix Table 1). The 6 fleets with sparse observer coverage were also designated as fleets in need of pilot coverage for the sample size analysis; however, discard estimation was performed with the sparse observer data. For the 22 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 22 fleets, there were 5 fleets (Rows 4, 11, 17, 19, and 24) where the simple imputation was applied (Tables 2 and 3).

Thus, for the discard estimation and precision analysis, 34 fleets had no discard estimation, and 22 fleets had discards estimated. For the sample size analysis, 22 fleets had sample sizes derived from the discard variances, and 34 fleets had sample sizes based upon pilot coverage.

A total of 3,869 trips (11,083 days) was observed during the July 2012 through July 2013 period. When these trips were stratified, some trips were partitioned between strata resulting in 4,174 trips (11,658 days; Tables 2 and 3) in the NEFOP data set. The total number of trips and days do not include 6 observed twin trawl trips in the MA and NE twin 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 twin 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 28 fleets with some observer coverage, the percentage of observed trips by fleet ranged between 0.03% (MA Hand Line, Row 3; Table 2) to 108% (NE small mesh redfish exempted Otter Trawl fleet, Row 56; Table 2). It is unexpected to have coverage percentages exceed 100%; in this case, the NEFOP reported subtrips on a VTR trip that did not report subtrips, hence more observed trips than VTR trips appeared in the data sets. For the 22 nonpilot fleets (excluding the NE Otter Trawl small mesh redfish exempted fleet [Row 56] that required 100% observer coverage), the percentage of observed trips ranged between 0.09% (NE Lobster Pot, Row 48) and 37% (NE mid-water trawl fleet, Row 40). Over all fleets, the percentage of observed trips was 4.6% (Table 2).

In terms of kept weight of all species, the percentage of observer coverage over all fleets was 52% (Table 4). For the 22 nonpilot fleets, the percentage of observer coverage ranged between 38% and 98% with an average of 79% (Table 4). Nineteen of the 22 fleets had a percentage greater than or equal to 68% with an average of 86%. This finding indicates that the majority of kept weight within the fleet was associated with statistical areas and quarters with observer coverage. Additionally, these 19 fleets composed 56% 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 0.1% 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 pounds) with associated precision (CV and SE) for 27 individual fleets (Rows 2-8, 11, 17, 19, 23, 24, 26, 27, 29-37, 39, 40, 48, and 56) 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 21 fleets (Rows 1, 12, 14, 18, 21, 22, 25, 28, 41-47, 49-51, 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, 65,054 mt (143,419,914 lb; live weight) of discards for the 14 species groups occurred during the July 2012 through June 2013 period (Table 5C). The majority (81%) of the discards comprises 3 species groups: skates (Rajidae; 55%), spiny dogfish (*Squalus acanthias*; 13%), and sea scallops (*Placopecten magellanicus*; 13%); the remaining species groups each accounted for less than or equal to 6% (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% total catch; 3 species groups (SBM, SCAL, and BLUE) where percentages of discards ranged between 1% and 10% of total catch; 4 species groups (FSB, GFL, RCRAB, 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 (74%), spiny dogfish (50%), and monkfish (*Lophius americanus*; 31%; 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*; 100%), ocean pout (*Zoarces americanus*; >99%), and windowpane flounder (*Scophthalmus aquosus*; >99%) because of the no possession regulations for these 3 individual species. The New England 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 (75%) of discards occurred were due to "No Market." "Regulation" (size, quota, and other), "Poor Quality," and "Other" contributed 19%, 3%, and 3%, respectively (Appendix Table 3A).

The percentages of discard to total catch were also summarized by fleet for the 22 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 "Other FMP." Discards of nonfederally managed species have been aggregated into a species group labeled "Non-FMP." The percentages of discard to total catch varied by fleet (Figure 2). There were 2 fleets (Rows 29 and 40) where discards were less than 1% of the total catch in the fleet; 4 fleets (Rows 2, 4, 35, and 56) where the percentages of discards ranged between 1% and 10%; 8 fleets (Rows 7, 19, 24, 27, 32, 33, 36, and 37) where the percentages of discards ranged between 11% and 25% of total catch; 7 fleets (Rows 5, 8, 11, 17, 26, 34, and 48) where the percentages of

discards ranged between 26% and 50% of the total catch; and 1 fleet (Row 6) 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 (13 of the 22 fleets) comprised 2 or 3 discarded species groups. For 7 of these fleets (Rows 2, 4, 11, 17, 24, 35, and 56), the "Other FMP" species group comprised the majority of the discards. This finding indicates that the majority of discards were filtered out via the importance filter. There were 3 fleets (Rows 29, 40, and 48) for which the "Non-FMP" species group comprised the majority of the discards. There were another 3 fleets where 2 of the 3 discarded species groups were "Other FMP" and "Non-FMP," and the third represented at least 45% of the discards: Row 19 (small mesh groundfish), Row 26 (spiny dogfish), and Row 34 (skate; Figure 2).

The remaining fleets (9 of the 22 fleets) had between 4 and 10 discarded species groups. The skate species group dominated the discards in 5 of these fleets (Rows 5, 6, 8, 27, and 33) while "Non-FMP" dominated the discards in 2 fleets (Rows 7 and 36), SCAL was the dominant discarded species group in 1 fleet (Row 37), and "Other FMP" was the dominant discarded group in 1 fleet (Row 32). The dominant "Non-FMP" species in the scallop dredge fleets (Rows 32, 33, 34, 35, 36, and 37) were: sand dollar (Clypeasteroida), sponge (Porifera), and starfish (Asteroidea). "Fish, not known" was the dominant "Non-FMP" species in the NE purse seine fleet and the NE mid-water trawl fleet (Rows 29 and 40). American lobsters (*Homarus americanus*) and jonah crab (*Cancer borealis*) were the dominant "Non-FMP" species in 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, 8 species groups (FSB, GFL, MONK, SCAL, SKATE, GFS, DOG, and SBM) had an overall CV that was less than 30%, and 6 species groups (SAL, BLUE, HERR, RCRAB, SCOQ, and TILE) had an overall CV that was greater than 30%. The discards of 5 species groups (SAL, BLUE, HERR, 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 numbers 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 "2014 Sea Days Needed"), are summarized in Table 6. A total of 14,529 days are needed for the 56 fleets. As mentioned previously, 34 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 1,323 days (9% of 14,529; Table 6). There are 8 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, 4, 11, 17, 24, 29, 35, and 40; Table 6). There were 255 sea days associated with these fleets with minimum pilot coverage (2% of 14,529; Table 6). The sea days needed for the remaining 14 fleets (12,951 days, representing 89% of the total sea days needed) were derived by using the variance of the discard estimate (Tables 6). Of the 12,951 days, 7,262 days (56%) were associated with 1 fleet (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 2012 through June 2013 VTR trips) needed to achieve a 30% CV of the discard estimate in 13 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., 1,162 days rather than 7,262 days for Row 8), then the total number of sea days needed across the 56 fleets would be 8,429 days (a 42% decrease from the 14,529 days). When the penultimate value is used, the expected achieved precision of red crab discards in Row 8 would be 89% 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]; and VTR landings versus dealer landings). Region, based on port of departure, was used for the deployment observers. It is recognized that area fished would provide a better stratification for discard estimation. It is expected, however, that estimates would be in the same order of magnitude. The discard estimates presented here are not definitive estimates but rather are indicative of where discarding occurred among the commercial fleets for the 14 federally managed species groups.

We have assumed 100% discard mortality; i.e., we do not account for potential survival of organisms returned to the water. When comparing discard estimates from this study with those from stock assessments, it is useful to note that survival ratios are applied in stock assessments for Georges Bank and Gulf of Maine stocks of cod (*Gadus morhua*), Atlantic sea scallop, spiny dogfish, summer flounder (*Paralichthys dentatus*), southern New England and Gulf of Maine stocks of winter flounder (*Pseudopleuronectes americanus*), and southern New England yellowtail flounder (*Limanda ferruginea*).

Atlantic salmon are rarely encountered on observed trips (Wigley et al. 2011). In this analysis, 49 lb of Atlantic salmon discards were estimated, the first instance in which an estimate was greater than zero.

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. Regarding the twin trawl trips, there were no VTR trips that

reported using twin trawl (VTR gear code "OTT") in the VTR database at the time of this analysis, yet there were 6 observed twin trawl trips in the NEFOP database that occurred during the July 2012 through June 2013 period. When these 6 observed trips were mapped back to the VTR data, it was found that the VTR database had "OTF" (otter trawl, bottom, fish) as the gear and gear quantity was 2 nets. Because of this data irregularity of twin trawl gear type, the twin trawl fleet could not be included in this analysis (observed trips were greater than VTR trips, and no VTR trips existed in the database[10]). 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.

Since the northern shrimp fishery is closed during the calendar quarter 3, the VTR trips associated with NE shrimp trawl fleet (Row 19, 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 19) represent trips using shrimp trawl with and without a FED (Tables 2 through 7; Figures 2 and 3). An additional data element within the VTR database would be 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 fleet 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.

The use of pilot coverage may result in designating more observed trips than the number of trips that occurred in a fleet; therefore, pilot coverage may need further refinement in the

[10] In June 2013, the twin trawl gear code was removed from the VTR database, and data with twin trawl gear codes were changed from twin trawls to otter trawls. In February 2014, after this analysis was completed, the VTR data are to be changed back to what was originally reported.

future. For example, there are 10 fleets for which there were less than 3 trips per quarter for at least 1 quarter (Rows 9, 10, 13-16, 25, 42, 44, and 56; Table 2). To assign pilot coverage to these fleets for these quarters would results in coverage rates exceeding 100%. Additionally, there are several fleets for which activity is greater than 3 trips per quarter; however, overall activity is low (e.g., Rows 39, 45, and 46; Table 2). To assign pilot coverage to these fleets would result in coverage rates that exceed those derived from observer data. For fleets with low activity, there are 2 scenarios: (1) fleets for which significant activity occurs in other quarters (e.g., Rows 42 and 44; Table 2); and (2) fleets for which overall activity is low (e.g., Rows 9, 10, 13-16, 25, 39, 45, 46, and 56; Table 2). In the first scenario, the use of pilot coverage is warranted for these fleets. In the second scenario, pilot coverage is not warranted. A future refinement might be to exclude fleets in the second scenario by using a standardize protocol either at the beginning of the sample size analysis or when the sea day allocation is performed.

There are several fleets with high sea day requirements (>1,000 sea days). The NEFOP data associated with the trips within these fleets were reviewed to rule out any data "irregularities." The high monitoring coverage for New England large mesh and MA small mesh otter trawl fleets (Rows 5 and 8; Table 6) was due to high variability of red crab discards. In this analysis, as well as in previous analyses (NEFSC 2011a, 2011b; Wigley et al. 2011, 2012b, 2013), 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 crabs were encountered during trips fishing in deep water. Although the discard reason reported for 3 fleets was "No Market" (Appendix Table 3A), these vessels do not generally have permits to land red crabs, thus the red crabs must be discarded. Currently, the analysis does not stratify these fleets further to account for depth because statistical area is the finest spatial resolution that defines a subtrip within the Vessel Trip Report (a subtrip within the VTR is a unique gear, mesh, and statistical area). While depth is a data element in the VTR, depth is not always reported, and there are few 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 2010, 2011) 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 CRAB (RCRAB)	*Chaceon quinquedens*
SEA SCALLOP (SCAL)	*Placopecten magellanicus*
SKATE COMPLEX[11] (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[12] - 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)[13]	
Surfclam	*Spisula solidissima*
Ocean quahog	*Artica islandica*
TILEFISH (TILE)	*Lopholatilus chamaeleonticeps*

[11] Skate complex is comprises seven species as well as skate, unknown. Individual species are not summarized separately.
[12] 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.
[13] 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 2012 through June 2013 data. "P" indicates fleets with "pilot" designation.

						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	.	.	.	.	.	59	24	20	56	159	P
2	Longline	OPEN	all	NE	all	91	21	27	5	144	742	184	136	58	1,120	
3	Hand Line	OPEN	all	MA	all	1	.	.	.	1	1,702	756	131	796	3,385	P
4	Hand Line	OPEN	all	NE	all	68	6	.	2	76	1,391	207	35	407	2,040	
5	Otter Trawl	OPEN	all	MA	sm	45	65	56	97	263	1,624	750	393	802	3,569	
6	Otter Trawl	OPEN	all	MA	lg	35	34	58	70	197	1,595	907	939	1,382	4,823	
7	Otter Trawl	OPEN	all	NE	sm	47	40	23	61	171	1,298	728	444	845	3,315	
8	Otter Trawl	OPEN	all	NE	lg	257	400	342	279	1,278	2,287	1,979	1,848	1,787	7,901	
9	Scallop Trawl	AA	GEN	MA	all	.	.	.	.	.	1	.	.	.	1	P
10	Scallop Trawl	AA	LIM	MA	all	.	.	.	.	.	4	1	.	1	6	P
11	Scallop Trawl	OPEN	GEN	MA	all	3	6	1	8	18	105	23	52	149	329	
12	Scallop Trawl	OPEN	LIM	MA	all	.	.	.	.	.	5	3	9	11	28	P
13+	Scallop Trawl	OPEN	LIM	NE	all	1	.	.	.	1	1	4	1	.	6	P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	.	.	.	.	.	2	4	1	.	7	P
15	Otter Trawl, Ruhle	OPEN	all	NE	sm	.	.	.	.	.	1	.	16	1	18	P
16	Otter Trawl, Ruhle	OPEN	all	NE	lg	.	.	.	.	.	.	2	.	4	6	P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	6	5	1	4	16	15	22	16	18	71	
18	Shrimp Trawl	OPEN	all	MA	all	.	.	.	.	.	256	64	.	3	323	P
19	Shrimp Trawl	OPEN	all	NE	all	.	.	24	.	24	87	13	443	30	573	
20	Floating Trap	OPEN	all	MA	all	.	.	.	.	.	35	3	.	33	71	P
21	Floating Trap	OPEN	all	NE	all	.	.	.	.	.	13	.	.	12	25	P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	.	.	.	.	.	675	480	343	308	1,806	P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	.	.	4	.	4	371	1,095	497	371	2,334	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	.	5	5	16	26	71	464	381	1,061	1,977	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	.	.	.	.	.	2	1	.	.	3	P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	543	316	28	139	1,026	3,446	1,441	320	807	6,014	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	177	43	15	49	284	965	441	297	810	2,513	
28	Purse Seine	OPEN	all	MA	all	.	.	.	.	.	299	38	.	104	441	P
29	Purse Seine	OPEN	all	NE	all	24	4	.	3	31	230	29	.	60	319	
30	Scallop Dredge	AA	GEN	MA	all	.	1	1	1	3	7	7	7	6	27	P
31	Scallop Dredge	AA	GEN	NE	all	1	2	.	2	5	29	10	3	19	61	P
32	Scallop Dredge	AA	LIM	MA	all	23	3	7	12	45	130	38	61	108	337	
33	Scallop Dredge	AA	LIM	NE	all	44	35	11	30	120	240	199	75	198	712	

Note: The MA and NE twin trawl fleets are not reported in this table. Based on July 2012 through June 2013 data, there were 3 MA twin trawl trips and 3 NE twin trawl trips observed with no corresponding VTR trips for these 2 fleets.

See text for fleet abbreviations; "+" = new fleets in 2014.

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 2012 through June 2013 data. "P" indicates fleets with "pilot" designation.

						NEFOP					VTR					
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	Pilot
34	Scallop Dredge	OPEN	GEN	MA	all	8	5	14	15	42	823	465	534	710	2,532	
35	Scallop Dredge	OPEN	GEN	NE	all	8	11	10	31	60	882	770	970	1,251	3,873	
36	Scallop Dredge	OPEN	LIM	MA	all	8	3	4	13	28	125	65	64	121	375	
37	Scallop Dredge	OPEN	LIM	NE	all	25	9	20	73	127	368	200	179	502	1,249	
38	Danish Seine	OPEN	all	MA	all	.	.	.	.	.	93	7	.	55	155	P
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	.	.	1	.	1	.	.	5	5	10	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	90	17	18	21	146	137	34	168	55	394	
41	Pots and Traps, Fish	OPEN	all	MA	all	.	.	.	.	.	299	173	75	293	840	P
42	Pots and Traps, Fish	OPEN	all	NE	all	.	.	.	.	.	511	40	2	150	703	P
43	Pots and Traps, Conch	OPEN	all	MA	all	.	.	.	.	.	60	527	206	369	1,162	P
44	Pots and Traps, Conch	OPEN	all	NE	all	.	.	.	.	.	380	450	1	339	1,170	P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	.	.	.	.	.	7	3	6	11	27	P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	.	.	.	.	.	.	.	21	.	21	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	.	.	.	.	.	920	382	136	450	1,888	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	5	8	6	5	24	11,849	8,182	1,847	4,635	26,513	
49	Pots and Traps, Crab	OPEN	all	MA	all	.	.	.	.	.	34	11	.	27	72	P
50	Pots and Traps, Crab	OPEN	all	NE	all	.	.	.	.	.	26	19	25	6	76	P
51	Beam Trawl	OPEN	all	MA	all	.	.	.	.	.	37	21	9	3	70	P
52	Beam Trawl	OPEN	all	NE	all	.	.	.	.	.	26	9	.	18	53	P
53	Dredge, Other	OPEN	all	MA	all	.	.	.	.	.	5	74	83	50	212	P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	.	.	.	.	.	506	426	451	429	1,812	P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	.	.	.	.	.	840	569	591	708	2,708	P
56+	Otter Trawl	OPEN	all	NE	smR	.	.	2	11	13	.	.	2	10	12	
					Total	**1,510**	**1,039**	**678**	**947**	**4,174**	**35,616**	**22,344**	**11,843**	**20,444**	**90,247**	

Note: The MA and NE twin trawl fleets are not reported in this table. Based on July 2012 through June 2013 data, there were 3 MA twin trawl trips and 3 NE twin trawl trips observed with no corresponding VTR trips for these 2 fleets.

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 2012 through June 2013 data. "P" indicates fleets with "pilot" designation.

						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	.	.	.	.	.	289	199	183	333	1,004	P
2	Longline	OPEN	all	NE	all	91	21	27	5	144	746	190	145	60	1,141	
3	Hand Line	OPEN	all	MA	all	1	.	.	.	1	1,905	806	141	812	3,664	P
4	Hand Line	OPEN	all	NE	all	69	6	.	2	77	1,604	327	35	429	2,395	
5	Otter Trawl	OPEN	all	MA	sm	61	125	271	174	631	2,644	1,545	1,444	1,370	7,003	
6	Otter Trawl	OPEN	all	MA	lg	56	90	174	97	417	2,405	2,517	3,943	2,364	11,229	
7	Otter Trawl	OPEN	all	NE	sm	120	102	102	139	463	2,598	1,767	1,297	1,653	7,315	
8	Otter Trawl	OPEN	all	NE	lg	848	1,245	1,035	944	4,072	5,194	5,418	5,613	5,417	21,642	
9	Scallop Trawl	AA	GEN	MA	all	.	.	.	.	.	2	.	.	.	2	P
10	Scallop Trawl	AA	LIM	MA	all	.	.	.	.	.	29	6	.	15	50	P
11	Scallop Trawl	OPEN	GEN	MA	all	3	6	2	14	25	206	41	110	303	660	
12	Scallop Trawl	OPEN	LIM	MA	all	.	.	.	.	.	21	13	55	53	142	P
13+	Scallop Trawl	OPEN	LIM	NE	all	15	.	.	.	15	4	32	5	.	41	P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	.	.	.	.	.	5	30	10	.	45	P
15	Otter Trawl, Ruhle	OPEN	all	NE	sm	.	.	.	.	.	3	.	40	3	46	P
16	Otter Trawl, Ruhle	OPEN	all	NE	lg	.	.	.	.	.	.	17	.	38	55	P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	50	49	11	35	145	138	217	144	161	660	
18	Shrimp Trawl	OPEN	all	MA	all	.	.	.	.	.	1,346	354	.	13	1,713	P
19	Shrimp Trawl	OPEN	all	NE	all	.	.	24	.	24	87	13	443	30	573	
20	Floating Trap	OPEN	all	MA	all	.	.	.	.	.	35	3	.	33	71	P
21	Floating Trap	OPEN	all	NE	all	.	.	.	.	.	13	.	.	12	25	P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	.	.	.	.	.	718	495	352	326	1,891	P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	.	.	4	.	4	398	1,124	518	392	2,432	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	.	8	6	19	33	74	540	449	1,215	2,278	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	.	.	.	.	.	3	1	.	.	4	P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	592	368	72	203	1,235	3,949	1,832	598	1,215	7,594	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	196	55	40	88	379	1,144	545	611	1,516	3,816	
28	Purse Seine	OPEN	all	MA	all	.	.	.	.	.	299	38	.	110	447	P
29	Purse Seine	OPEN	all	NE	all	53	9	.	9	71	496	60	.	143	699	
30	Scallop Dredge	AA	GEN	MA	all	.	3	3	3	9	17	19	18	16	70	P
31	Scallop Dredge	AA	GEN	NE	all	3	5	.	4	12	72	24	9	41	146	P
32	Scallop Dredge	AA	LIM	MA	all	225	31	62	123	441	1,174	323	483	995	2,975	
33	Scallop Dredge	AA	LIM	NE	all	377	336	92	235	1,040	2,043	1,756	648	1,741	6,188	

Note: The MA and NE twin trawl fleets are not reported in this table. Based on July 2012 through June 2013 data, there were 11 MA twin trawl sea days and 15 NE twin trawl sea days observed with no corresponding VTR sea days for these 2 fleets.

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 2012 through June 2013 data. "P" indicates fleets with "pilot" designation.

						NEFOP					VTR					
Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Q3	Q4	Q1	Q2	TOTAL	Q3	Q4	Q1	Q2	TOTAL	Pilot
34	Scallop Dredge	OPEN	GEN	MA	all	12	8	24	22	66	1,253	751	839	1,117	3,960	
35	Scallop Dredge	OPEN	GEN	NE	all	10	15	10	41	76	1,060	965	1,142	1,513	4,680	
36	Scallop Dredge	OPEN	LIM	MA	all	71	28	47	128	274	1,180	565	530	1,097	3,372	
37	Scallop Dredge	OPEN	LIM	NE	all	257	76	156	700	1,189	3,486	1,678	1,376	4,678	11,218	
38	Danish Seine	OPEN	all	MA	all	.	.	.	.	.	94	7	.	55	156	P
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	.	.	7	.	7	.	.	30	42	72	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	389	75	76	98	638	598	123	428	240	1,389	
41	Pots and Traps, Fish	OPEN	all	MA	all	.	.	.	.	.	308	174	81	302	865	P
42	Pots and Traps, Fish	OPEN	all	NE	all	.	.	.	.	.	511	40	5	150	706	P
43	Pots and Traps, Conch	OPEN	all	MA	all	.	.	.	.	.	61	534	286	512	1,393	P
44	Pots and Traps, Conch	OPEN	all	NE	all	.	.	.	.	.	381	450	1	340	1,172	P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	.	.	.	.	.	52	16	27	78	173	P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	.	.	.	.	.	.	.	21	.	21	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	.	.	.	.	.	1,208	527	215	564	2,514	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	11	31	23	23	88	14,106	10,298	3,523	6,414	34,341	
49	Pots and Traps, Crab	OPEN	all	MA	all	.	.	.	.	.	34	22	.	54	110	P
50	Pots and Traps, Crab	OPEN	all	NE	all	.	.	.	.	.	234	206	153	39	632	P
51	Beam Trawl	OPEN	all	MA	all	.	.	.	.	.	76	31	15	9	131	P
52	Beam Trawl	OPEN	all	NE	all	.	.	.	.	.	34	11	.	19	64	P
53	Dredge, Other	OPEN	all	MA	all	.	.	.	.	.	10	95	89	96	290	P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	.	.	.	.	.	969	870	977	964	3,780	P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	.	.	.	.	.	904	714	723	789	3,129	P
56+	Otter Trawl	OPEN	all	NE	smR	.	.	6	76	82	.	.	5	69	74	
					Total	**3,510**	**2,692**	**2,274**	**3,182**	**11,658**	**56,220**	**38,329**	**27,760**	**39,950**	**162,258**	

Note: The MA and NE twin trawl fleets are not reported in this table. Based on July 2012 through June 2013 data, there were 11 MA twin trawl sea days and 15 NE twin trawl sea days observed with no corresponding VTR sea days for these 2 fleets.

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 2012 through June 2013 data.

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	861	0.1	0	0.0
2	Longline	OPEN	all	NE	all	1,132	0.2	1,112	98.2
3	Hand Line	OPEN	all	MA	all	282	<0.1	0	0.0
4	Hand Line	OPEN	all	NE	all	440	0.1	298	67.7
5	Otter Trawl	OPEN	all	MA	sm	15,283	2.4	11,575	75.7
6	Otter Trawl	OPEN	all	MA	lg	7,941	1.3	7,222	91.0
7	Otter Trawl	OPEN	all	NE	sm	21,666	3.5	18,945	87.4
8	Otter Trawl	OPEN	all	NE	lg	27,291	4.4	26,638	97.6
11	Scallop Trawl	OPEN	GEN	MA	all	602	0.1	253	42.1
12	Scallop Trawl	OPEN	LIM	MA	all	192	<0.1	0	0.0
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	11	<0.1	0	0.0
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	202	<0.1	139	68.4
18	Shrimp Trawl	OPEN	all	MA	all	593	0.1	0	0.0
19	Shrimp Trawl	OPEN	all	NE	all	354	0.1	133	37.5
21	Floating Trap	OPEN	all	NE	all	7	<0.1	0	0.0
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,380	0.2	0	0.0
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	2,448	0.4	150	6.1
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2,513	0.4	1,719	68.4
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	3	<0.1	0	0.0
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	6,589	1.1	6,214	94.3
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	5,960	1.0	5,370	90.1
28	Purse Seine	OPEN	all	MA	all	26,432	4.2	0	0.0
29	Purse Seine	OPEN	all	NE	all	19,022	3.0	17,481	91.9
30	Scallop Dredge	AA	GEN	MA	all	67	<0.1	0	0.0
31	Scallop Dredge	AA	GEN	NE	all	261	<0.1	0	0.0
32	Scallop Dredge	AA	LIM	MA	all	13,357	2.1	13,120	98.2
33	Scallop Dredge	AA	LIM	NE	all	35,474	5.7	34,693	97.8
34	Scallop Dredge	OPEN	GEN	MA	all	5,354	0.9	3,802	71.0
35	Scallop Dredge	OPEN	GEN	NE	all	5,857	0.9	4,329	73.9
36	Scallop Dredge	OPEN	LIM	MA	all	21,170	3.4	18,568	87.7
37	Scallop Dredge	OPEN	LIM	NE	all	96,949	15.5	91,987	94.9
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	800	0.1	0	0.0
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	61,791	9.9	56,294	91.1
41	Pots and Traps, Fish	OPEN	all	MA	all	208	<0.1	0	0.0
42	Pots and Traps, Fish	OPEN	all	NE	all	86	<0.1	0	0.0
43	Pots and Traps, Conch	OPEN	all	MA	all	1,280	0.2	0	0.0
44	Pots and Traps, Conch	OPEN	all	NE	all	387	0.1	0	0.0
45	Pots and Traps, Hagfish	OPEN	all	NE	all	313	0.1	0	0.0
46	Pots and Traps, Shrimp	OPEN	all	NE	all	1	<0.1	0	0.0
47	Pots and Traps, Lobster	OPEN	all	MA	all	871	0.1	0	0.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	11,568	1.9	4,896	42.3
49	Pots and Traps, Crab	OPEN	all	MA	all	92	<0.1	0	0.0
50	Pots and Traps, Crab	OPEN	all	NE	all	1,393	0.2	0	0.0
51	Beam Trawl	OPEN	all	MA	all	53	<0.1	0	0.0
53	Dredge, Other	OPEN	all	MA	all	96	<0.1	0	0.0
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	113,082	18.1	0	0.0

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 2012 through June 2013 data.

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
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	109,469	17.5	0	0.0
56	Otter Trawl	OPEN	all	NE	smR	166	<0.1	131	78.9
	Confidential fleets					3,078	0.5	0	0.0
	Other minor fleets					616	0.1	0	0.0
					Total	**625,038**	**100.0**	**325,068**	**52.0**

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: ATLANTIC SALMON (Salmo salar)

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
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	49	0	49	0.928	45	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	0	0	0			
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0			

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: ATLANTIC SALMON (Salmo salar)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	49	0	49	0.928	45	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: BLUEFISH (Pomatomus saltatrix)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	710	710				P
2	Longline	OPEN	all	NE	all	159	78	81	0.615	50	
3	Hand Line	OPEN	all	MA	all	126,708	126,708	0			P
4	Hand Line	OPEN	all	NE	all	46,037	45,386	651	1.941	1,263	
5	Otter Trawl	OPEN	all	MA	sm	409,398	273,448	135,950	0.588	79,884	
6	Otter Trawl	OPEN	all	MA	lg	167,577	166,261	1,316	0.466	612	
7	Otter Trawl	OPEN	all	NE	sm	241,237	239,843	1,394	0.749	1,044	
8	Otter Trawl	OPEN	all	NE	lg	78,374	70,565	7,809	0.262	2,042	
11	Scallop Trawl	OPEN	GEN	MA	all	785	785	0			
12	Scallop Trawl	OPEN	LIM	MA	all	1,480	1,480				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	668	668				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
18	Shrimp Trawl	OPEN	all	MA	all	153	153				P
19	Shrimp Trawl	OPEN	all	NE	all	155	155	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	225,109	225,109				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	525,248	525,248	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	25,741	13,654	12,087	0.468	5,653	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	170	170				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	155,801	148,871	6,930	0.266	1,845	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	16,848	4,447	12,401	0.171	2,120	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	0	0	0			
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: BLUEFISH (Pomatomus saltatrix)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0			
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	2,714	0	2,714	0.686	1,863	
41	Pots and Traps, Fish	OPEN	all	MA	all	1,428	1,428				P
42	Pots and Traps, Fish	OPEN	all	NE	all	251	251				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	817	817				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	70	70	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	695	695				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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					49,638	49,638				
	Other minor fleets					12,440	12,440				
					TOTAL	2,090,410	1,909,078	181,332	0.442	80,200	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	523	523				P
2	Longline	OPEN	all	NE	all	40	0	40	0.828	33	
3	Hand Line	OPEN	all	MA	all	245,550	245,550	0			P
4	Hand Line	OPEN	all	NE	all	20,831	20,723	108	1.941	210	
5	Otter Trawl	OPEN	all	MA	sm	7,827,127	5,123,143	2,703,984	0.167	451,499	
6	Otter Trawl	OPEN	all	MA	lg	12,215,829	11,733,080	482,749	0.225	108,612	
7	Otter Trawl	OPEN	all	NE	sm	5,322,169	4,850,927	471,242	0.529	249,460	
8	Otter Trawl	OPEN	all	NE	lg	4,325,235	3,766,615	558,620	0.161	89,909	
11	Scallop Trawl	OPEN	GEN	MA	all	31,431	27,960	3,471	0.391	1,358	
12	Scallop Trawl	OPEN	LIM	MA	all	55,030	55,030				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	16,761	16,761				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	879	875	4	1.388	5	
18	Shrimp Trawl	OPEN	all	MA	all	563	563				P
19	Shrimp Trawl	OPEN	all	NE	all	4,168	4,163	5	0.983	4	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1,615	1,615				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	9,261	8,537	724	0.347	251	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	43,644	18,536	25,108	0.363	9,112	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	90	90				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	89,302	88,444	858	0.220	189	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	149,166	30,756	118,410	0.243	28,798	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	737	379	358	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	346	0	346	0.885	306	P
32	Scallop Dredge	AA	LIM	MA	all	73,903	13,316	60,587	0.233	14,134	
33	Scallop Dredge	AA	LIM	NE	all	216,026	355	215,671	0.156	33,580	
34	Scallop Dredge	OPEN	GEN	MA	all	53,538	28,113	25,425	0.302	7,678	
35	Scallop Dredge	OPEN	GEN	NE	all	1,116	100	1,016	0.706	717	
36	Scallop Dredge	OPEN	LIM	MA	all	181,604	19,364	162,240	0.253	40,970	
37	Scallop Dredge	OPEN	LIM	NE	all	133,815	4,550	129,265	0.220	28,404	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	2,000	2,000	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	289,011	289,011				P
42	Pots and Traps, Fish	OPEN	all	NE	all	176,090	176,090				P
43	Pots and Traps, Conch	OPEN	all	MA	all	170	170				P
44	Pots and Traps, Conch	OPEN	all	NE	all	100	100				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	78,970	78,970				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	17,263	14,337	2,926	1.002	2,931	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	25,552	25,552				P
53	Dredge, Other	OPEN	all	MA	all	2,492	2,492				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	30	30				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl	OPEN	all	NE	smR	3	0	3	0.290	1	
	Confidential fleets					7,928	7,928				
	Other minor fleets					2,955	2,955				
					TOTAL	31,622,862	26,659,703	4,963,159	0.109	539,219	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: HERRING, ATLANTIC (Clupea harengus)

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	58	58	0			P
4	Hand Line	OPEN	all	NE	all	715	715	0			
5	Otter Trawl	OPEN	all	MA	sm	406,890	368,104	38,786	0.489	18,973	
6	Otter Trawl	OPEN	all	MA	lg	9,425	8,301	1,124	0.715	804	
7	Otter Trawl	OPEN	all	NE	sm	14,277,056	14,130,466	146,590	0.780	114,412	
8	Otter Trawl	OPEN	all	NE	lg	34,973	6,781	28,192	0.238	6,721	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	110	0	110	0.433	47	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	398,521	366,005	32,516	0.367	11,932	
21	Floating Trap	OPEN	all	NE	all	1,150	1,150				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	167	167				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	109	109	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	3	3	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	8,773	150	8,623	0.315	2,716	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	41,933,014	41,932,360	654	1.012	662	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	6	0	6	0.955	5	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	135	0	135	0.660	89	
37	Scallop Dredge	OPEN	LIM	NE	all	22	0	22	0.528	12	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: HERRING, ATLANTIC (Clupea harengus)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	1,728,398	1,728,395	3	0.000	0	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	128,497,448	128,443,488	53,960	0.633	34,179	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	2	0	2	0.213	<1	
	Confidential fleets					1,082,500	1,082,500				
	Other minor fleets					19,550	19,550				
					TOTAL	188,399,024	188,088,302	310,722	0.392	121,714	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: LARGE MESH GROUNDFISH

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	18	18				P
2	Longline	OPEN	all	NE	all	107,605	77,706	29,899	0.250	7,460	
3	Hand Line	OPEN	all	MA	all	4,711	4,711	0			P
4	Hand Line	OPEN	all	NE	all	112,887	62,753	50,134	0.351	17,615	
5	Otter Trawl	OPEN	all	MA	sm	1,196,587	7,084	1,189,503	0.314	373,086	
6	Otter Trawl	OPEN	all	MA	lg	1,357,626	391,464	966,162	0.147	141,759	
7	Otter Trawl	OPEN	all	NE	sm	307,322	61,903	245,419	0.393	96,454	
8	Otter Trawl	OPEN	all	NE	lg	39,197,967	34,862,286	4,335,681	0.059	255,042	
11	Scallop Trawl	OPEN	GEN	MA	all	8,434	81	8,353	0.375	3,132	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	4	4				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	445,261	394,384	50,877	0.372	18,920	
18	Shrimp Trawl	OPEN	all	MA	all	20	20				P
19	Shrimp Trawl	OPEN	all	NE	all	19,259	125	19,134	0.303	5,789	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	64	64				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,495	1,495	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	703	660	43	1.052	46	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	5,960,390	5,678,654	281,736	0.057	16,060	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	133,016	92,544	40,472	0.222	8,969	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	86	0	86	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	633	0	633	0.379	240	P
32	Scallop Dredge	AA	LIM	MA	all	82,251	1,813	80,438	0.296	23,800	
33	Scallop Dredge	AA	LIM	NE	all	613,115	43,636	569,479	0.138	78,595	
34	Scallop Dredge	OPEN	GEN	MA	all	56,545	262	56,283	0.205	11,518	
35	Scallop Dredge	OPEN	GEN	NE	all	25,935	5	25,930	0.250	6,477	
36	Scallop Dredge	OPEN	LIM	MA	all	123,326	3,964	119,362	0.199	23,713	
37	Scallop Dredge	OPEN	LIM	NE	all	627,157	9,268	617,889	0.092	56,949	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: LARGE MESH GROUNDFISH

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	309,164	276,605	32,559	0.572	18,621	
41	Pots and Traps, Fish	OPEN	all	MA	all	487	487				P
42	Pots and Traps, Fish	OPEN	all	NE	all	58	58				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	488	488				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	421,949	2,070	419,879	0.694	291,368	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	100	100				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	OPEN	all	NE	smR	368,575	355,186	13,389	0.108	1,441	
	Confidential fleets					9,375	9,375				
	Other minor fleets					290	290				
					TOTAL	51,492,904	42,339,563	9,153,341	0.063	575,076	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: MONKFISH (Lophius americanus)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	45	45				P
2	Longline	OPEN	all	NE	all	544	544	0			
3	Hand Line	OPEN	all	MA	all	183	183	0			P
4	Hand Line	OPEN	all	NE	all	0	0	0			
5	Otter Trawl	OPEN	all	MA	sm	382,140	83,300	298,839	0.192	57,275	
6	Otter Trawl	OPEN	all	MA	lg	886,771	404,415	482,356	0.456	220,060	
7	Otter Trawl	OPEN	all	NE	sm	183,030	130,759	52,271	0.610	31,879	
8	Otter Trawl	OPEN	all	NE	lg	7,006,093	6,191,645	814,448	0.059	47,689	
11	Scallop Trawl	OPEN	GEN	MA	all	21,258	6,633	14,624	0.335	4,897	
12	Scallop Trawl	OPEN	LIM	MA	all	4,966	4,966				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	687	687				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	12,447	12,129	318	0.446	142	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	447	0	447	0.780	348	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	5,695	5,695				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	24,511	24,511	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2,907,585	2,769,007	138,578	0.274	37,926	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	3,928	3,928				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	323,260	312,907	10,354	0.078	803	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	2,996,343	2,748,403	247,941	0.155	38,398	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	2,588	404	2,184	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	1,553	542	1,011	0.374	378	P
32	Scallop Dredge	AA	LIM	MA	all	549,574	54,082	495,492	0.142	70,405	
33	Scallop Dredge	AA	LIM	NE	all	1,814,476	311,116	1,503,360	0.119	178,291	
34	Scallop Dredge	OPEN	GEN	MA	all	152,965	71,187	81,778	0.253	20,679	
35	Scallop Dredge	OPEN	GEN	NE	all	20,400	8,508	11,892	0.291	3,462	
36	Scallop Dredge	OPEN	LIM	MA	all	568,259	96,770	471,489	0.201	94,625	
37	Scallop Dredge	OPEN	LIM	NE	all	1,595,573	155,385	1,440,189	0.250	360,450	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: MONKFISH (Lophius americanus)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	200	0	200	0.525	105	
41	Pots and Traps, Fish	OPEN	all	MA	all	830	830				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	53	53				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	2,200	35	2,165	0.760	1,644	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	1,251	1,251				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	25,833	25,833				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	5,221	5,221				P
56	Otter Trawl	OPEN	all	NE	smR	2,288	2,192	96	0.166	16	
	Confidential fleets					6,504	6,504				
	Other minor fleets					350	350				
					TOTAL	19,510,050	13,440,020	6,070,030	0.080	483,736	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: RED CRAB (Chaceon quinquedens)

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	489,527	25	489,502	0.497	243,492	
6	Otter Trawl	OPEN	all	MA	lg	7,490	0	7,490	0.683	5,115	
7	Otter Trawl	OPEN	all	NE	sm	13	0	13	1.010	14	
8	Otter Trawl	OPEN	all	NE	lg	235,459	0	235,459	0.483	113,694	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4	0	4	1.407	6	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	172	0	172	0.469	80	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	45	0	45	0.841	38	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	1,574	0	1,574	0.955	1,503	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: RED CRAB (Chaceon quinquedens)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,329	75	1,254	0.799	1,003	
49	Pots and Traps, Crab	OPEN	all	MA	all	117,098	117,098				P
50	Pots and Traps, Crab	OPEN	all	NE	all	2,701,906	2,701,906				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	OPEN	all	NE	smR	0	0	<1	0.324	<1	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	3,554,618	2,819,104	735,514	0.365	268,782	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SEA SCALLOP (Placopecten magellanicus)

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	7	0	7	0.755	5	
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	54,479	10,079	44,400	0.481	21,356	
6	Otter Trawl	OPEN	all	MA	lg	1,588,121	1,532,179	55,942	0.484	27,091	
7	Otter Trawl	OPEN	all	NE	sm	226,715	207,942	18,774	0.885	16,608	
8	Otter Trawl	OPEN	all	NE	lg	653,715	515,944	137,772	0.273	37,607	
11	Scallop Trawl	OPEN	GEN	MA	all	1,299,985	1,254,423	45,562	0.534	24,317	
12	Scallop Trawl	OPEN	LIM	MA	all	361,230	361,230				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	4,998	4,998				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	417	417	0			
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	5,230	3,557	1,673	0.341	570	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	4,082	4,082				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	590	117	473	0.756	358	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1,879	0	1,879	0.541	1,017	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	622	0	622	0.292	182	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	154,218	147,058	7,160	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	614,632	575,511	39,121	0.260	10,158	P
32	Scallop Dredge	AA	LIM	MA	all	30,683,136	29,377,977	1,305,158	0.163	212,259	
33	Scallop Dredge	AA	LIM	NE	all	81,458,241	77,849,823	3,608,418	0.167	603,953	
34	Scallop Dredge	OPEN	GEN	MA	all	11,714,566	11,636,502	78,064	0.491	38,325	
35	Scallop Dredge	OPEN	GEN	NE	all	13,491,619	12,890,463	601,155	0.182	109,684	
36	Scallop Dredge	OPEN	LIM	MA	all	48,383,934	46,546,824	1,837,110	0.500	918,947	
37	Scallop Dredge	OPEN	LIM	NE	all	224,428,256	213,565,848	10,862,408	0.172	1,873,517	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SEA SCALLOP (Placopecten magellanicus)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	87	0	87	2.552	222	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	30,263	30,263				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	694,347	694,347				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	382,480	382,480				P
56	Otter Trawl	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					469,895	469,895				
	Other minor fleets					754,890	754,890				
					TOTAL	417,462,632	398,816,848	18,645,785	0.117	2,186,645	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	114	114				P
2	Longline	OPEN	all	NE	all	78,559	15,503	63,056	0.395	24,892	
3	Hand Line	OPEN	all	MA	all	66	66	0			P
4	Hand Line	OPEN	all	NE	all	598	598	0			
5	Otter Trawl	OPEN	all	MA	sm	11,752,600	315,471	11,437,129	0.300	3,434,184	
6	Otter Trawl	OPEN	all	MA	lg	16,946,989	1,616,606	15,330,383	0.125	1,910,335	
7	Otter Trawl	OPEN	all	NE	sm	1,260,888	250,538	1,010,350	0.440	444,225	
8	Otter Trawl	OPEN	all	NE	lg	42,629,598	12,437,209	30,192,389	0.082	2,475,479	
11	Scallop Trawl	OPEN	GEN	MA	all	985,181	27,403	957,778	0.817	782,685	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	49,619	31,403	18,216	0.230	4,189	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	1,335	0	1,335	0.609	814	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	7,942	7,942				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	70,788	67,835	2,953	0.255	752	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	3,088,691	2,549,915	538,776	0.369	198,688	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	2,357	2,357				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	427,225	262,573	164,652	0.053	8,754	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	11,866,625	9,497,294	2,369,330	0.163	385,770	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	9,186	0	9,186	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	16,098	0	16,098	0.482	7,759	P
32	Scallop Dredge	AA	LIM	MA	all	1,369,177	0	1,369,177	0.130	178,146	
33	Scallop Dredge	AA	LIM	NE	all	4,671,428	0	4,671,428	0.086	400,376	
34	Scallop Dredge	OPEN	GEN	MA	all	1,960,238	29,621	1,930,617	0.240	463,448	
35	Scallop Dredge	OPEN	GEN	NE	all	140,950	0	140,950	0.162	22,786	
36	Scallop Dredge	OPEN	LIM	MA	all	3,249,081	3,379	3,245,702	0.200	650,211	
37	Scallop Dredge	OPEN	LIM	NE	all	4,955,705	0	4,955,705	0.150	741,237	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	126	0	126	0.445	56	
41	Pots and Traps, Fish	OPEN	all	MA	all	9	9				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	2,238	2,238	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	21,237	21,237				P
53	Dredge, Other	OPEN	all	MA	all	220	220				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	OPEN	all	NE	smR	2,687	590	2,097	0.167	351	
	Confidential fleets					130	130				
	Other minor fleets					140	140				
					TOTAL	105,567,824	27,140,390	78,427,433	0.062	4,893,827	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SMALL MESH GROUNDFISH

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	56	56				P
2	Longline	OPEN	all	NE	all	446	33	413	0.417	172	
3	Hand Line	OPEN	all	MA	all	3,277	3,277	0			P
4	Hand Line	OPEN	all	NE	all	246	246	0			
5	Otter Trawl	OPEN	all	MA	sm	5,935,819	4,567,082	1,368,737	0.486	664,941	
6	Otter Trawl	OPEN	all	MA	lg	130,288	110,975	19,313	0.256	4,938	
7	Otter Trawl	OPEN	all	NE	sm	11,722,168	9,742,646	1,979,522	0.469	928,166	
8	Otter Trawl	OPEN	all	NE	lg	734,592	255,022	479,570	0.106	51,004	
11	Scallop Trawl	OPEN	GEN	MA	all	2,397	418	1,979	0.697	1,380	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	5,138	500	4,638	0.229	1,061	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	229,742	96,235	133,507	0.290	38,674	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	483	483				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,114	1,114	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	65	65	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	91,538	56,850	34,688	0.119	4,143	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	4,120	3,592	528	0.314	166	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	1	0	1	0.944	1	
30	Scallop Dredge	AA	GEN	MA	all	48	0	48	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	768	0	768	0.234	180	P
32	Scallop Dredge	AA	LIM	MA	all	33,812	0	33,812	0.365	12,326	
33	Scallop Dredge	AA	LIM	NE	all	78,845	0	78,845	0.122	9,639	
34	Scallop Dredge	OPEN	GEN	MA	all	1,185	20	1,165	0.291	339	
35	Scallop Dredge	OPEN	GEN	NE	all	1,122	0	1,122	0.445	499	
36	Scallop Dredge	OPEN	LIM	MA	all	6,630	0	6,630	0.264	1,748	
37	Scallop Dredge	OPEN	LIM	NE	all	86,632	0	86,632	0.244	21,119	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SMALL MESH GROUNDFISH

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	473	0	473	0.640	303	
41	Pots and Traps, Fish	OPEN	all	MA	all	6,345	6,345				P
42	Pots and Traps, Fish	OPEN	all	NE	all	85	85				P
43	Pots and Traps, Conch	OPEN	all	MA	all	789	789				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	19,848	19,848				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	54,617	15,753	38,864	0.699	27,181	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	1,161	1,161				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	OPEN	all	NE	smR	672	335	337	0.156	53	
	Confidential fleets					205	205				
	Other minor fleets					330	330				
					TOTAL	19,155,055	14,883,465	4,271,590	0.268	1,144,209	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SPINY DOGFISH (Squalus acanthias)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	44,388	44,388				P
2	Longline	OPEN	all	NE	all	2,492,991	2,394,538	98,453	0.123	12,158	
3	Hand Line	OPEN	all	MA	all	801	801	0			P
4	Hand Line	OPEN	all	NE	all	606,045	596,295	9,750	0.480	4,678	
5	Otter Trawl	OPEN	all	MA	sm	5,650,876	388,016	5,262,860	0.148	777,992	
6	Otter Trawl	OPEN	all	MA	lg	1,971,688	460,385	1,511,303	0.252	380,151	
7	Otter Trawl	OPEN	all	NE	sm	1,081,407	405,890	675,517	0.685	462,467	
8	Otter Trawl	OPEN	all	NE	lg	6,565,184	816,660	5,748,524	0.072	414,798	
11	Scallop Trawl	OPEN	GEN	MA	all	37,113	0	37,113	0.415	15,397	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	58,822	2,350	56,472	0.761	42,961	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	1,640	1,640	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	489,296	489,296				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	3,827,964	3,825,358	2,606	0.277	722	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	268,357	124,157	144,200	0.373	53,823	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	100	100				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	12,029,496	7,833,585	4,195,911	0.075	312,874	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	893,434	739,782	153,652	0.169	25,893	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	89	0	89	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	105	0	105	0.664	70	P
32	Scallop Dredge	AA	LIM	MA	all	50,894	0	50,894	0.233	11,873	
33	Scallop Dredge	AA	LIM	NE	all	73,320	400	72,920	0.215	15,665	
34	Scallop Dredge	OPEN	GEN	MA	all	9,572	2,780	6,792	0.476	3,232	
35	Scallop Dredge	OPEN	GEN	NE	all	9,106	0	9,106	0.902	8,211	
36	Scallop Dredge	OPEN	LIM	MA	all	79,574	0	79,574	0.266	21,180	
37	Scallop Dredge	OPEN	LIM	NE	all	141,624	400	141,224	0.311	43,908	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: SPINY DOGFISH (Squalus acanthias)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	87,530	0	87,530	0.342	29,946	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	500	500				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	38,511	454	38,057	0.783	29,800	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	6,023	6,023				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	OPEN	all	NE	smR	17,476	5,500	11,976	0.159	1,909	
	Confidential fleets					0	0				
	Other minor fleets					17	17				
					TOTAL	36,533,941	18,139,315	18,394,626	0.061	1,115,374	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

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	1	0			
3	Hand Line	OPEN	all	MA	all	33	33	0			P
4	Hand Line	OPEN	all	NE	all	1,570	1,570	0			
5	Otter Trawl	OPEN	all	MA	sm	21,378,566	20,287,727	1,090,839	0.384	418,814	
6	Otter Trawl	OPEN	all	MA	lg	511,009	495,936	15,073	0.332	5,008	
7	Otter Trawl	OPEN	all	NE	sm	18,380,546	17,452,363	928,183	0.424	393,261	
8	Otter Trawl	OPEN	all	NE	lg	326,603	272,308	54,295	0.096	5,211	
11	Scallop Trawl	OPEN	GEN	MA	all	749	685	64	0.410	26	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	2	2				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	650	0	650	0.316	205	
18	Shrimp Trawl	OPEN	all	MA	all	1,251	1,251				P
19	Shrimp Trawl	OPEN	all	NE	all	30,853	7,279	23,574	0.991	23,363	
21	Floating Trap	OPEN	all	NE	all	13,196	13,196				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	20,799	20,799				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,387	1,387	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	127	127	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	12,788	8,947	3,841	0.167	642	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1,134	1,081	53	0.593	32	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	18	0	18	0.549	10	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	31	0	31	0.307	10	P
32	Scallop Dredge	AA	LIM	MA	all	2,065	0	2,065	0.389	803	
33	Scallop Dredge	AA	LIM	NE	all	1,067	50	1,017	0.223	227	
34	Scallop Dredge	OPEN	GEN	MA	all	1,019	446	573	0.553	317	
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	3,607	50	3,557	0.525	1,868	
37	Scallop Dredge	OPEN	LIM	NE	all	733	20	713	0.417	297	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	33,205	33,200	5	0.000	0	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	7,446,733	7,446,525	208	0.349	73	
41	Pots and Traps, Fish	OPEN	all	MA	all	1,436	1,436				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,603	1,352	251	0.799	201	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	1,881	1,881				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	OPEN	all	NE	smR	24	5	19	0.178	3	
	Confidential fleets					9,402	9,402				
	Other minor fleets					79,862	79,862				
					TOTAL	48,263,952	46,138,921	2,125,031	0.271	575,032	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

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	10	0	10	0.517	5	
6	Otter Trawl	OPEN	all	MA	lg	2,707	0	2,707	0.733	1,983	
7	Otter Trawl	OPEN	all	NE	sm	0	0	0			
8	Otter Trawl	OPEN	all	NE	lg	457	0	457	0.477	218	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0			
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	26,215	0	26,215	0.933	24,468	
33	Scallop Dredge	AA	LIM	NE	all	93,817	0	93,817	0.916	85,923	
34	Scallop Dredge	OPEN	GEN	MA	all	3,851	20	3,831	1.043	3,997	
35	Scallop Dredge	OPEN	GEN	NE	all	2,845	0	2,845	0.550	1,565	
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	4,701	0	4,701	0.534	2,508	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

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

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	248,578,514	248,578,514				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	240,636,604	240,636,604				P
56	Otter Trawl	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					45,139	45,139				
					TOTAL	489,394,861	489,260,278	134,583	0.665	89,499	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: TILEFISH (Lopholatilus chamaeleonticeps)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	1,786,679	1,786,679				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	8,750	8,750	0			P
4	Hand Line	OPEN	all	NE	all	0	0	0			
5	Otter Trawl	OPEN	all	MA	sm	8,695	6,543	2,152	0.699	1,504	
6	Otter Trawl	OPEN	all	MA	lg	6,333	5,564	769	0.973	748	
7	Otter Trawl	OPEN	all	NE	sm	9,847	9,270	577	1.004	580	
8	Otter Trawl	OPEN	all	NE	lg	5,267	5,267	0			
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	110	110				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	144	144	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0			
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	5,695	2,487	3,208	0.361	1,158	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	0	0	0			
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	12	0	12	1.040	12	

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 2012 through June 2013 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 estimated or discards equals 0. "P" indicates fleets with "pilot" designation.

Species Group: TILEFISH (Lopholatilus chamaeleonticeps)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	98	98				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	16	16				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	35	35	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					250	250				
					TOTAL	1,831,931	1,825,213	6,718	0.316	2,121	

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 2012 through June 2013 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 Group: BLACK SEA BASS (Centropristis striata)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	501	501				P
2	Longline	OPEN	all	NE	all	40	0	40	0.828	33	
3	Hand Line	OPEN	all	MA	all	80,806	80,806	0			P
4	Hand Line	OPEN	all	NE	all	1,412	1,304	108	1.941	210	
5	Otter Trawl	OPEN	all	MA	sm	845,481	373,968	471,513	0.182	86,045	
6	Otter Trawl	OPEN	all	MA	lg	399,772	351,016	48,756	0.312	15,217	
7	Otter Trawl	OPEN	all	NE	sm	127,114	67,821	59,293	0.487	28,904	
8	Otter Trawl	OPEN	all	NE	lg	56,001	31,855	24,146	0.202	4,868	
11	Scallop Trawl	OPEN	GEN	MA	all	719	658	61	0.515	31	
12	Scallop Trawl	OPEN	LIM	MA	all	2,830	2,830				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	1,048	1,048				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4	0	4	1.388	5	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	177	177				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	77	77	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	1,428	1,428	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	4,584	4,563	21	0.662	14	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	213	83	130	0.556	72	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	11	0	11	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	1,297	69	1,228	0.369	453	
33	Scallop Dredge	AA	LIM	NE	all	1,485	0	1,485	0.549	815	
34	Scallop Dredge	OPEN	GEN	MA	all	436	350	86	0.829	72	
35	Scallop Dredge	OPEN	GEN	NE	all	11	0	11	1.351	15	
36	Scallop Dredge	OPEN	LIM	MA	all	2,184	142	2,042	0.430	878	
37	Scallop Dredge	OPEN	LIM	NE	all	557	0	557	0.448	250	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	274,789	274,789				P
42	Pots and Traps, Fish	OPEN	all	NE	all	35,213	35,213				P
43	Pots and Traps, Conch	OPEN	all	MA	all	170	170				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	77,260	77,260				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	12,297	9,371	2,926	1.002	2,931	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	98	98				P
53	Dredge, Other	OPEN	all	MA	all	0	0				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	30	30				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0	0				P
56	Otter Trawl	OPEN	all	NE	smR	0	0	0	0.292	0	
	Confidential fleets					92	92				
	Other minor fleets					50	50				
					TOTAL	1,928,189	1,315,769	612,420	0.151	92,221	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	22	22				P
2	Longline	OPEN	all	NE	all	0	0	0			
3	Hand Line	OPEN	all	MA	all	53,447	53,447	0			P
4	Hand Line	OPEN	all	NE	all	17,445	17,445	0			
5	Otter Trawl	OPEN	all	MA	sm	670,690	383,763	286,927	0.190	54,631	
6	Otter Trawl	OPEN	all	MA	lg	8,563,337	8,356,254	207,083	0.211	43,707	
7	Otter Trawl	OPEN	all	NE	sm	646,897	589,000	57,897	0.467	27,024	
8	Otter Trawl	OPEN	all	NE	lg	2,171,240	1,708,604	462,636	0.186	85,931	
11	Scallop Trawl	OPEN	GEN	MA	all	24,084	20,700	3,384	0.392	1,328	
12	Scallop Trawl	OPEN	LIM	MA	all	50,100	50,100				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	14,703	14,703				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	875	875	0			
18	Shrimp Trawl	OPEN	all	MA	all	563	563				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	724	724				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	8,357	7,633	724	0.347	251	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	41,913	16,805	25,108	0.363	9,112	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	90	90				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	24,989	24,164	825	0.228	188	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	147,962	29,748	118,214	0.244	28,804	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	725	379	346	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	346	0	346	0.885	306	P
32	Scallop Dredge	AA	LIM	MA	all	71,700	13,247	58,453	0.233	13,615	
33	Scallop Dredge	AA	LIM	NE	all	214,012	355	213,657	0.156	33,296	
34	Scallop Dredge	OPEN	GEN	MA	all	53,036	27,721	25,315	0.303	7,667	
35	Scallop Dredge	OPEN	GEN	NE	all	1,105	100	1,005	0.714	717	
36	Scallop Dredge	OPEN	LIM	MA	all	178,994	19,222	159,772	0.255	40,792	
37	Scallop Dredge	OPEN	LIM	NE	all	128,854	219	128,635	0.220	28,309	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	2,231	2,231				P
42	Pots and Traps, Fish	OPEN	all	NE	all	2,405	2,405				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	780	780				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	210	210	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	22,713	22,713				P
53	Dredge, Other	OPEN	all	MA	all	2,492	2,492				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	OPEN	all	NE	smR	3	0	3	0.323	1	
	Confidential fleets					6,997	6,997				
	Other minor fleets					621	621				
					TOTAL	13,124,663	11,374,332	1,750,331	0.076	133,201	

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 2012 through June 2013 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)

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	111,297	111,297	0			P
4	Hand Line	OPEN	all	NE	all	1,974	1,974	0			
5	Otter Trawl	OPEN	all	MA	sm	6,310,955	4,365,412	1,945,543	0.180	350,504	
6	Otter Trawl	OPEN	all	MA	lg	3,252,720	3,025,810	226,910	0.329	74,669	
7	Otter Trawl	OPEN	all	NE	sm	4,548,158	4,194,106	354,052	0.605	214,371	
8	Otter Trawl	OPEN	all	NE	lg	2,097,993	2,026,156	71,837	0.282	20,283	
11	Scallop Trawl	OPEN	GEN	MA	all	6,628	6,602	26	0.442	12	
12	Scallop Trawl	OPEN	LIM	MA	all	2,100	2,100				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	1,010	1,010				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	4,168	4,163	5	0.983	4	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	714	714				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	827	827	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	303	303	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	59,729	59,717	12	0.922	11	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	991	925	66	0.730	48	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	906	0	906	0.511	463	
33	Scallop Dredge	AA	LIM	NE	all	529	0	529	0.541	286	
34	Scallop Dredge	OPEN	GEN	MA	all	65	42	23	0.829	19	
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	426	0	426	0.559	238	
37	Scallop Dredge	OPEN	LIM	NE	all	4,404	4,331	73	0.897	65	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	2,000	2,000	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	11,991	11,991				P
42	Pots and Traps, Fish	OPEN	all	NE	all	138,472	138,472				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	100	100				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	930	930				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	4,756	4,756	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	2,741	2,741				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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					839	839				
	Other minor fleets					2,284	2,284				
					TOTAL	16,570,010	13,969,602	2,600,408	0.161	418,085	

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 2012 through June 2013 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)

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	141	141	0			
3	Hand Line	OPEN	all	MA	all	2	2	0			P
4	Hand Line	OPEN	all	NE	all	0	0	0			
5	Otter Trawl	OPEN	all	MA	sm	2,476	33	2,443	0.353	862	
6	Otter Trawl	OPEN	all	MA	lg	11,940	704	11,236	0.728	8,180	
7	Otter Trawl	OPEN	all	NE	sm	27,808	146	27,662	0.498	13,770	
8	Otter Trawl	OPEN	all	NE	lg	3,231,605	2,738,282	493,323	0.050	24,729	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	7,369	6,957	412	0.638	263	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	4,986	0	4,986	0.367	1,831	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	29,014	22,304	6,710	0.102	684	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	820	802	18	0.983	18	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	387	0	387	0.472	183	
33	Scallop Dredge	AA	LIM	NE	all	7,755	0	7,755	0.499	3,873	
34	Scallop Dredge	OPEN	GEN	MA	all	50	0	50	0.817	41	
35	Scallop Dredge	OPEN	GEN	NE	all	646	0	646	0.590	381	
36	Scallop Dredge	OPEN	LIM	MA	all	1,102	0	1,102	0.999	1,101	
37	Scallop Dredge	OPEN	LIM	NE	all	12,670	20	12,650	0.398	5,036	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	1	0	1	0.687	1	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	33	0	33	1.329	43	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	361	279	82	0.122	10	
	Confidential fleets					2	2				
	Other minor fleets					0	0				
					TOTAL	3,339,169	2,769,672	569,497	0.053	30,240	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	9	9				P
2	Longline	OPEN	all	NE	all	69,660	42,801	26,859	0.265	7,123	
3	Hand Line	OPEN	all	MA	all	3,852	3,852	0			P
4	Hand Line	OPEN	all	NE	all	37,562	24,710	12,852	0.886	11,385	
5	Otter Trawl	OPEN	all	MA	sm	2,434	1,077	1,357	0.346	469	
6	Otter Trawl	OPEN	all	MA	lg	27,844	24,565	3,279	0.515	1,690	
7	Otter Trawl	OPEN	all	NE	sm	11,790	1,389	10,401	0.485	5,042	
8	Otter Trawl	OPEN	all	NE	lg	4,277,947	3,878,476	399,471	0.105	42,047	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	3	3				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	19,884	15,925	3,959	0.454	1,798	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	200	100	100	0.942	94	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	7	7				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	305	305	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	282	282	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1,497,925	1,429,774	68,151	0.051	3,452	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	22,115	15,835	6,280	0.272	1,705	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	182	0	182	0.538	98	
33	Scallop Dredge	AA	LIM	NE	all	3,357	0	3,357	0.195	654	
34	Scallop Dredge	OPEN	GEN	MA	all	17	0	17	0.817	14	
35	Scallop Dredge	OPEN	GEN	NE	all	459	0	459	0.772	354	
36	Scallop Dredge	OPEN	LIM	MA	all	191	72	119	0.822	98	
37	Scallop Dredge	OPEN	LIM	NE	all	9,457	10	9,447	0.203	1,920	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	199	0	199	0.517	103	
41	Pots and Traps, Fish	OPEN	all	MA	all	486	486				P
42	Pots and Traps, Fish	OPEN	all	NE	all	43	43				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	255	255				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	258,662	669	257,993	0.912	235,365	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	965	730	235	0.133	31	
	Confidential fleets					9	9				
	Other minor fleets					290	290				
					TOTAL	6,246,390	5,441,674	804,716	0.298	239,574	

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 2012 through June 2013 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)

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	1,393	1,312	81	0.987	80	
3	Hand Line	OPEN	all	MA	all	0	0	0			P
4	Hand Line	OPEN	all	NE	all	253	253	0			
5	Otter Trawl	OPEN	all	MA	sm	0	0	0			
6	Otter Trawl	OPEN	all	MA	lg	120	120	0			
7	Otter Trawl	OPEN	all	NE	sm	1,182	0	1,182	0.967	1,143	
8	Otter Trawl	OPEN	all	NE	lg	105,286	15,862	89,424	0.077	6,856	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	636	67	569	0.479	273	
18	Shrimp Trawl	OPEN	all	MA	all	20	20				P
19	Shrimp Trawl	OPEN	all	NE	all	23	0	23	1.006	23	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	27	27				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	76	76	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	9,402	2,392	7,010	0.129	906	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	20,884	1,177	19,707	0.319	6,293	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	46	0	46	0.925	42	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	169	0	169	0.525	89	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	51	51	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	207	101	106	0.169	18	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	139,775	21,458	118,317	0.080	9,424	

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 2012 through June 2013 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)

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	383	0	383	0.412	158	
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	506	0	506	0.946	479	
7	Otter Trawl	OPEN	all	NE	sm	20	0	20	1.857	37	
8	Otter Trawl	OPEN	all	NE	lg	43,615	0	43,615	0.103	4,471	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,027	0	7,027	0.127	892	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	130	0	130	0.665	86	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	101	0	101	0.918	92	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	436	0	436	1.029	449	
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	965	0	965	0.337	326	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	13	0	13	0.679	9	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	12	0	12	0.292	4	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	53,208	0	53,208	0.087	4,622	

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 2012 through June 2013 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)

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	28,691	26,477	2,214	0.322	712	
3	Hand Line	OPEN	all	MA	all	0	0	0			P
4	Hand Line	OPEN	all	NE	all	2,796	2,471	325	1.597	520	
5	Otter Trawl	OPEN	all	MA	sm	5,125	0	5,125	0.469	2,406	
6	Otter Trawl	OPEN	all	MA	lg	133	75	58	1.296	75	
7	Otter Trawl	OPEN	all	NE	sm	26,474	172	26,302	0.746	19,621	
8	Otter Trawl	OPEN	all	NE	lg	2,157,965	1,452,923	705,042	0.215	151,839	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	193,296	176,174	17,122	0.501	8,581	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	2,543	0	2,543	0.889	2,262	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	47,200	27,408	19,792	0.083	1,634	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	750	317	433	0.326	141	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	188	0	188	0.969	182	
33	Scallop Dredge	AA	LIM	NE	all	2,428	0	2,428	0.325	788	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	208	0	208	0.858	178	
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	4,259	0	4,259	0.383	1,632	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	307,852	276,505	31,347	0.592	18,545	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	272	0	272	2.490	676	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	2,049	1,663	386	0.131	50	
	Confidential fleets					8,869	8,869				
	Other minor fleets					0	0				
					TOTAL	2,791,098	1,973,054	818,044	0.189	154,518	

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 2012 through June 2013 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)

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	148	0	148	0.567	84	
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	12,204	0	12,204	0.212	2,592	
6	Otter Trawl	OPEN	all	MA	lg	24,735	0	24,735	0.437	10,798	
7	Otter Trawl	OPEN	all	NE	sm	6,900	0	6,900	1.017	7,018	
8	Otter Trawl	OPEN	all	NE	lg	90,810	0	90,810	0.124	11,220	
11	Scallop Trawl	OPEN	GEN	MA	all	726	0	726	0.672	488	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	38	0	38	1.066	40	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	9	0	9	0.995	9	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	144	18	126	0.587	74	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	45	0	45	0.307	14	P
32	Scallop Dredge	AA	LIM	MA	all	639	0	639	0.380	243	
33	Scallop Dredge	AA	LIM	NE	all	1,599	0	1,599	0.172	276	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	73	0	73	0.538	40	
36	Scallop Dredge	OPEN	LIM	MA	all	335	0	335	0.517	173	
37	Scallop Dredge	OPEN	LIM	NE	all	5,964	0	5,964	0.170	1,011	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	10	0	10	1.044	10	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	6,170	0	6,170	0.839	5,180	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	3	0	3	0.311	1	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	150,553	18	150,535	0.120	18,075	

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 2012 through June 2013 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)

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	4,217	4,025	192	0.374	72	
3	Hand Line	OPEN	all	MA	all	751	751	0			P
4	Hand Line	OPEN	all	NE	all	68,256	34,495	33,761	0.383	12,919	
5	Otter Trawl	OPEN	all	MA	sm	32	0	32	0.859	28	
6	Otter Trawl	OPEN	all	MA	lg	10	10	0			
7	Otter Trawl	OPEN	all	NE	sm	8,116	5,005	3,111	0.791	2,461	
8	Otter Trawl	OPEN	all	NE	lg	7,519,973	7,406,116	113,857	0.144	16,409	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	76,538	73,141	3,397	0.405	1,377	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	1,258	0	1,258	0.931	1,171	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	10	10	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3,121,882	3,009,078	112,804	0.093	10,508	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	67,071	55,774	11,297	0.336	3,797	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	8	0	8	0.971	8	
33	Scallop Dredge	AA	LIM	NE	all	0	0	0			
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	30	0	30	1.022	30	
37	Scallop Dredge	OPEN	LIM	NE	all	70	0	70	0.711	50	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	152	0	152	0.437	67	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	4	4	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	59,591	58,437	1,154	0.098	113	
	Confidential fleets					15	15				
	Other minor fleets					0	0				
					TOTAL	10,927,985	10,646,861	281,124	0.085	23,882	

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 2012 through June 2013 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)

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	194	192	2	0.988	2	
3	Hand Line	OPEN	all	MA	all	6	6	0			P
4	Hand Line	OPEN	all	NE	all	3,813	617	3,196	0.356	1,138	
5	Otter Trawl	OPEN	all	MA	sm	904	40	864	0.590	509	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0			
7	Otter Trawl	OPEN	all	NE	sm	43,661	42,017	1,644	0.825	1,357	
8	Otter Trawl	OPEN	all	NE	lg	8,483,789	7,614,842	868,947	0.150	130,359	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	89,855	65,202	24,653	0.486	11,992	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	1,026	0	1,026	0.779	799	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	100,158	93,372	6,786	0.269	1,823	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	122	122	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	0	0	0			
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0			

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	906	100	806	0.331	266	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	230	230				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,718	1	1,717	1.713	2,940	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	303,481	292,330	11,151	0.113	1,257	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	9,029,862	8,109,071	920,791	0.142	130,977	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	9	9				P
2	Longline	OPEN	all	NE	all	622	610	12	0.681	8	
3	Hand Line	OPEN	all	MA	all	8	8	0			P
4	Hand Line	OPEN	all	NE	all	168	168	0			
5	Otter Trawl	OPEN	all	MA	sm	808	418	390	0.390	152	
6	Otter Trawl	OPEN	all	MA	lg	3,585	1,788	1,797	0.876	1,575	
7	Otter Trawl	OPEN	all	NE	sm	8,953	7,673	1,280	0.817	1,046	
8	Otter Trawl	OPEN	all	NE	lg	2,823,305	2,794,339	28,966	0.206	5,965	
11	Scallop Trawl	OPEN	GEN	MA	all	1	1	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	23,298	23,250	48	0.955	46	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	5	0	5	1.026	5	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	530	530	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	20	20	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	848,150	811,469	36,681	0.121	4,421	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	16,448	14,054	2,394	0.308	738	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	23	0	23	0.948	22	P
32	Scallop Dredge	AA	LIM	MA	all	250	0	250	0.617	154	
33	Scallop Dredge	AA	LIM	NE	all	3,824	0	3,824	0.277	1,060	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	34	0	34	1.351	46	
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	1,350	5	1,345	0.354	477	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	126,589	1,323	125,266	1.288	161,399	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
53	Dredge, Other	OPEN	all	MA	all	100	100				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	OPEN	all	NE	smR	1,742	1,508	234	0.247	58	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	3,859,823	3,657,273	202,550	0.798	161,587	

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 2012 through June 2013 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)

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	0	1	1.130	1	
3	Hand Line	OPEN	all	MA	all	84	84	0			P
4	Hand Line	OPEN	all	NE	all	1	1	0			
5	Otter Trawl	OPEN	all	MA	sm	516,695	1,526	515,169	0.637	328,080	
6	Otter Trawl	OPEN	all	MA	lg	713,481	8,884	704,597	0.154	108,189	
7	Otter Trawl	OPEN	all	NE	sm	32,374	0	32,374	0.680	22,023	
8	Otter Trawl	OPEN	all	NE	lg	698,357	0	698,357	0.144	100,853	
11	Scallop Trawl	OPEN	GEN	MA	all	3,321	0	3,321	0.793	2,634	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	54	0	54	1.023	55	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	1,413	0	1,413	0.330	466	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	30	30				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	454	454	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	117	74	43	1.052	46	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1,424	4	1,420	0.155	221	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	97	0	97	0.697	67	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	321	0	321	0.724	232	P
32	Scallop Dredge	AA	LIM	MA	all	11,400	0	11,400	0.291	3,313	
33	Scallop Dredge	AA	LIM	NE	all	166,523	0	166,523	0.310	51,566	
34	Scallop Dredge	OPEN	GEN	MA	all	45,860	195	45,665	0.250	11,401	
35	Scallop Dredge	OPEN	GEN	NE	all	3,042	0	3,042	0.263	799	
36	Scallop Dredge	OPEN	LIM	MA	all	73,560	0	73,560	0.240	17,660	
37	Scallop Dredge	OPEN	LIM	NE	all	99,862	0	99,862	0.143	14,293	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	2	0	2	0.711	2	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	21,572	0	21,572	0.799	17,246	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	2,390,042	11,252	2,378,790	0.154	365,540	

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 2012 through June 2013 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)

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	1,671	1,671	0			
3	Hand Line	OPEN	all	MA	all	8	8	0			P
4	Hand Line	OPEN	all	NE	all	20	20	0			
5	Otter Trawl	OPEN	all	MA	sm	213,668	3,518	210,150	0.309	64,963	
6	Otter Trawl	OPEN	all	MA	lg	323,390	195,452	127,938	0.233	29,749	
7	Otter Trawl	OPEN	all	NE	sm	90,023	253	89,770	0.516	46,341	
8	Otter Trawl	OPEN	all	NE	lg	5,002,453	4,608,942	393,511	0.171	67,286	
11	Scallop Trawl	OPEN	GEN	MA	all	2,238	0	2,238	0.462	1,033	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	26,578	26,448	130	0.957	125	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	5,442	0	5,442	0.319	1,737	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	206	206	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	195	195	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	68,953	62,024	6,929	0.134	928	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	213	200	13	0.927	12	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	105	0	105	0.397	41	P
32	Scallop Dredge	AA	LIM	MA	all	33,778	875	32,903	0.556	18,284	
33	Scallop Dredge	AA	LIM	NE	all	185,898	5,578	180,320	0.173	31,117	
34	Scallop Dredge	OPEN	GEN	MA	all	2,976	0	2,976	0.307	915	
35	Scallop Dredge	OPEN	GEN	NE	all	15,723	5	15,718	0.379	5,952	
36	Scallop Dredge	OPEN	LIM	MA	all	9,981	150	9,831	0.605	5,946	
37	Scallop Dredge	OPEN	LIM	NE	all	364,303	4,215	360,088	0.114	41,002	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	29	0	29	0.595	17	
41	Pots and Traps, Fish	OPEN	all	MA	all	1	1				P
42	Pots and Traps, Fish	OPEN	all	NE	all	15	15				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	6,878	22	6,856	0.799	5,481	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	0	0	<1	0.311	<1	
	Confidential fleets					197	197				
	Other minor fleets					0	0				
					TOTAL	6,354,942	4,909,995	1,444,947	0.084	121,944	

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 2012 through June 2013 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)

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	41	41	0			
3	Hand Line	OPEN	all	MA	all	0	0	0			P
4	Hand Line	OPEN	all	NE	all	18	18	0			
5	Otter Trawl	OPEN	all	MA	sm	331,994	0	331,994	0.345	114,459	
6	Otter Trawl	OPEN	all	MA	lg	20,395	3,930	16,465	0.404	6,659	
7	Otter Trawl	OPEN	all	NE	sm	22,971	153	22,818	0.532	12,139	
8	Otter Trawl	OPEN	all	NE	lg	1,910,041	1,779,615	130,426	0.065	8,462	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	3,323	2,966	357	0.372	133	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	383	0	383	0.459	176	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	11,251	10,714	537	0.118	63	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	4,202	4,202	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	74	0	74	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	8	0	8	0.948	7	P
32	Scallop Dredge	AA	LIM	MA	all	2,741	0	2,741	0.306	840	
33	Scallop Dredge	AA	LIM	NE	all	16,528	65	16,463	0.223	3,679	
34	Scallop Dredge	OPEN	GEN	MA	all	248	0	248	0.632	157	
35	Scallop Dredge	OPEN	GEN	NE	all	504	0	504	0.690	348	
36	Scallop Dredge	OPEN	LIM	MA	all	2,968	0	2,968	0.462	1,370	
37	Scallop Dredge	OPEN	LIM	NE	all	31,813	575	31,238	0.394	12,309	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	163	138	25	0.230	6	
	Confidential fleets					3	3				
	Other minor fleets					0	0				
					TOTAL	2,359,668	1,802,420	557,248	0.209	116,327	

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 2012 through June 2013 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)

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	443	436	7	0.983	7	
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	110,246	472	109,774	0.266	29,221	
6	Otter Trawl	OPEN	all	MA	lg	231,487	155,936	75,551	0.303	22,888	
7	Otter Trawl	OPEN	all	NE	sm	27,050	5,095	21,955	0.644	14,140	
8	Otter Trawl	OPEN	all	NE	lg	2,852,822	2,572,889	279,933	0.078	21,817	
11	Scallop Trawl	OPEN	GEN	MA	all	2,148	80	2,068	0.423	874	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	1	1				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4,391	4,254	137	0.540	74	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	1,971	25	1,946	0.406	789	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	3	3	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	217,859	210,097	7,762	0.136	1,056	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	165	61	104	0.497	52	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	11	0	11	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	132	0	132	0.269	36	P
32	Scallop Dredge	AA	LIM	MA	all	32,679	938	31,741	0.432	13,712	
33	Scallop Dredge	AA	LIM	NE	all	225,057	37,993	187,064	0.240	44,839	
34	Scallop Dredge	OPEN	GEN	MA	all	7,395	67	7,328	0.256	1,877	
35	Scallop Dredge	OPEN	GEN	NE	all	4,810	0	4,810	0.284	1,366	
36	Scallop Dredge	OPEN	LIM	MA	all	35,160	3,742	31,418	0.293	9,201	
37	Scallop Dredge	OPEN	LIM	NE	all	96,275	4,443	91,832	0.173	15,888	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	3	3				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				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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					280	280				
	Other minor fleets					0	0				
					TOTAL	3,850,389	2,996,815	853,574	0.079	67,803	

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 2012 through June 2013 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)

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	15,252	9,393	5,859	0.543	3,182	
6	Otter Trawl	OPEN	all	MA	lg	897	897	0			
7	Otter Trawl	OPEN	all	NE	sm	1,177	804	373	0.813	303	
8	Otter Trawl	OPEN	all	NE	lg	353	35	318	0.581	185	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0			
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0			
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	446	446				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	19	19	0			
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	0	0	0			
34	Scallop Dredge	OPEN	GEN	MA	all	10	10	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0			
37	Scallop Dredge	OPEN	LIM	NE	all	13	0	13	0.708	9	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	18,167	11,604	6,563	0.488	3,202	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	6	6				P
2	Longline	OPEN	all	NE	all	388	26	362	0.415	150	
3	Hand Line	OPEN	all	MA	all	3,274	3,274	0			P
4	Hand Line	OPEN	all	NE	all	109	109	0			
5	Otter Trawl	OPEN	all	MA	sm	759,833	424,525	335,308	0.230	77,233	
6	Otter Trawl	OPEN	all	MA	lg	31,714	28,811	2,903	0.442	1,282	
7	Otter Trawl	OPEN	all	NE	sm	1,540,063	610,278	929,785	0.409	380,382	
8	Otter Trawl	OPEN	all	NE	lg	170,289	21,225	149,064	0.118	17,533	
11	Scallop Trawl	OPEN	GEN	MA	all	298	0	298	0.416	124	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,506	0	1,506	0.325	490	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	9,416	8,272	1,144	0.353	404	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	30	30	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	4,718	361	4,357	0.106	462	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	34	0	34	0.722	24	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	10	0	10	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	665	0	665	0.242	161	P
32	Scallop Dredge	AA	LIM	MA	all	27,675	0	27,675	0.428	11,846	
33	Scallop Dredge	AA	LIM	NE	all	63,028	0	63,028	0.138	8,709	
34	Scallop Dredge	OPEN	GEN	MA	all	235	0	235	0.648	153	
35	Scallop Dredge	OPEN	GEN	NE	all	290	0	290	0.675	196	
36	Scallop Dredge	OPEN	LIM	MA	all	3,235	0	3,235	0.366	1,185	
37	Scallop Dredge	OPEN	LIM	NE	all	51,876	0	51,876	0.310	16,088	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	2	0	2	0.460	1	
41	Pots and Traps, Fish	OPEN	all	MA	all	3,145	3,145				P
42	Pots and Traps, Fish	OPEN	all	NE	all	85	85				P
43	Pots and Traps, Conch	OPEN	all	MA	all	789	789				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	19,848	19,848				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	54,617	15,753	38,864	0.699	27,181	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	776	776				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	OPEN	all	NE	smR	167	0	167	0.172	29	
	Confidential fleets					5	5				
	Other minor fleets					305	305				
					TOTAL	2,748,431	1,137,623	1,610,808	0.242	390,103	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	50	50				P
2	Longline	OPEN	all	NE	all	58	7	51	0.922	47	
3	Hand Line	OPEN	all	MA	all	3	3	0			P
4	Hand Line	OPEN	all	NE	all	137	137	0			
5	Otter Trawl	OPEN	all	MA	sm	5,160,734	4,133,164	1,027,570	0.652	669,596	
6	Otter Trawl	OPEN	all	MA	lg	97,677	81,267	16,410	0.280	4,590	
7	Otter Trawl	OPEN	all	NE	sm	10,180,928	9,131,564	1,049,364	0.576	603,969	
8	Otter Trawl	OPEN	all	NE	lg	563,950	233,762	330,188	0.134	44,312	
11	Scallop Trawl	OPEN	GEN	MA	all	2,098	418	1,680	0.807	1,357	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	3,632	500	3,132	0.306	958	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	220,326	87,963	132,363	0.291	38,455	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	37	37				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,114	1,114	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	35	35	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	86,802	56,470	30,332	0.133	4,024	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	4,086	3,592	494	0.315	156	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	1	0	1	0.944	1	
30	Scallop Dredge	AA	GEN	MA	all	38	0	38	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	102	0	102	0.192	20	P
32	Scallop Dredge	AA	LIM	MA	all	6,137	0	6,137	0.363	2,226	
33	Scallop Dredge	AA	LIM	NE	all	15,817	0	15,817	0.175	2,774	
34	Scallop Dredge	OPEN	GEN	MA	all	940	10	930	0.324	302	
35	Scallop Dredge	OPEN	GEN	NE	all	832	0	832	0.454	378	
36	Scallop Dredge	OPEN	LIM	MA	all	3,395	0	3,395	0.252	854	
37	Scallop Dredge	OPEN	LIM	NE	all	34,743	0	34,743	0.279	9,692	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	471	0	471	0.643	303	
41	Pots and Traps, Fish	OPEN	all	MA	all	3,200	3,200				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	385	385				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	OPEN	all	NE	smR	504	335	169	0.167	28	
	Confidential fleets					200	200				
	Other minor fleets					25	25				
					TOTAL	16,388,456	13,734,238	2,654,218	0.340	903,730	

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 2012 through June 2013 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)

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	1	0			
3	Hand Line	OPEN	all	MA	all	33	33	0			P
4	Hand Line	OPEN	all	NE	all	1,565	1,565	0			
5	Otter Trawl	OPEN	all	MA	sm	23,784	23,356	428	0.249	106	
6	Otter Trawl	OPEN	all	MA	lg	826	563	263	1.028	271	
7	Otter Trawl	OPEN	all	NE	sm	275,659	275,156	503	0.499	251	
8	Otter Trawl	OPEN	all	NE	lg	9,489	3,112	6,377	0.292	1,859	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	197	0	197	0.304	60	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	21,295	0	21,295	1.004	21,390	
21	Floating Trap	OPEN	all	NE	all	13,098	13,098				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	186	186				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	38	38	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	31	31	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	12,623	8,899	3,724	0.172	642	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1,134	1,081	53	0.593	32	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	14	0	14	0.475	7	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0			
33	Scallop Dredge	AA	LIM	NE	all	6	0	6	0.952	5	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0			
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	31	0	31	0.681	21	
37	Scallop Dredge	OPEN	LIM	NE	all	38	0	38	0.628	24	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	33,204	33,200	4	0.000	0	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	7,446,566	7,446,525	41	0.253	10	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	6	0	6	0.254	2	
	Confidential fleets					0	0				
	Other minor fleets					0	0				
					TOTAL	7,839,824	7,806,844	32,980	0.651	21,484	

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 2012 through June 2013 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)

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	3	3	0			
5	Otter Trawl	OPEN	all	MA	sm	763,690	337,115	426,575	0.295	125,650	
6	Otter Trawl	OPEN	all	MA	lg	82,303	78,028	4,275	0.473	2,020	
7	Otter Trawl	OPEN	all	NE	sm	1,191,575	908,432	283,143	0.376	106,496	
8	Otter Trawl	OPEN	all	NE	lg	54,695	52,461	2,234	0.158	353	
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0			
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	3	0	3	0.854	3	
18	Shrimp Trawl	OPEN	all	MA	all	1,241	1,241				P
19	Shrimp Trawl	OPEN	all	NE	all	4,225	2,739	1,486	0.791	1,175	
21	Floating Trap	OPEN	all	NE	all	2	2				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	20,607	20,607				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1,219	1,219	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	96	96	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	165	48	117	0.221	26	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	2	0	2	1.588	4	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	15	0	15	0.902	13	
33	Scallop Dredge	AA	LIM	NE	all	29	0	29	0.275	8	
34	Scallop Dredge	OPEN	GEN	MA	all	17	10	7	0.778	5	
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	267	25	242	0.649	157	
37	Scallop Dredge	OPEN	LIM	NE	all	16	0	16	0.491	8	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	1	0	1	0.000	0	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0			
41	Pots and Traps, Fish	OPEN	all	MA	all	1,265	1,265				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	251	0	251	0.799	201	
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	1,548	1,548				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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					6,752	6,752				
	Other minor fleets					1,112	1,112				
					TOTAL	2,131,098	1,412,703	718,395	0.229	164,727	

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 2012 through June 2013 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)

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	1	0			
5	Otter Trawl	OPEN	all	MA	sm	12,669,818	12,641,986	27,832	0.246	6,856	
6	Otter Trawl	OPEN	all	MA	lg	7,458	15	7,443	0.644	4,794	
7	Otter Trawl	OPEN	all	NE	sm	10,345,095	9,878,487	466,608	0.628	293,118	
8	Otter Trawl	OPEN	all	NE	lg	28,783	2,009	26,774	0.094	2,521	
11	Scallop Trawl	OPEN	GEN	MA	all	9	0	9	0.657	6	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	0	0				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	256	0	256	0.384	98	
18	Shrimp Trawl	OPEN	all	MA	all	0	0				P
19	Shrimp Trawl	OPEN	all	NE	all	814	25	789	1.026	809	
21	Floating Trap	OPEN	all	NE	all	0	0				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0	0				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0	0	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0			
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	2	0	2	0.944	2	
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	0	0	0			P
32	Scallop Dredge	AA	LIM	MA	all	267	0	267	1.018	272	
33	Scallop Dredge	AA	LIM	NE	all	259	0	259	0.429	111	
34	Scallop Dredge	OPEN	GEN	MA	all	17	0	17	1.046	17	
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	50	0	50	1.182	59	
37	Scallop Dredge	OPEN	LIM	NE	all	299	0	299	0.752	225	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	41	0	41	0.486	20	
41	Pots and Traps, Fish	OPEN	all	MA	all	0	0				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	0	0				P
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	OPEN	all	NE	smR	0	0	0			
	Confidential fleets					0	0				
	Other minor fleets					26,000	26,000				
					TOTAL	23,079,169	22,548,523	530,646	0.553	293,250	

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 2012 through June 2013 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)

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	1	0			
5	Otter Trawl	OPEN	all	MA	sm	7,903,031	7,284,770	618,261	0.654	404,417	
6	Otter Trawl	OPEN	all	MA	lg	420,385	417,330	3,055	0.278	849	
7	Otter Trawl	OPEN	all	NE	sm	6,549,958	6,390,288	159,670	0.814	130,012	
8	Otter Trawl	OPEN	all	NE	lg	233,591	214,726	18,865	0.181	3,407	
11	Scallop Trawl	OPEN	GEN	MA	all	741	685	56	0.432	24	
12	Scallop Trawl	OPEN	LIM	MA	all	0	0				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	2	2				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	194	0	194	0.718	139	
18	Shrimp Trawl	OPEN	all	MA	all	10	10				P
19	Shrimp Trawl	OPEN	all	NE	all	4,520	4,515	5	0.895	4	
21	Floating Trap	OPEN	all	NE	all	96	96				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	6	6				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	130	130	0			P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0			
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	0	0				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0			
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0			
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	0	0	0			
30	Scallop Dredge	AA	GEN	MA	all	0	0	0			P
31	Scallop Dredge	AA	GEN	NE	all	31	0	31	0.307	10	P
32	Scallop Dredge	AA	LIM	MA	all	1,783	0	1,783	0.431	769	
33	Scallop Dredge	AA	LIM	NE	all	773	50	723	0.270	195	
34	Scallop Dredge	OPEN	GEN	MA	all	986	436	550	0.578	318	
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0			
36	Scallop Dredge	OPEN	LIM	MA	all	3,259	25	3,234	0.547	1,769	
37	Scallop Dredge	OPEN	LIM	NE	all	380	20	360	0.519	187	

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 2012 through June 2013 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)

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	0	0	0			P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	124	0	124	0.527	65	
41	Pots and Traps, Fish	OPEN	all	MA	all	171	171				P
42	Pots and Traps, Fish	OPEN	all	NE	all	0	0				P
43	Pots and Traps, Conch	OPEN	all	MA	all	0	0				P
44	Pots and Traps, Conch	OPEN	all	NE	all	0	0				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	0	0				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	1,352	1,352	0			
49	Pots and Traps, Crab	OPEN	all	MA	all	0	0				P
50	Pots and Traps, Crab	OPEN	all	NE	all	0	0				P
51	Beam Trawl	OPEN	all	MA	all	333	333				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	OPEN	all	NE	smR	18	5	13	0.152	2	
	Confidential fleets					2,650	2,650				
	Other minor fleets					52,750	52,750				
					TOTAL	15,177,276	14,370,351	806,925	0.526	424,821	

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 the 14 species groups combined, by fleet, based on July 2012 through June 2013 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 Group: 14 SPECIES GROUPS COMBINED

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
1	Longline	OPEN	all	MA	all	1,832,533	1,832,533				P
2	Longline	OPEN	all	NE	all	2,680,352	2,488,403	191,949	0.149	28,690	
3	Hand Line	OPEN	all	MA	all	390,137	390,137	0			P
4	Hand Line	OPEN	all	NE	all	788,929	728,286	60,643	0.301	18,270	
5	Otter Trawl	OPEN	all	MA	sm	55,492,713	31,430,023	24,062,690	0.152	3,664,595	
6	Otter Trawl	OPEN	all	MA	lg	35,801,850	16,925,165	18,876,684	0.104	1,968,509	
7	Otter Trawl	OPEN	all	NE	sm	53,012,399	47,482,547	5,529,853	0.222	1,230,152	
8	Otter Trawl	OPEN	all	NE	lg	101,793,517	59,200,302	42,593,215	0.059	2,528,335	
11	Scallop Trawl	OPEN	GEN	MA	all	2,387,332	1,318,388	1,068,944	0.733	783,238	
12	Scallop Trawl	OPEN	LIM	MA	all	422,817	422,817				P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	23,120	23,120				P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	573,346	442,058	131,288	0.359	47,142	
18	Shrimp Trawl	OPEN	all	MA	all	1,987	1,987				P
19	Shrimp Trawl	OPEN	all	NE	all	691,349	479,159	212,190	0.222	47,101	
21	Floating Trap	OPEN	all	NE	all	14,346	14,346				P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	755,251	755,251				P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	4,461,876	4,455,593	6,282	0.171	1,072	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	6,335,650	5,476,384	859,266	0.244	209,588	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	6,645	6,645				P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	19,100,674	14,390,980	4,709,694	0.067	313,456	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	16,067,004	13,120,386	2,946,618	0.132	389,716	
28	Purse Seine	OPEN	all	MA	all	0	0				P
29	Purse Seine	OPEN	all	NE	all	41,933,033	41,932,360	673	0.983	662	
30	Scallop Dredge	AA	GEN	MA	all	166,951	147,841	19,110	0.000	0	P
31	Scallop Dredge	AA	GEN	NE	all	634,167	576,053	58,113	0.220	12,795	P
32	Scallop Dredge	AA	LIM	MA	all	32,871,027	29,447,189	3,423,838	0.084	288,799	
33	Scallop Dredge	AA	LIM	NE	all	89,020,385	78,205,379	10,815,005	0.070	756,223	
34	Scallop Dredge	OPEN	GEN	MA	all	13,953,480	11,768,951	2,184,529	0.213	465,723	
35	Scallop Dredge	OPEN	GEN	NE	all	13,693,093	12,899,076	794,017	0.142	112,581	
36	Scallop Dredge	OPEN	LIM	MA	all	52,596,149	46,670,351	5,925,798	0.191	1,130,879	

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 the 14 species groups combined, by fleet, based on July 2012 through June 2013 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 Group: 14 SPECIES GROUPS COMBINED

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Total	Kept	Discarded	CV	SE	Pilot
37	Scallop Dredge	OPEN	LIM	NE	all	231,975,805	213,735,470	18,240,334	0.112	2,048,379	
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	1,763,603	1,763,595	8	0.000	0	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	136,344,388	136,166,618	177,770	0.276	49,145	
41	Pots and Traps, Fish	OPEN	all	MA	all	299,644	299,644				P
42	Pots and Traps, Fish	OPEN	all	NE	all	176,484	176,484				P
43	Pots and Traps, Conch	OPEN	all	MA	all	1,459	1,459				P
44	Pots and Traps, Conch	OPEN	all	NE	all	100	100				P
45	Pots and Traps, Hagfish	OPEN	all	NE	all	0	0				P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	0	0				P
47	Pots and Traps, Lobster	OPEN	all	MA	all	100,192	100,192				P
48	Pots and Traps, Lobster	OPEN	all	NE	all	539,902	36,419	503,483	0.584	294,167	
49	Pots and Traps, Crab	OPEN	all	MA	all	117,098	117,098				P
50	Pots and Traps, Crab	OPEN	all	NE	all	2,701,906	2,701,906				P
51	Beam Trawl	OPEN	all	MA	all	88,063	88,063				P
53	Dredge, Other	OPEN	all	MA	all	2,812	2,812				P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	249,298,725	249,298,725				P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	241,024,306	241,024,306				P
56	Otter Trawl	OPEN	all	NE	smR	391,725	363,808	27,918	0.087	2,418	
	Confidential fleets					1,635,577	1,635,577				
	Other fleets					916,213	916,213				
					TOTAL	1,414,880,113	1,271,460,199	143,419,914	0.040	5,707,177	

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 (2014 Sea Days Needed) for fish and invertebrate species groups based on July 2012 through June 2013 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	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	2014 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	25	**12**	12	
3	Hand Line	OPEN	all	MA	all	74	74	74	74	74	74	74	74	74	74	74	74	74	74	**74**	13	74	P
4	Hand Line	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	**14**	14	
5	Otter Trawl	OPEN	all	MA	sm	0	0	0	1,147	0	827	223	562	**1,289**	517	135	169	0	0	140	27	1,289	
6	Otter Trawl	OPEN	all	MA	lg	0	0	0	0	0	0	**1,007**	114	0	83	328	265	0	0	225	31	1,007	
7	Otter Trawl	OPEN	all	NE	sm	0	0	0	0	0	722	0	0	854	0	**1,601**	1,035	0	0	146	28	1,601	
8	Otter Trawl	OPEN	all	NE	lg	0	0	0	**7,262**	0	0	159	160	525	307	240	1,162	0	0	433	33	7,262	
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	85	85	85	85	85	85	85	85	85	85	85	85	85	85	**85**	85	85	P
11	Scallop Trawl	OPEN	GEN	MA	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	**24**	24	
12	Scallop Trawl	OPEN	LIM	MA	all	58	58	58	58	58	58	58	58	58	58	58	58	58	58	**58**	58	58	P
13	Scallop Trawl	OPEN	LIM	NE	all	51	51	51	51	51	51	51	51	51	51	51	51	51	51	**51**	51	51	P
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	60	60	60	60	60	60	60	60	60	60	60	60	60	60	**60**	60	60	P
15	Otter Trawl, Ruhle	OPEN	all	NE	sm	26	26	26	26	26	26	26	26	26	26	26	26	26	26	**26**	26	26	P
16	Otter Trawl, Ruhle	OPEN	all	NE	lg	54	54	54	54	54	54	54	54	54	54	54	54	54	54	**54**	54	54	P
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	**111**	111	
18	Shrimp Trawl	OPEN	all	MA	all	57	57	57	57	57	57	57	57	57	57	57	57	57	57	**57**	45	57	P
19	Shrimp Trawl	OPEN	all	NE	all	0	0	0	0	0	0	0	0	**21**	0	0	0	0	0	18	12	21	
20	Floating Trap	OPEN	all	MA	all	9	9	9	9	9	9	9	9	9	9	9	9	9	9	**9**	9	9	P
21	Floating Trap	OPEN	all	NE	all	6	6	6	6	6	6	6	6	6	6	6	6	6	6	**6**	6	6	P
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	38	38	38	38	38	38	38	38	38	38	38	38	38	38	**38**	13	38	P
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	49	49	49	49	49	49	49	49	49	49	49	49	49	49	**49**	13	49	P
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	**14**	14	
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	8	8	8	8	8	8	8	8	8	8	8	8	8	8	**8**	8	8	P
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0	0	0	0	0	0	0	0	0	0	**94**	0	0	0	152	17	94	
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0	0	0	0	0	0	121	0	0	134	**148**	0	0	0	76	19	148	
28	Purse Seine	OPEN	all	MA	all	12	12	12	12	12	12	12	12	12	12	12	12	12	12	**12**	9	12	P
29	Purse Seine	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	**20**	20	
30	Scallop Dredge	AA	GEN	MA	all	31	31	31	31	31	31	31	31	31	31	31	31	31	31	**31**	31	31	P
31	Scallop Dredge	AA	GEN	NE	all	30	30	30	30	30	30	30	30	30	30	30	30	30	30	**30**	30	30	P
32	Scallop Dredge	AA	LIM	MA	all	0	0	0	0	0	0	**101**	0	0	85	0	0	0	0	104	104	101	
33	Scallop Dredge	AA	LIM	NE	all	0	0	0	0	0	0	192	**254**	0	101	0	0	0	0	137	104	254	
34	Scallop Dredge	OPEN	GEN	MA	all	0	0	0	0	0	0	0	0	0	**42**	0	0	0	0	79	19	42	
35	Scallop Dredge	OPEN	GEN	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	**15**	15	
36	Scallop Dredge	OPEN	LIM	MA	all	0	0	0	0	0	0	**118**	0	0	117	0	0	0	0	106	106	118	
37	Scallop Dredge	OPEN	LIM	NE	all	0	0	0	0	398	0	**821**	120	0	302	0	0	0	0	224	105	821	
38	Danish Seine	OPEN	all	MA	all	9	9	9	9	9	9	9	9	9	9	9	9	9	9	**9**	9	9	P
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	43	43	43	43	43	43	43	43	43	43	43	43	43	43	**43**	43	43	P
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	**45**	45	
41	Pots and Traps, Fish	OPEN	all	MA	all	19	19	19	19	19	19	19	19	19	19	19	19	19	19	**19**	12	19	P
42	Pots and Traps, Fish	OPEN	all	NE	all	24	24	24	24	24	24	24	24	24	24	24	24	24	24	**24**	17	24	P
43	Pots and Traps, Conch	OPEN	all	MA	all	30	30	30	30	30	30	30	30	30	30	30	30	30	30	**30**	14	30	P
44	Pots and Traps, Conch	OPEN	all	NE	all	26	26	26	26	26	26	26	26	26	26	26	26	26	26	**26**	12	26	P

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 (2014 Sea Days Needed) for fish and invertebrate species groups, based on July 2012 through June 2013 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	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	2014 Sea Days Needed	Pilot
45	Pots and Traps, Hagfish	OPEN	all	NE	all	73	73	73	73	73	73	73	73	73	73	73	73	73	73	**73**	73	73	P
46	Pots and Traps, Shrimp	OPEN	all	NE	all	3	3	3	3	3	3	3	3	3	3	3	3	3	3	**3**	3	3	P
47	Pots and Traps, Lobster	OPEN	all	MA	all	51	51	51	51	51	51	51	51	51	51	51	51	51	51	**51**	17	51	P
48	Pots and Traps, Lobster	OPEN	all	NE	all	0	0	0	0	0	0	0	**165**	0	0	0	0	0	0	444	17	165	
49	Pots and Traps, Crab	OPEN	all	MA	all	15	15	15	15	15	15	15	15	15	15	15	15	15	15	**15**	15	15	P
50	Pots and Traps, Crab	OPEN	all	NE	all	97	97	97	97	97	97	97	97	97	97	97	97	97	97	**97**	97	97	P
51	Beam Trawl	OPEN	all	MA	all	25	25	25	25	25	25	25	25	25	25	25	25	25	25	**25**	25	25	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	19	19	19	19	19	19	19	19	19	19	19	19	19	19	**19**	19	19	P
54	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	76	76	76	76	76	76	76	76	76	76	76	76	76	76	**76**	25	76	P
55	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	63	63	63	63	63	63	63	63	63	63	63	63	63	63	**63**	14	63	P
56+	Otter Trawl	OPEN	all	NE	smR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	**28**	28	
					Totals	**1,323**	**1,323**	**1,323**	**9,732**	**1,721**	**2,872**	**4,065**	**2,698**	**4,012**	**3,011**	**3,869**	**3,954**	**1,323**	**1,323**	**4,055**	**1,913**	**14,529**	

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 2012 through June 2013 data. See Table 1 for species group abbreviations.

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Species Group	Sea Days	Trips	% of Trips
5	Otter Trawl	OPEN	all	MA	sm	GFS	1,289	657	18
						RCRAB	1,147	585	16
						SBM	827	421	12
						GFL	562	286	8
						SKATE	517	263	7
						MONK	223	113	3
						FSB	169	86	2
						DOG	135	69	2
6	Otter Trawl	OPEN	all	MA	lg	MONK	1,007	432	9
						DOG	328	141	3
						FSB	265	114	2
						GFL	114	49	1
						SKATE	83	35	1
7	Otter Trawl	OPEN	all	NE	sm	DOG	1,601	726	22
						FSB	1,035	469	14
						GFS	854	387	12
						SBM	722	327	10
8	Otter Trawl	OPEN	all	NE	lg	RCRAB	7,262	2,651	34
						FSB	1,161	424	5
						GFS	525	192	2
						SKATE	307	112	1
						DOG	240	88	1
						GFL	160	58	1
						MONK	159	58	1
19	Shrimp Trawl	OPEN	all	NE	all	GFS	21	21	4
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	DOG	94	75	1
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	DOG	148	97	4
						SKATE	134	88	4
						MONK	121	80	3
32	Scallop Dredge	AA	LIM	MA	all	MONK	101	11	3
						SKATE	85	10	3
33	Scallop Dredge	AA	LIM	NE	all	GFL	254	29	4
						MONK	192	22	3
						SKATE	101	12	2
34	Scallop Dredge	OPEN	GEN	MA	all	SKATE	42	27	1
36	Scallop Dredge	OPEN	LIM	MA	all	MONK	118	13	4
						SKATE	117	13	3
37	Scallop Dredge	OPEN	LIM	NE	all	MONK	821	91	7
						SCAL	398	44	4
						SKATE	302	34	3
						GFL	120	13	1
48	Pots and Traps, Lobster	OPEN	all	NE	all	GFL	165	127	<1

See text for fleet abbreviations.

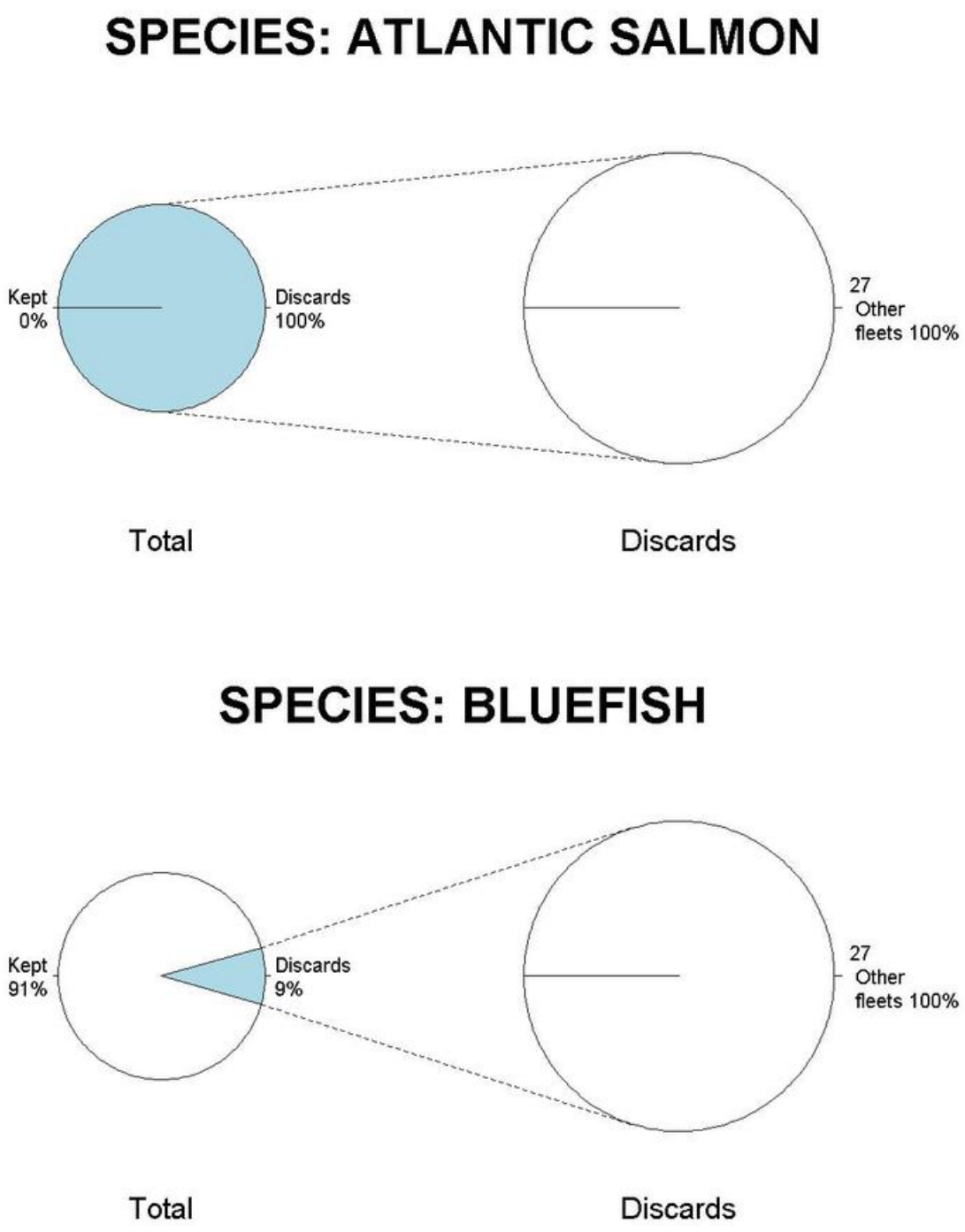


Figure 1A. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations.
Top: Atlantic salmon (*Salmo salar);* bottom: bluefish *(Pomatomus saltatrix).*

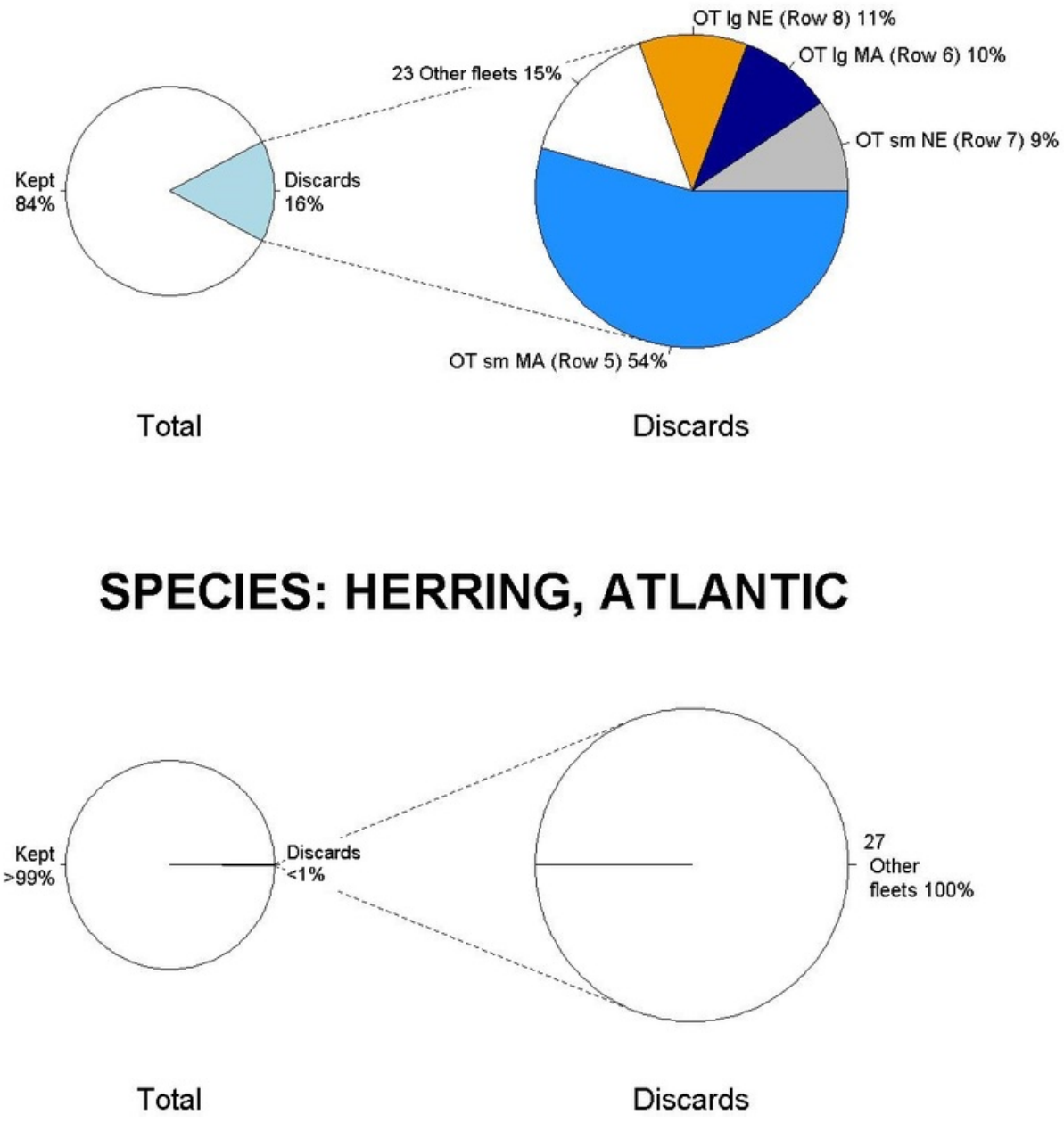


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, 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)*.

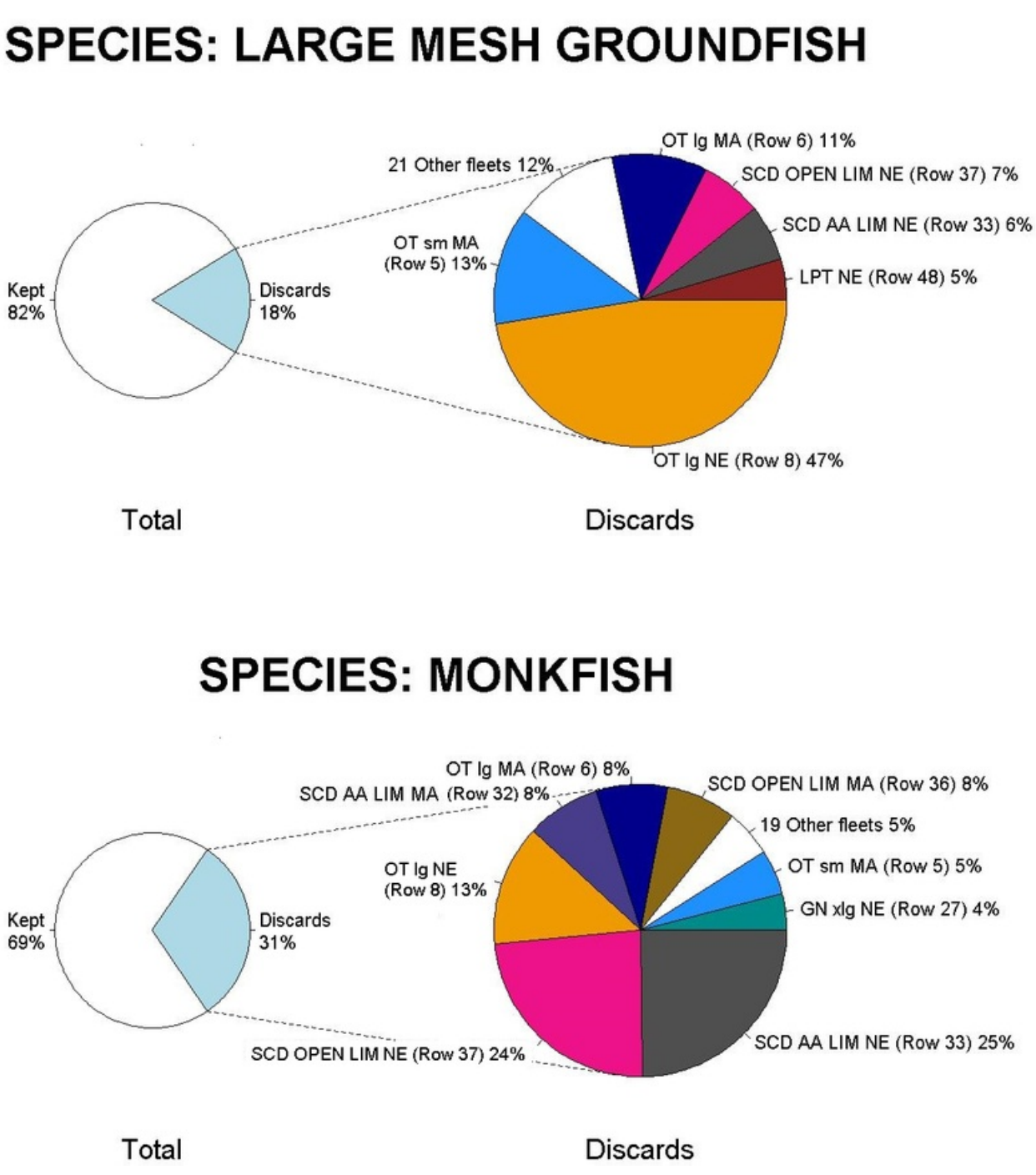


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: large mesh groundfish; bottom: monkfish (*Lophius americanus).*

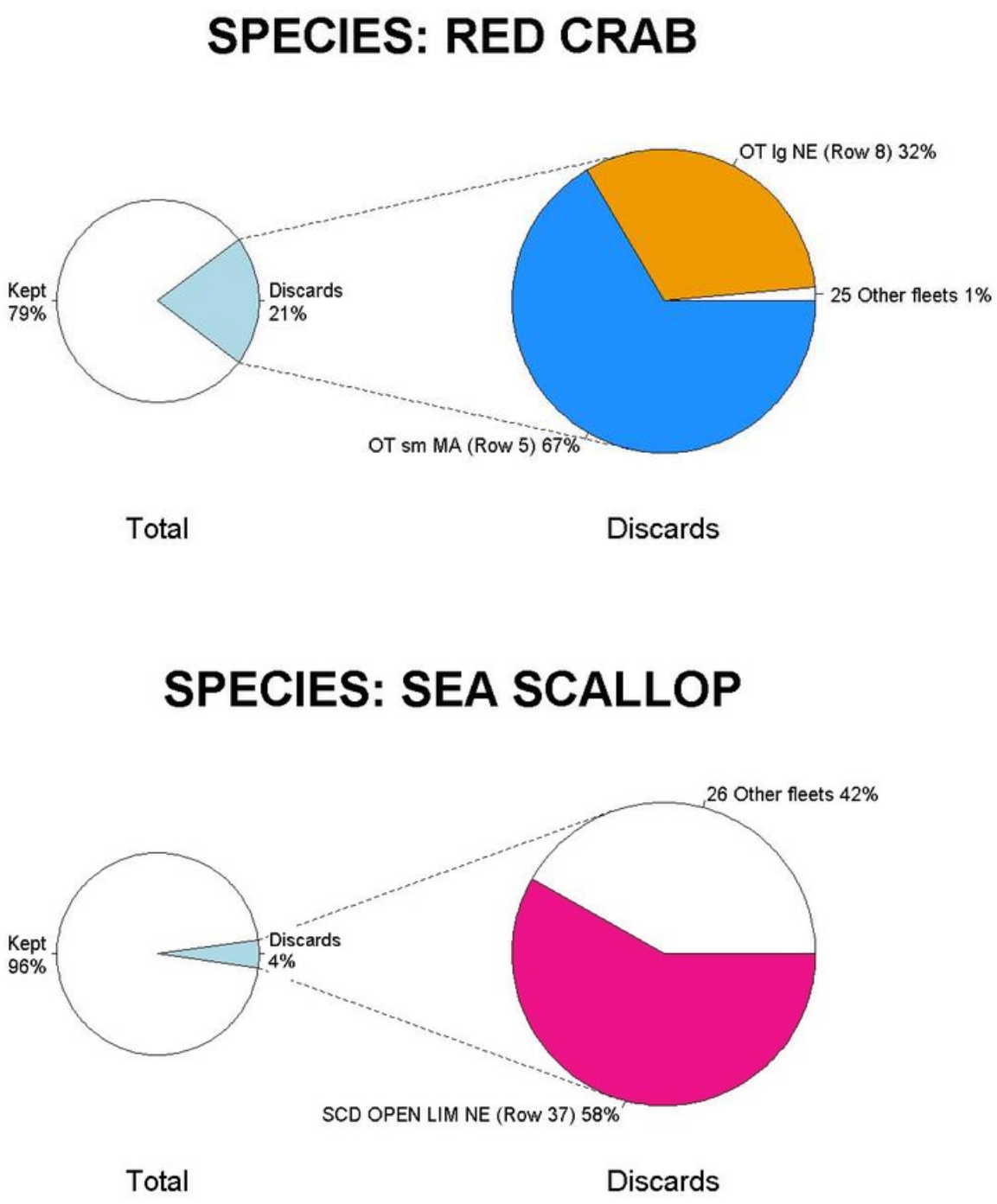
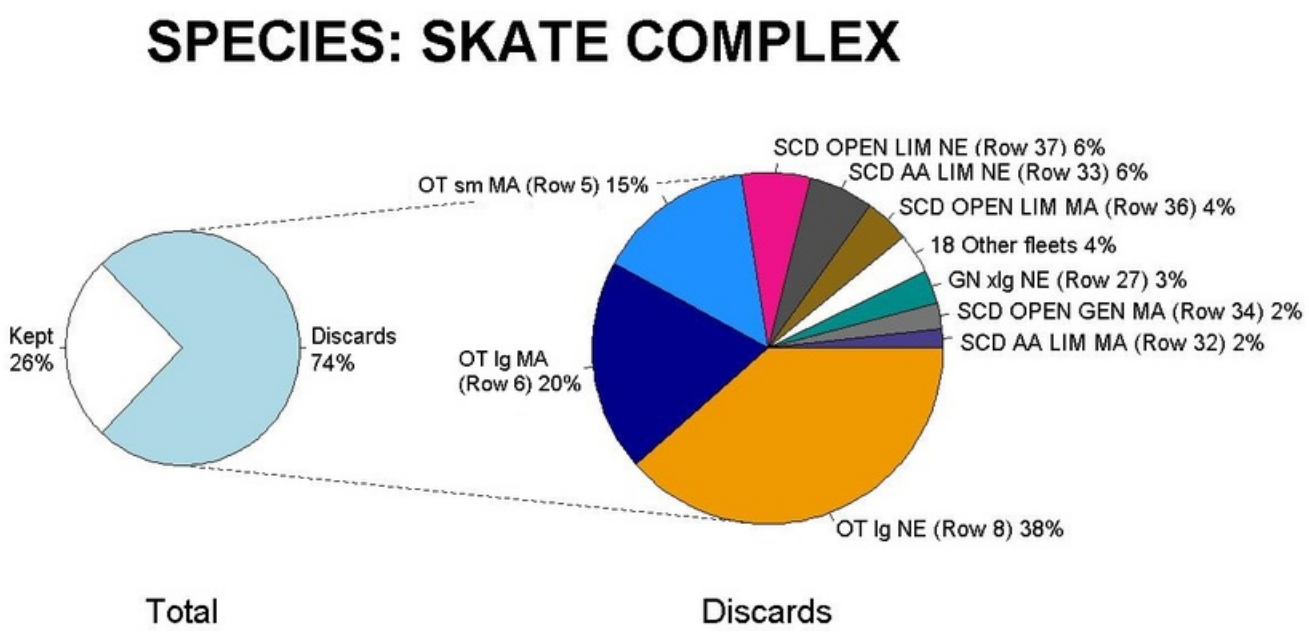


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: red crab (*Chaceon quinquedens*); bottom: sea scallop (*Placopecten magellanicus*).



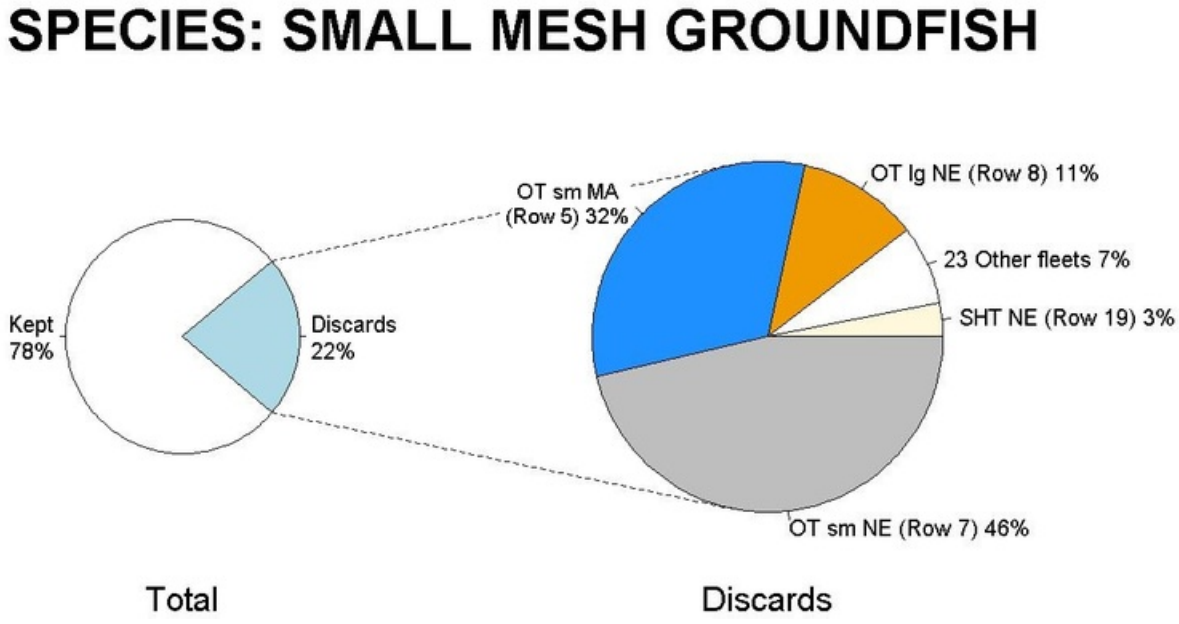
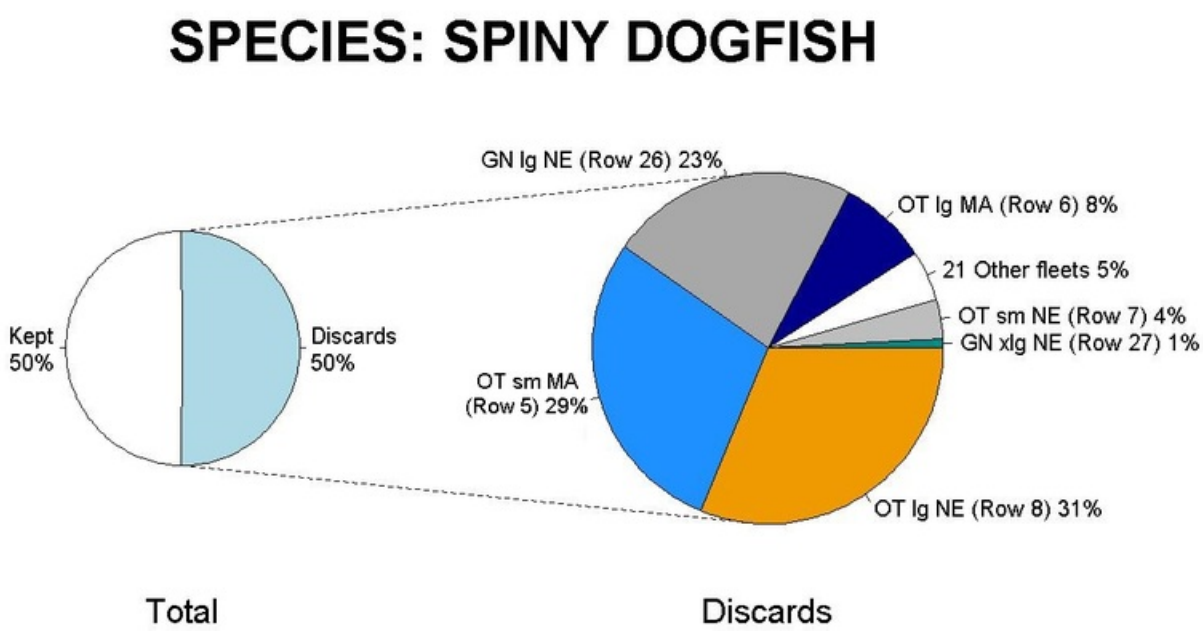


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: skate complex (Rajidae); bottom: small mesh groundfish.



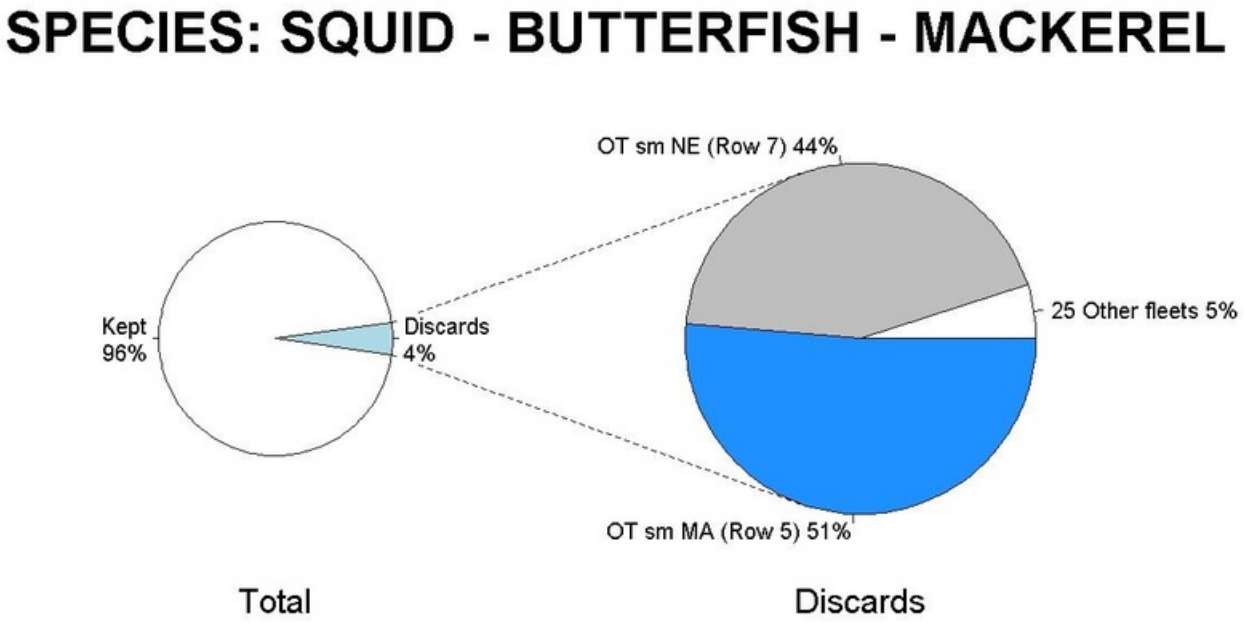


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, 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*).

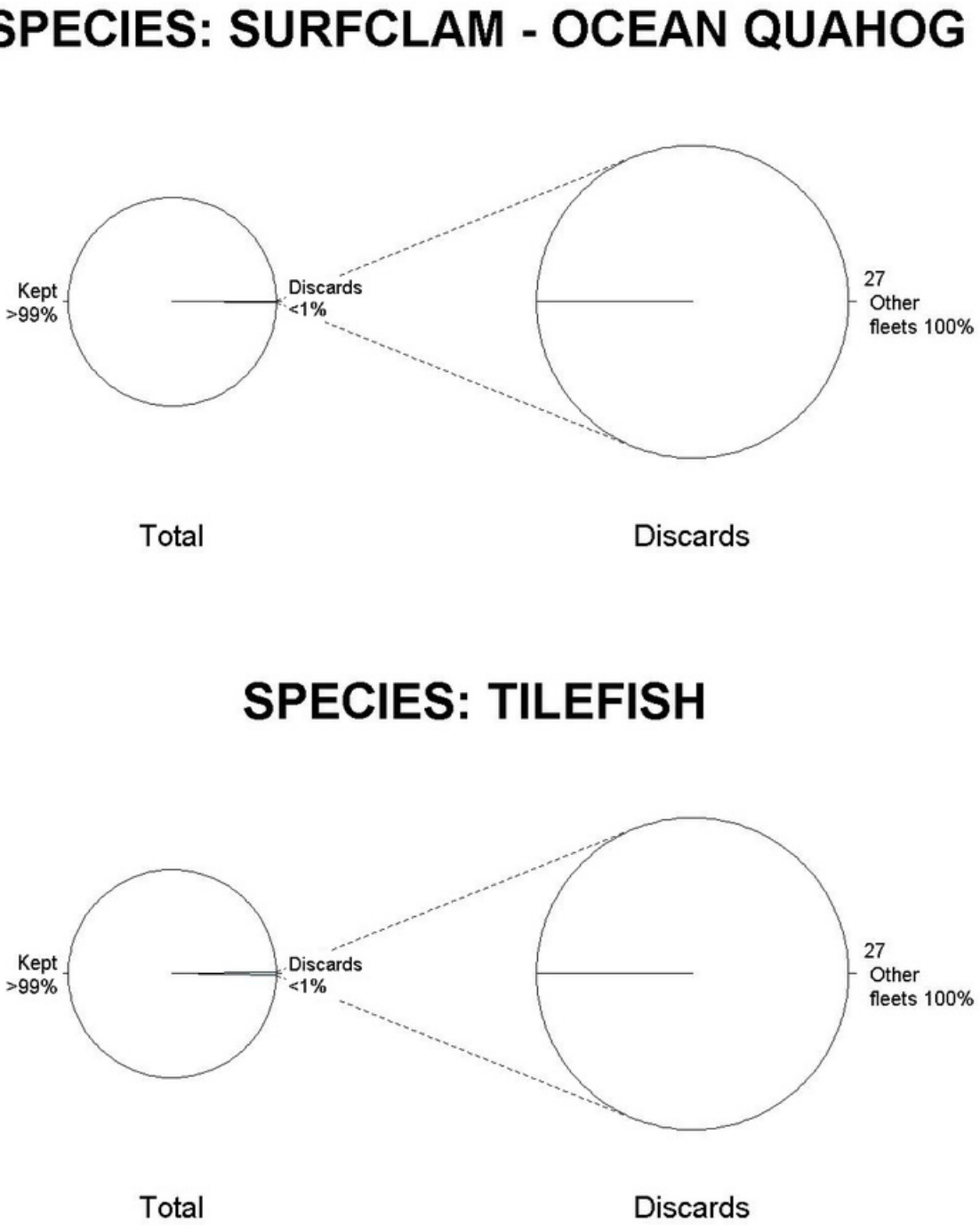


Figure 1A, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for each of the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: surfcalm (*Spisula solidissima*) - ocean quahog (*Artica islandica*); bottom: tilefish (*Lopholatilus chamaeleonticeps*).

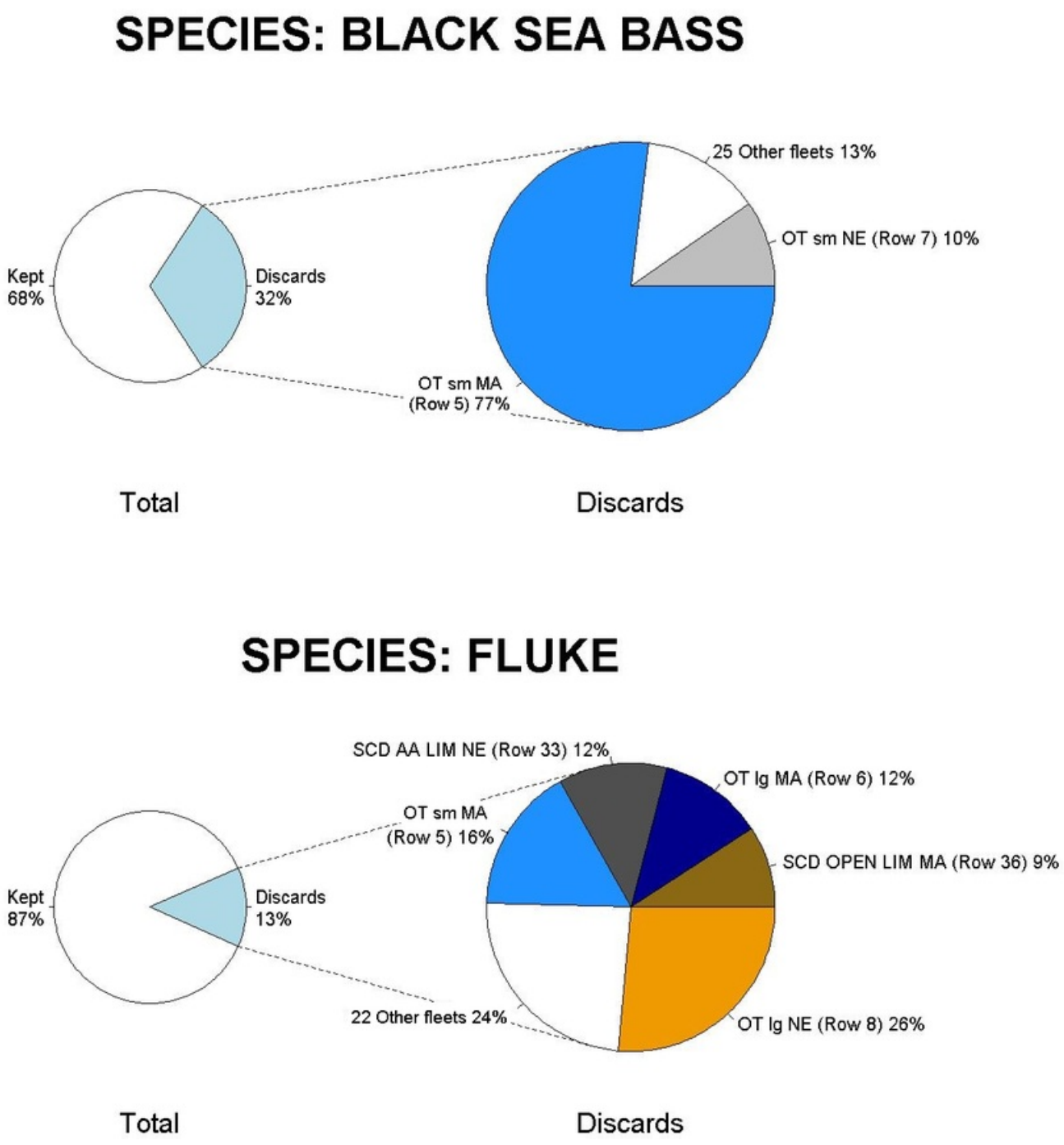
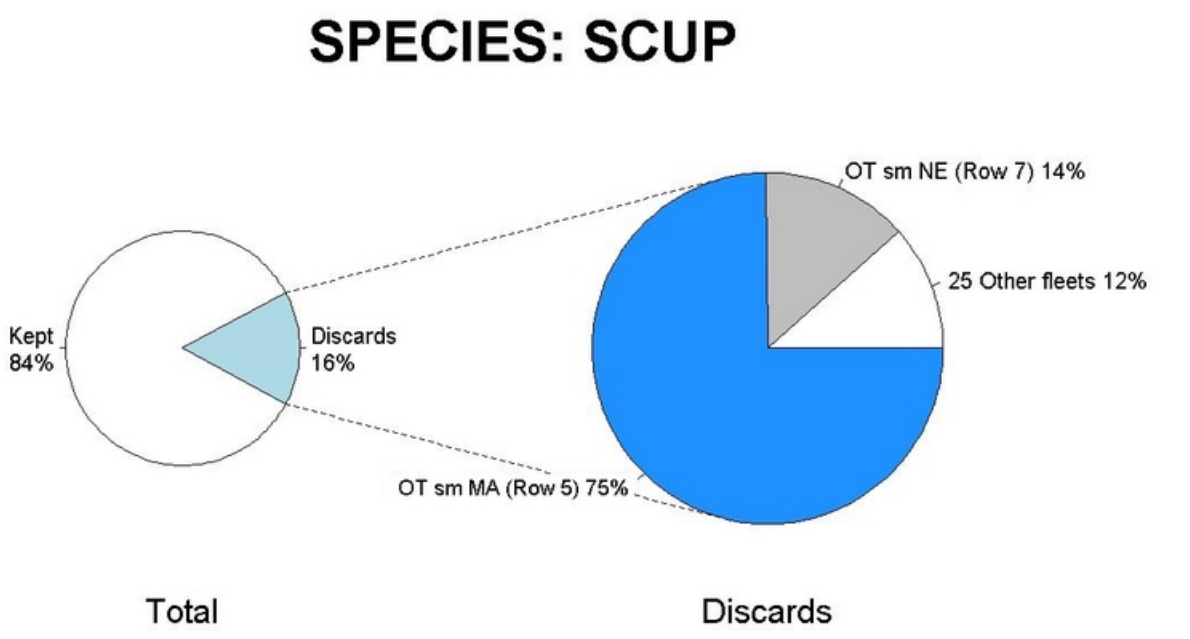


Figure 1B. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2012 through June 2013 data. Because percentages 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*).



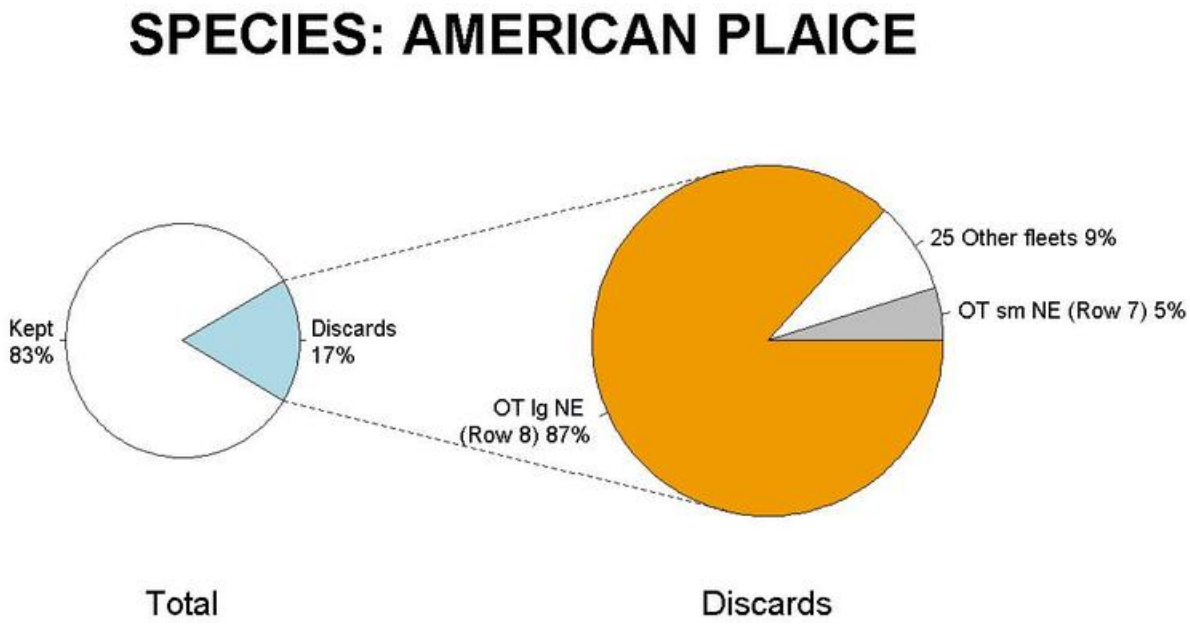
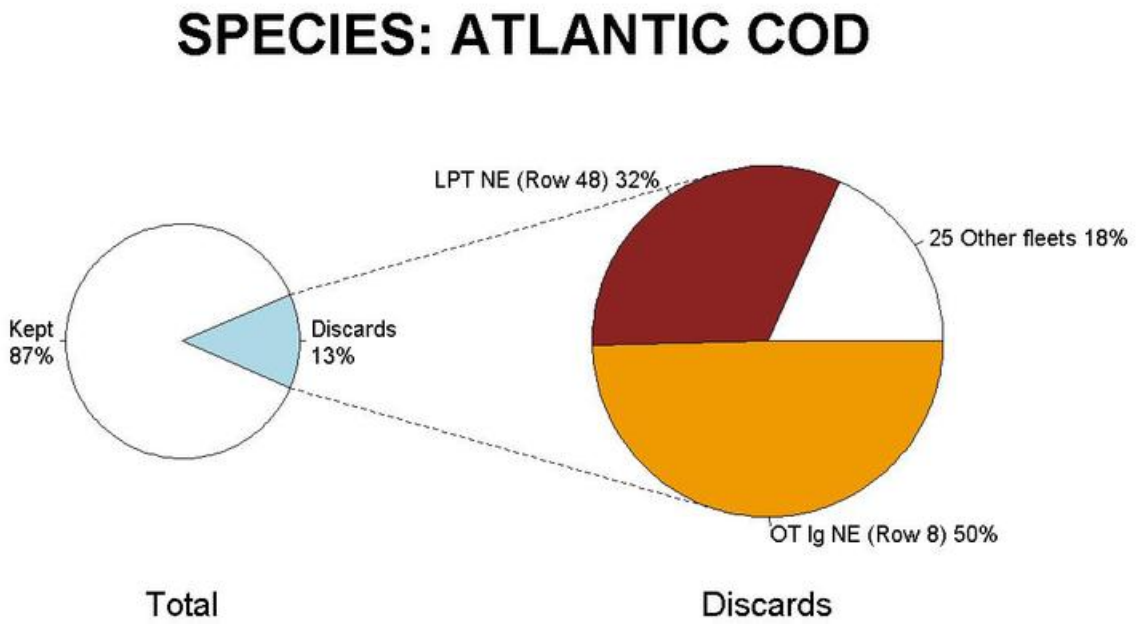
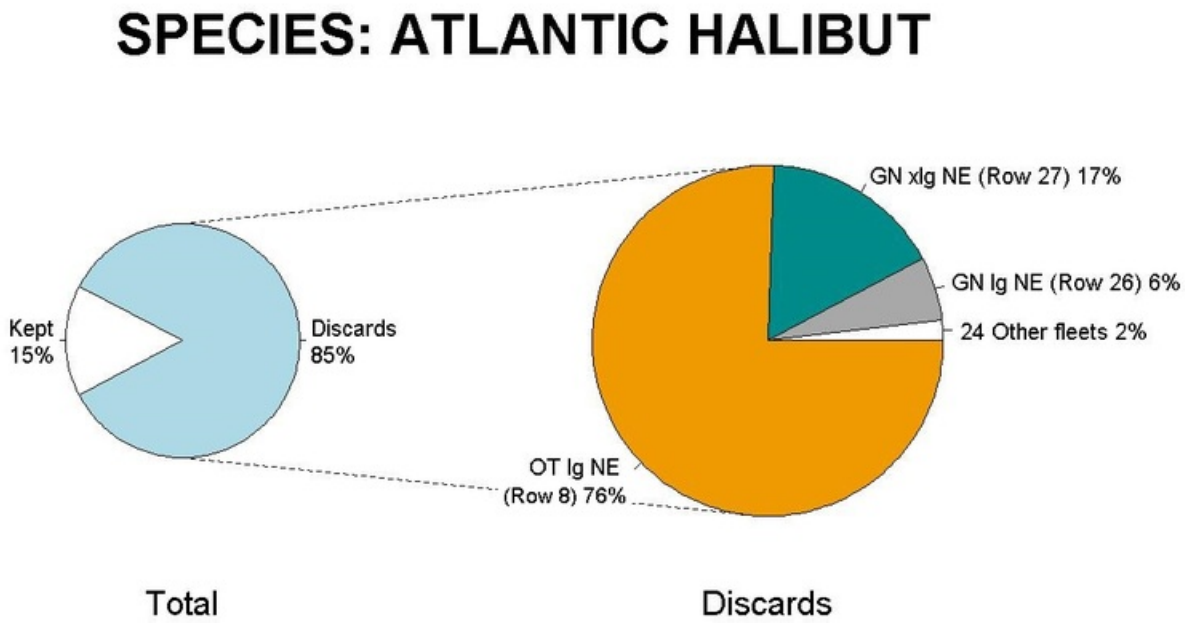


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2012 through June 2013 data. Because 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*).





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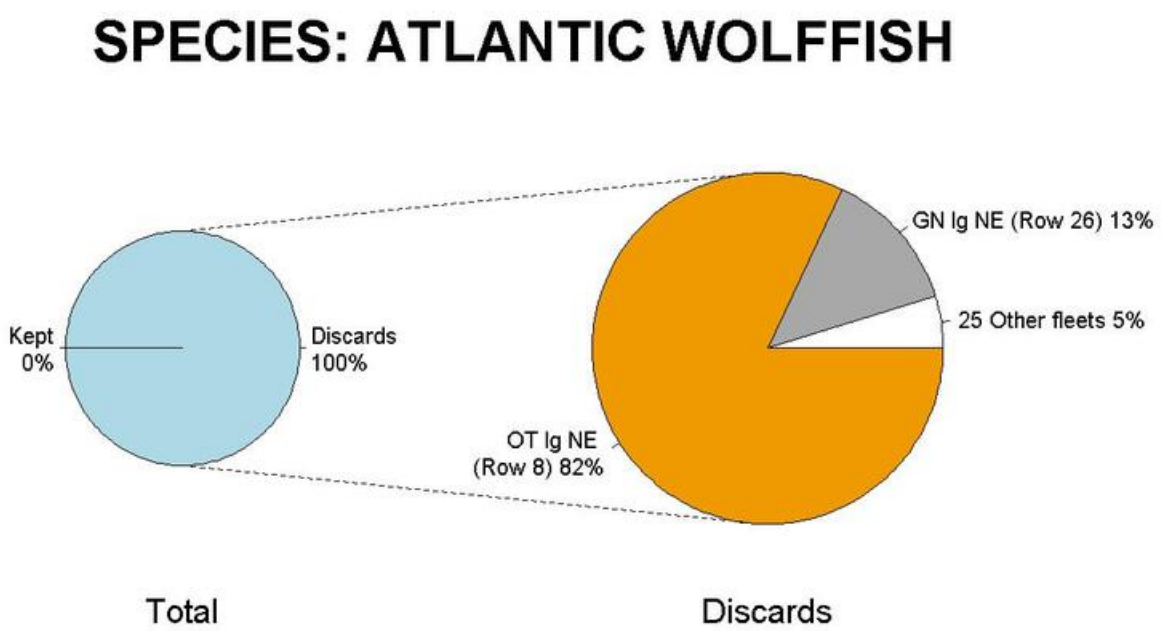


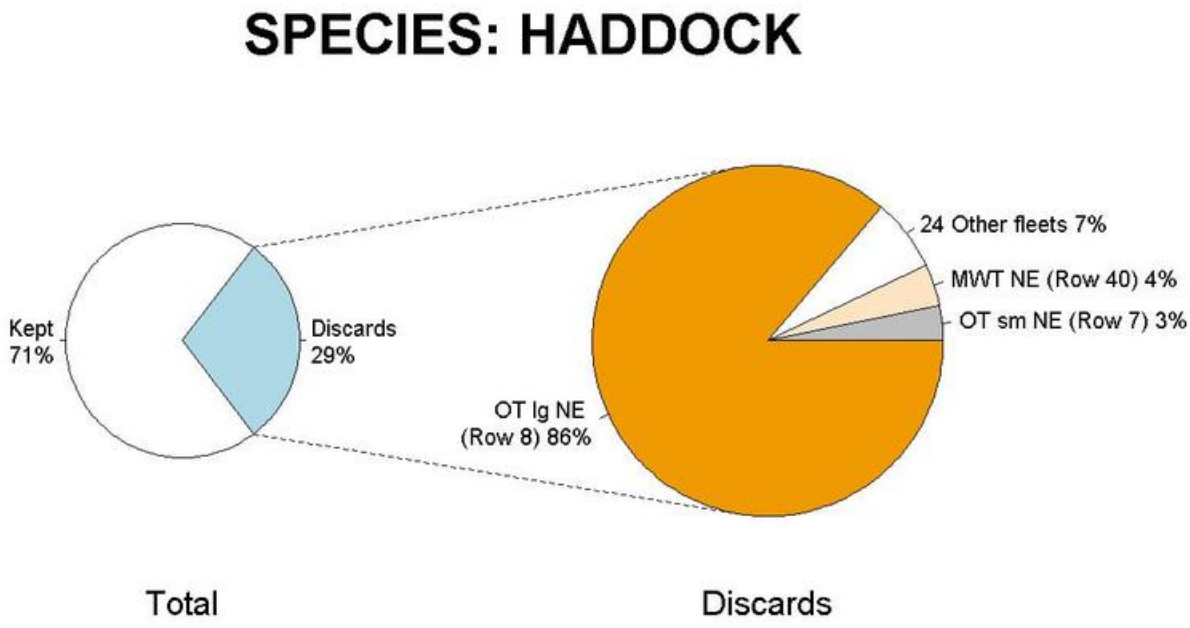
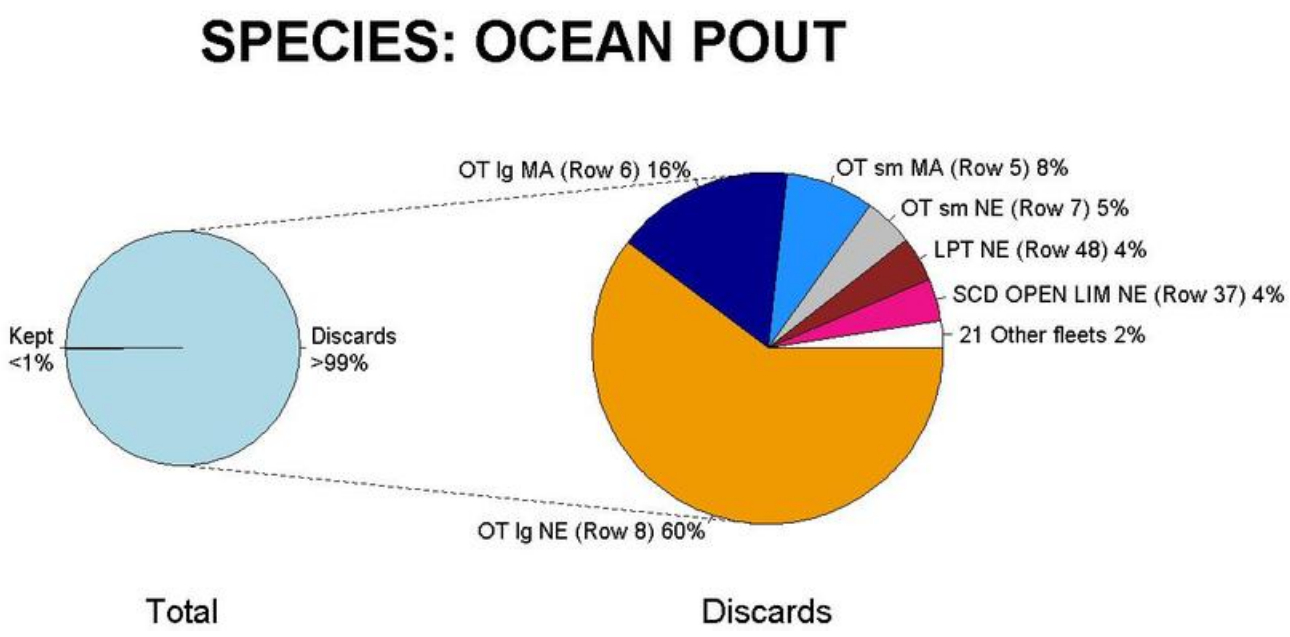
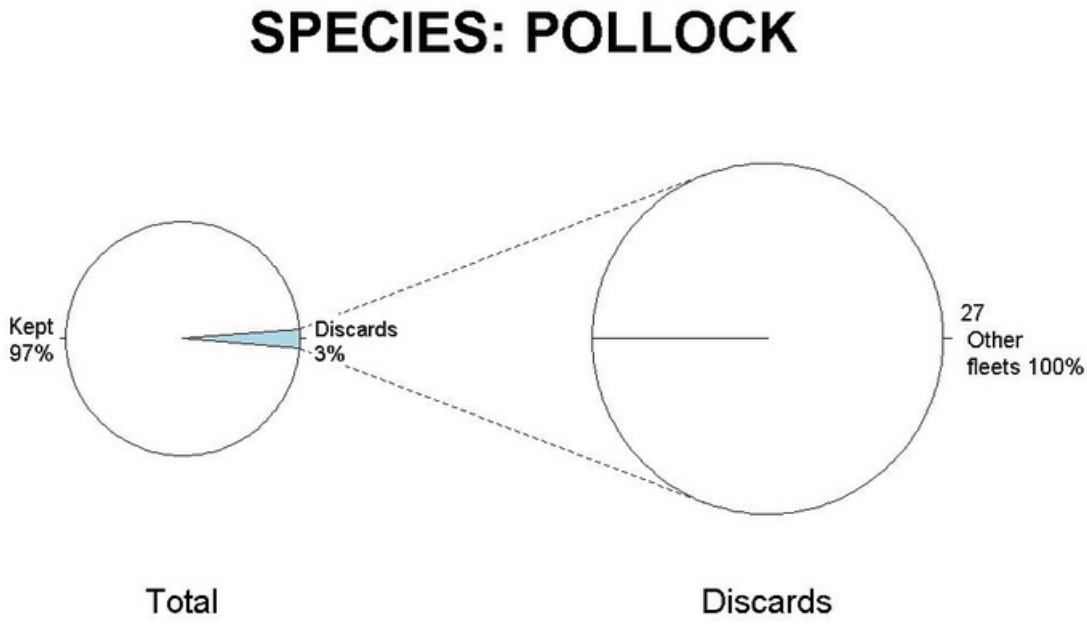


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2012 through June 2013 data. Because 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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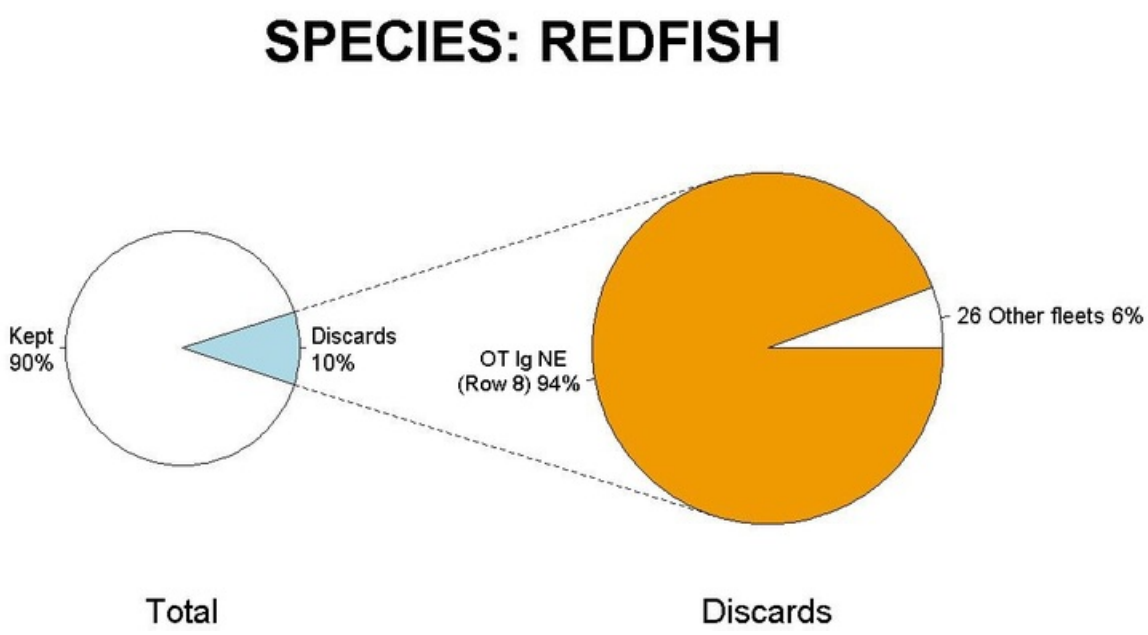


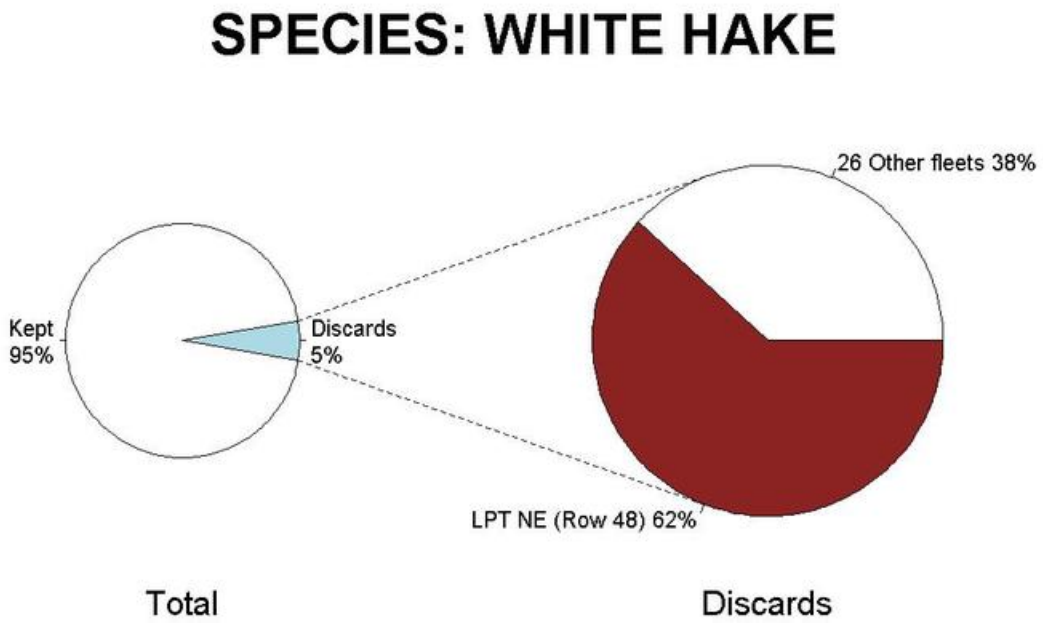
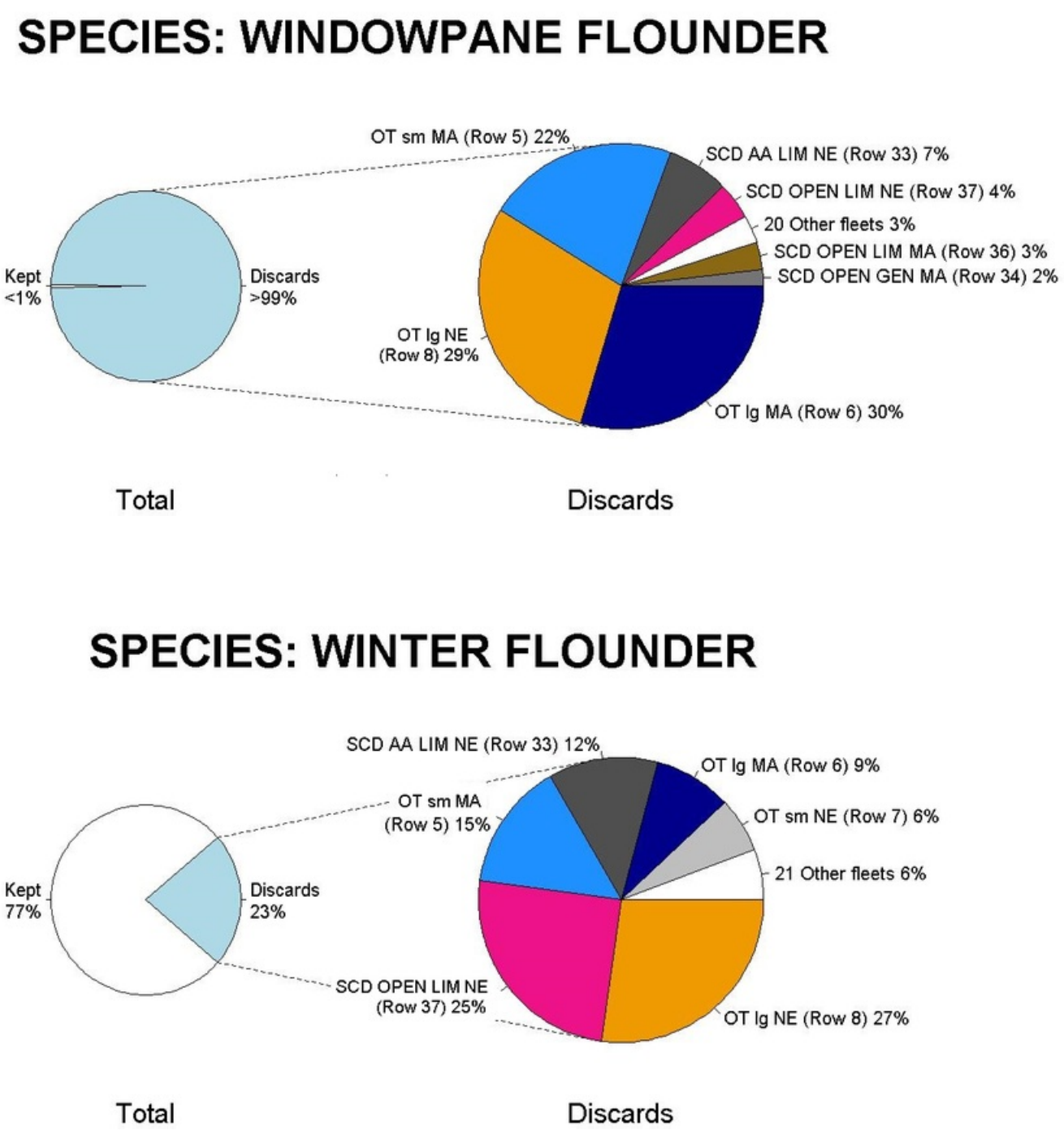


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Appendix Table 4 for fleet abbreviations. Top: redfish (*Sebastes fasciatus*); bottom: white hake (*Urophycis tenuis*).



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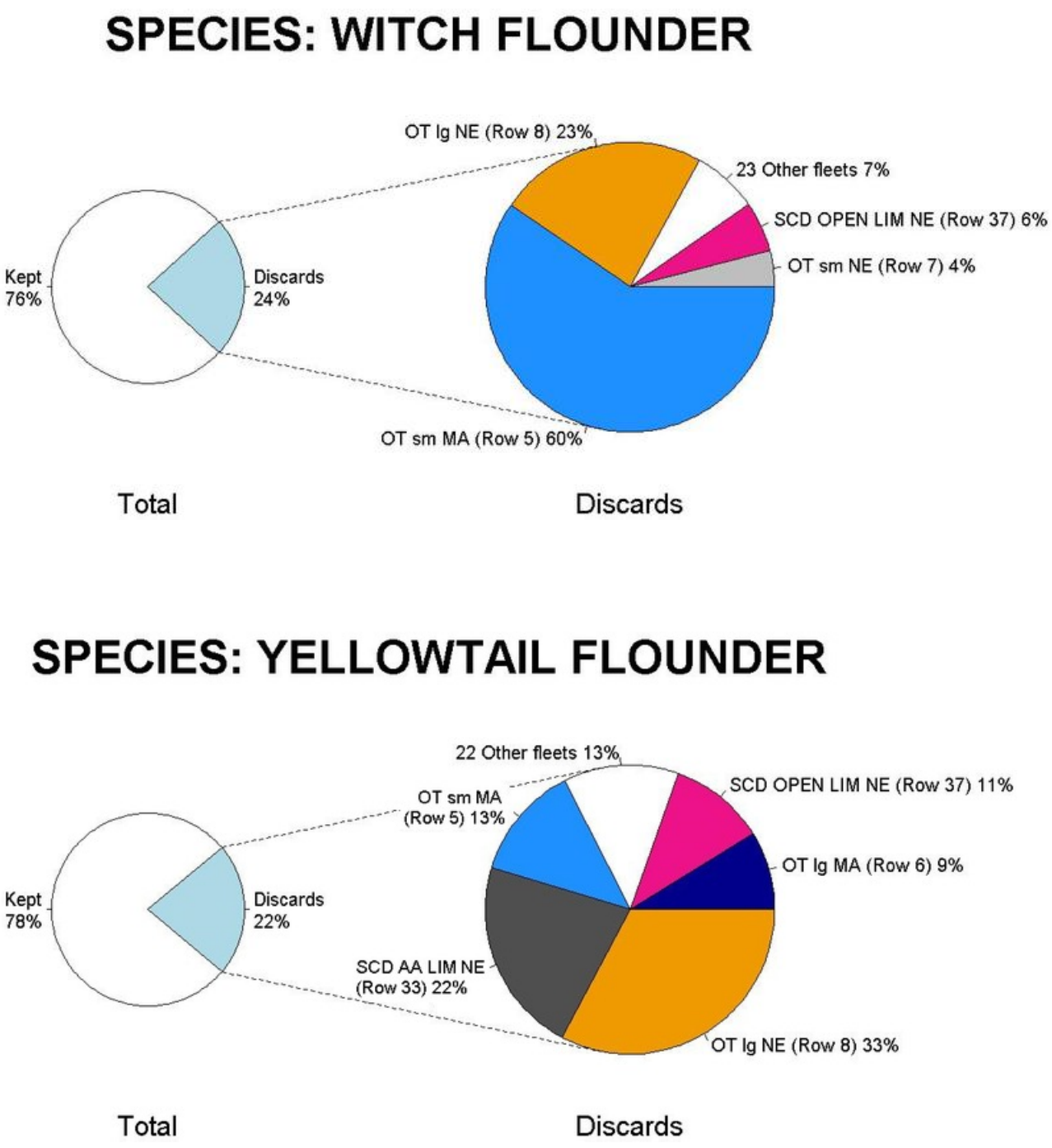

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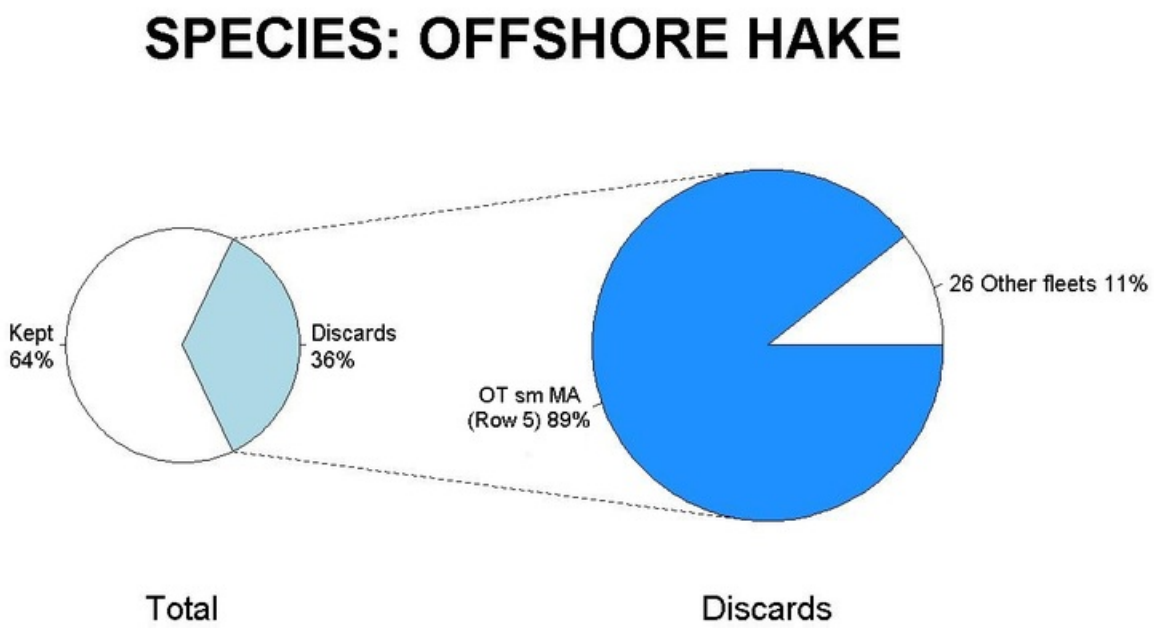

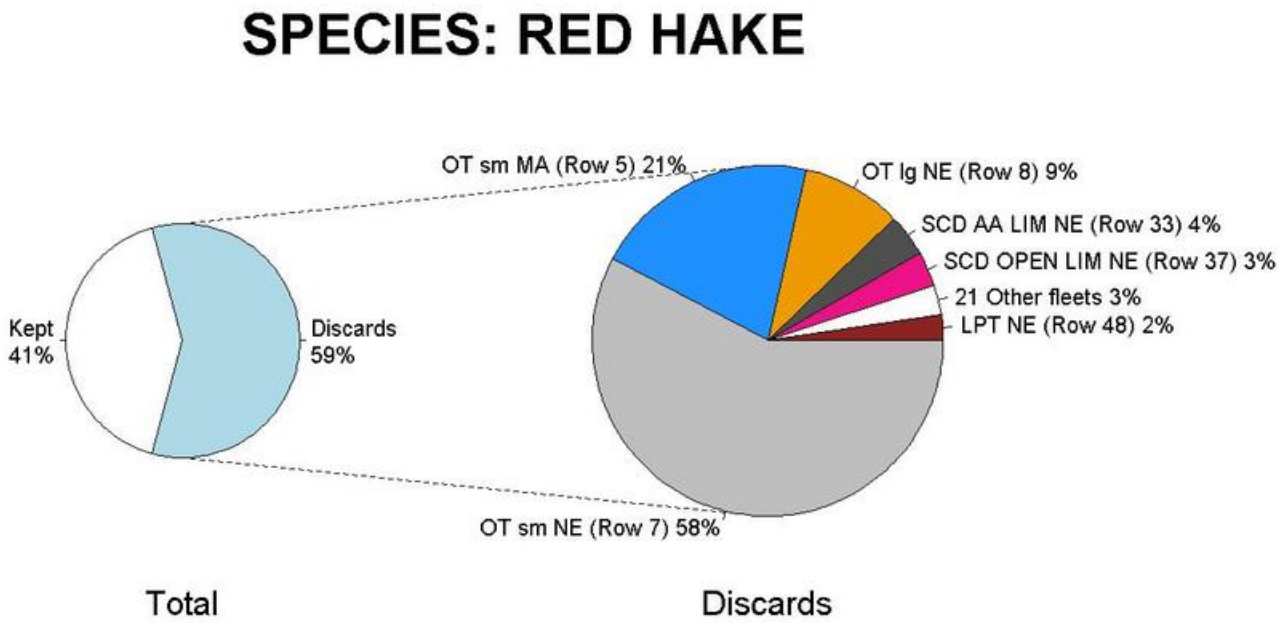

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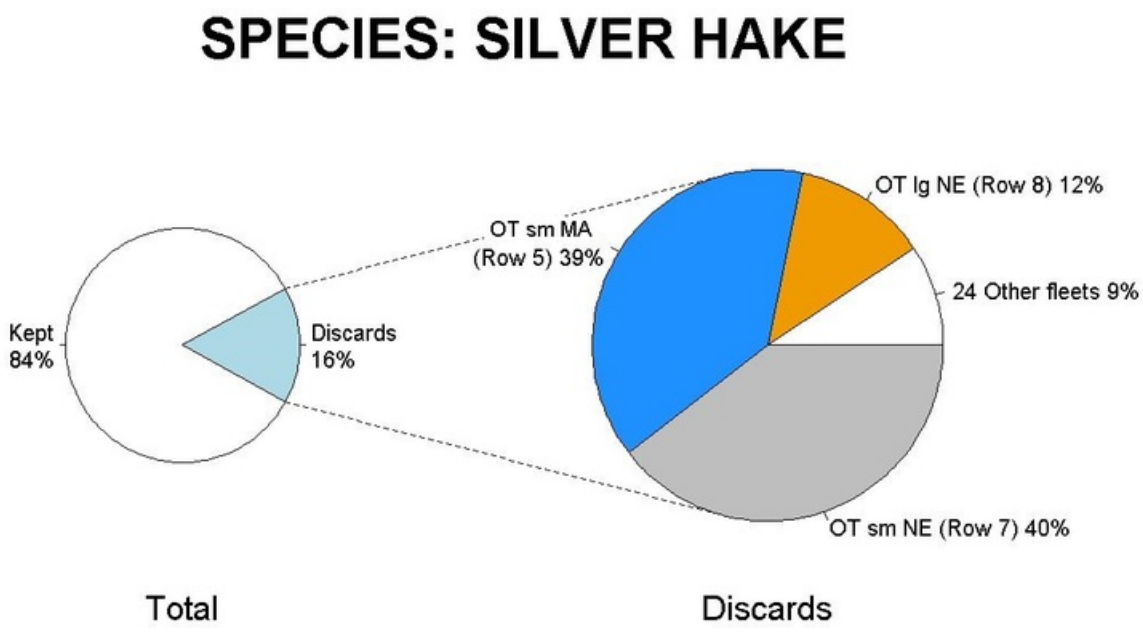

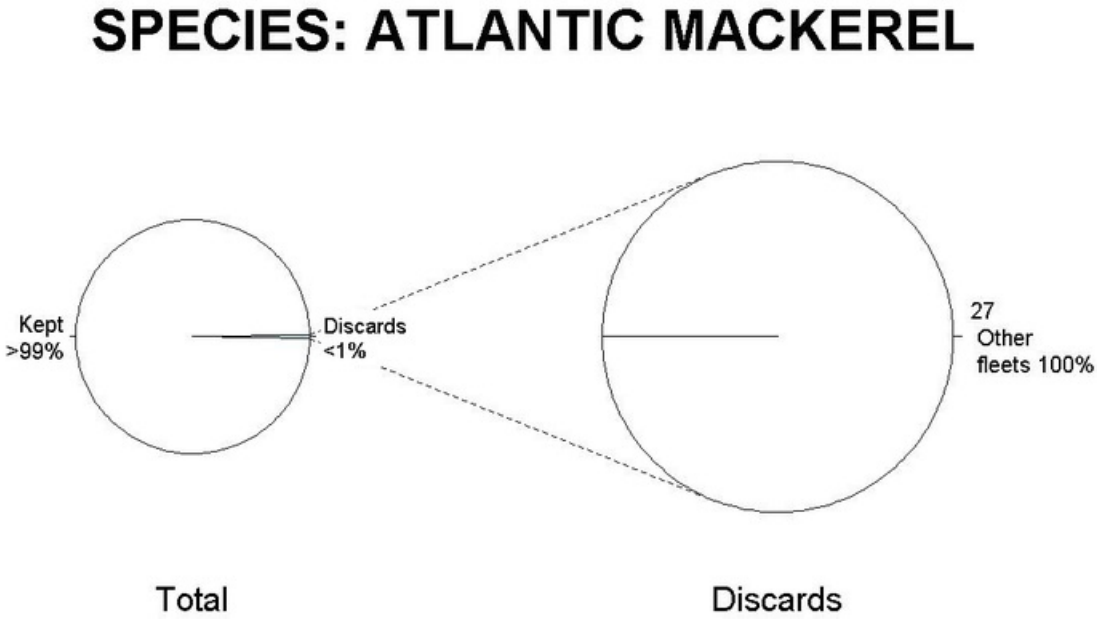

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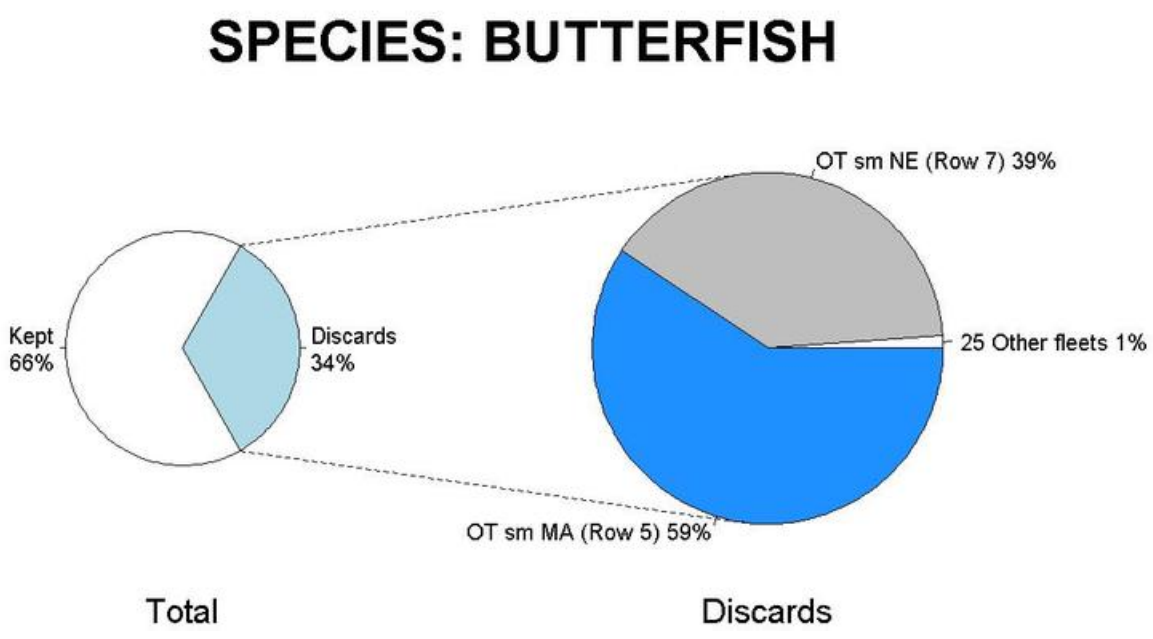


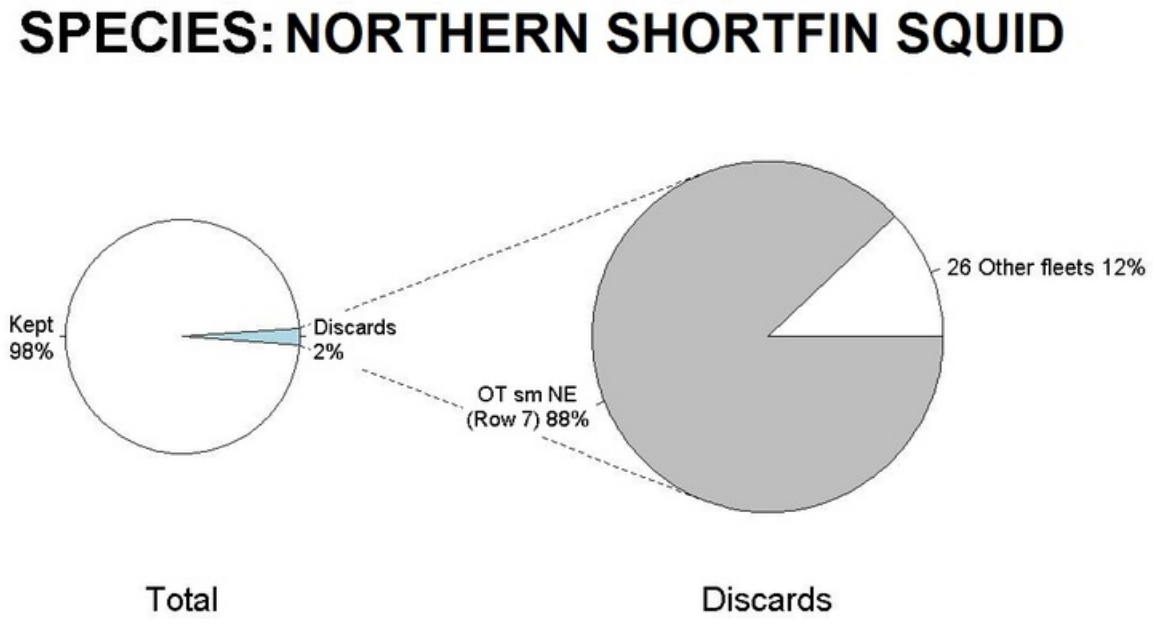


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2012 through June 2013 data. Because 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*).

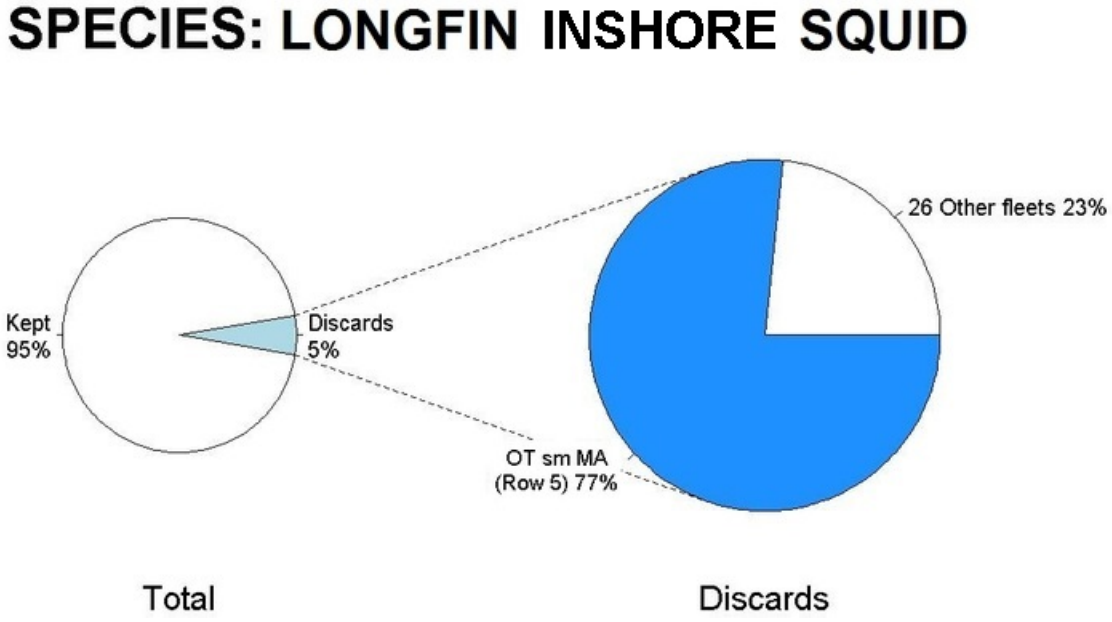
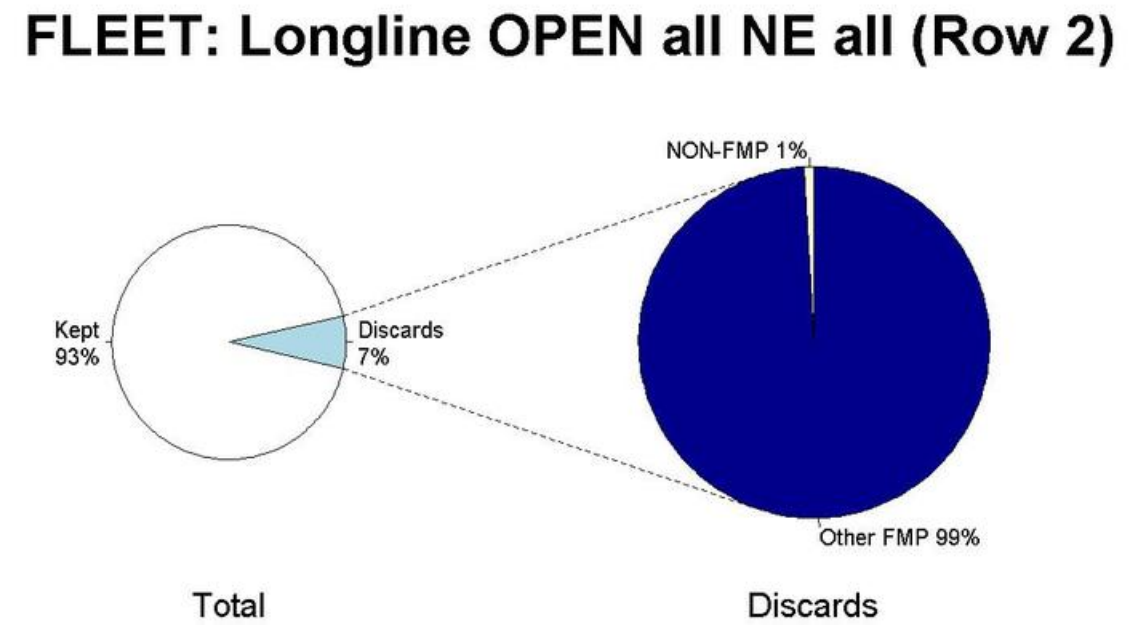


Figure 1B, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by fleet (Discards, right pie) for the 23 individual species that compose the 14 species groups, based on July 2012 through June 2013 data. Because 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*).



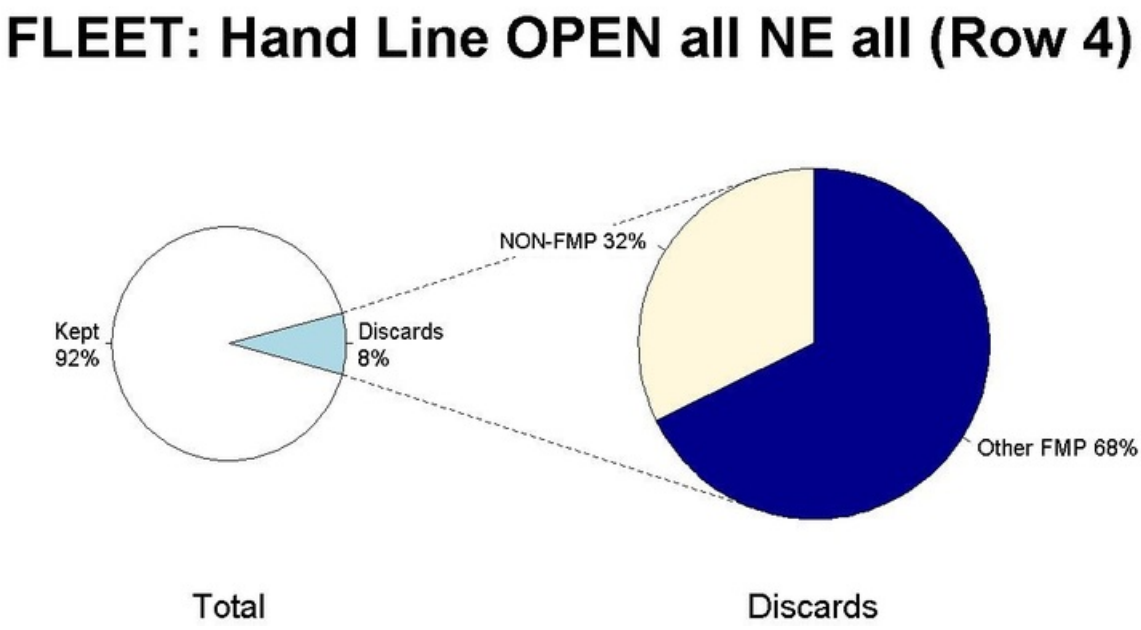
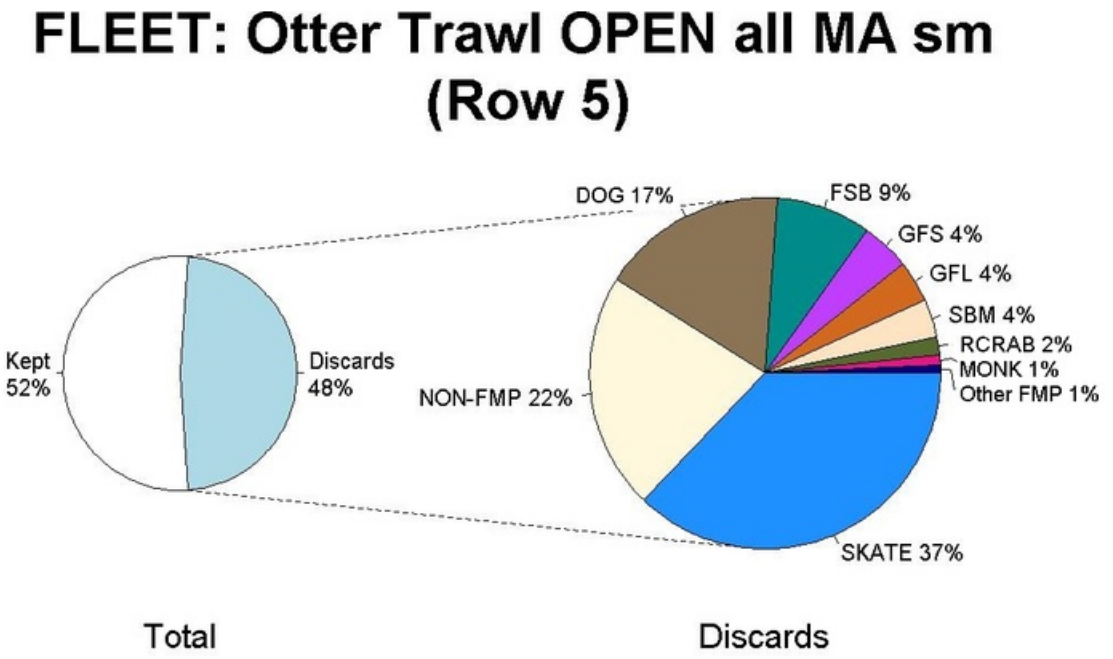


Figure 2. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

Note: Selected fleets include Rows 2, 4-8, 11, 17, 19, 24, 26, 27, 29, 32-37, 40, 48, and 56; these represent fleets where discards were estimated in 2014 (Table 5A).



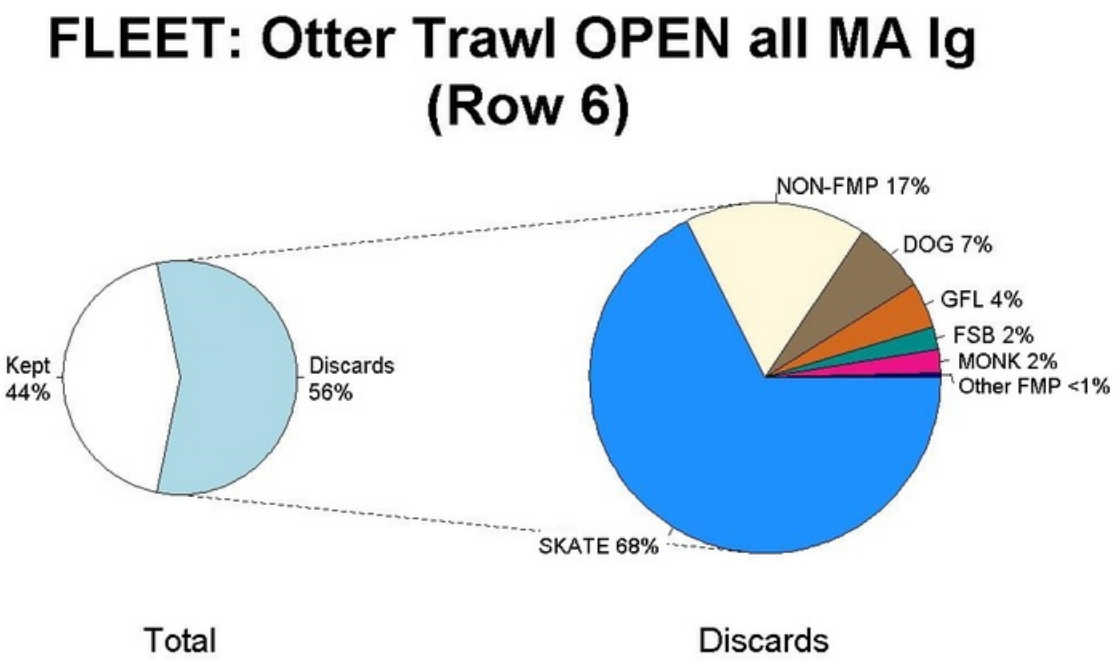


Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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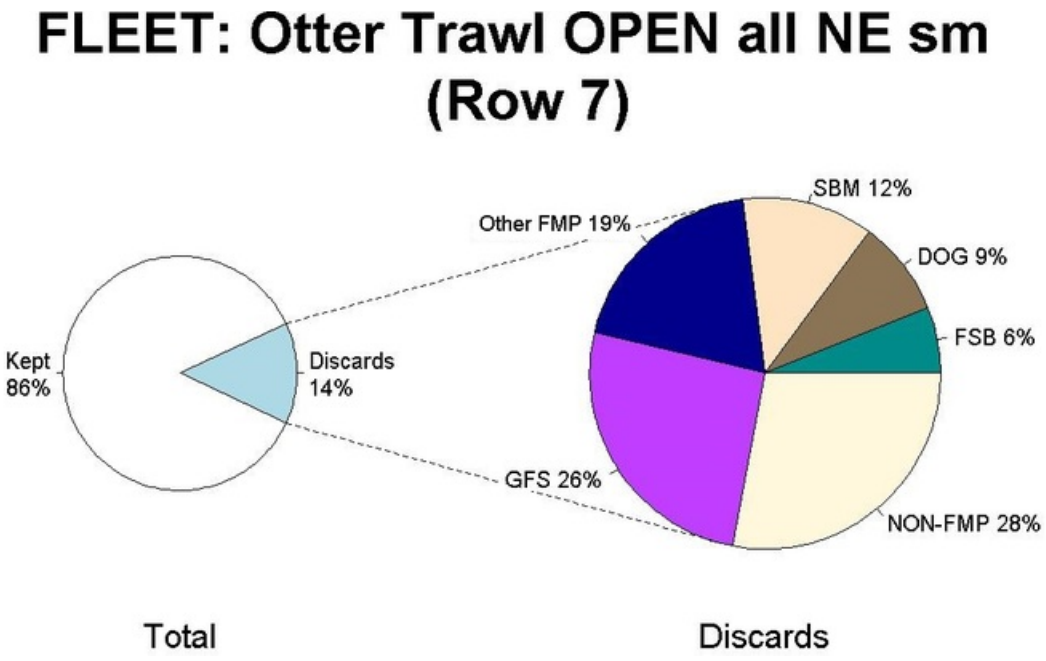

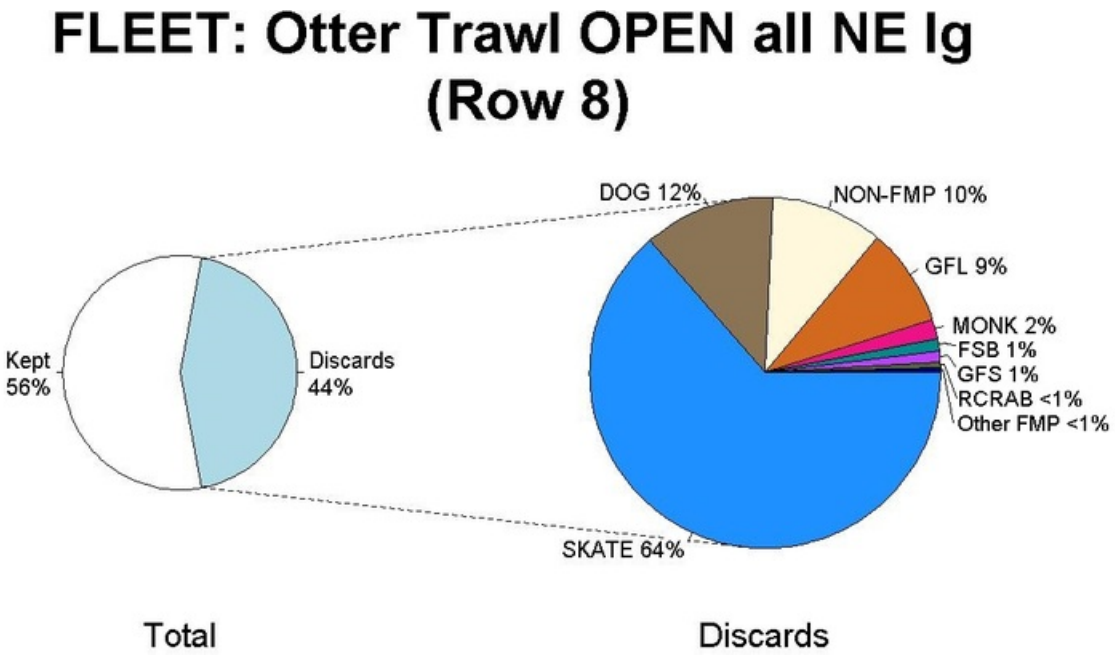

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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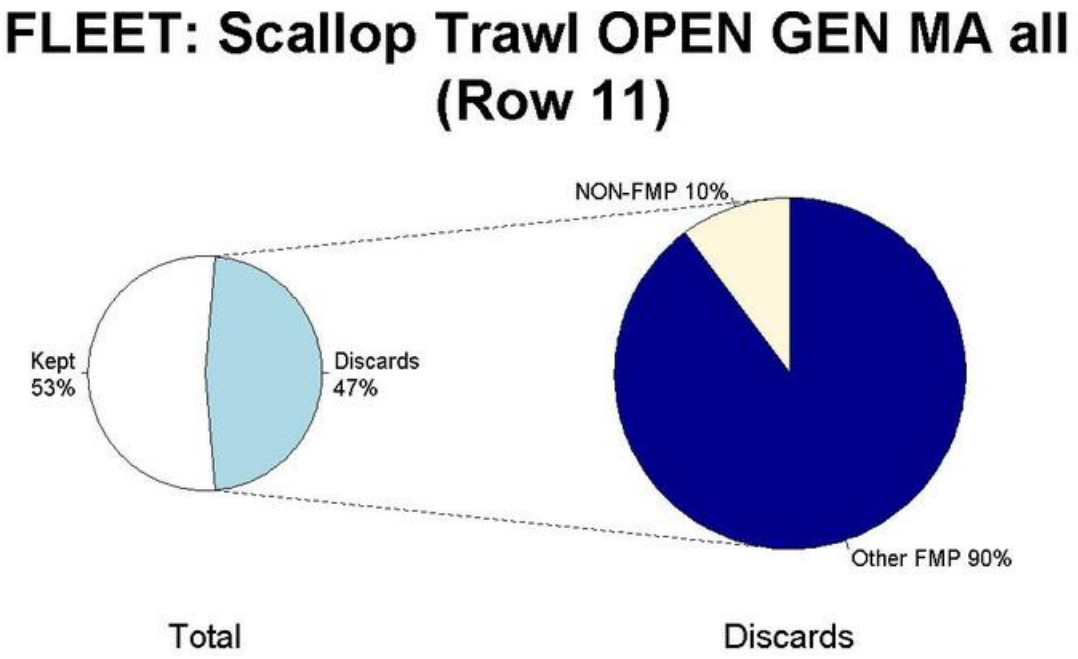

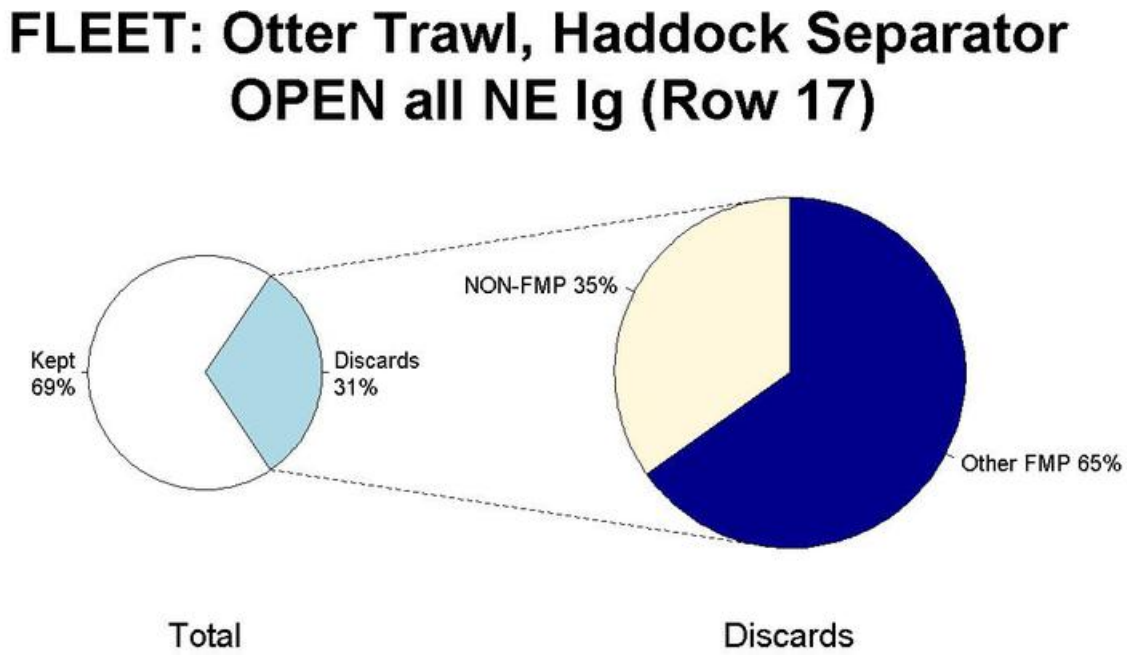

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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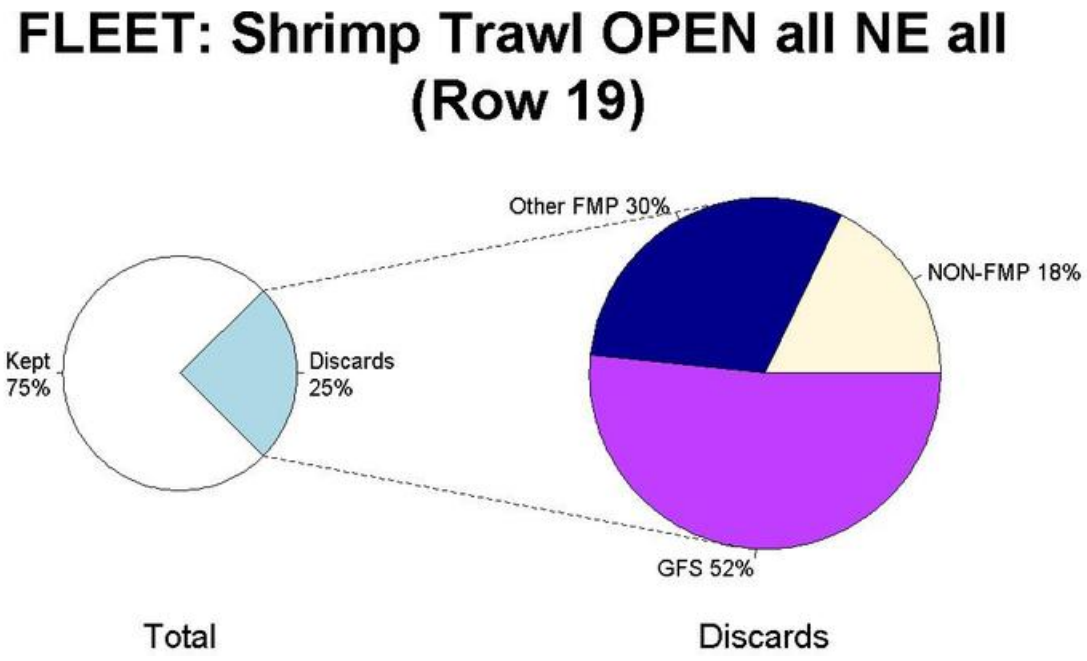

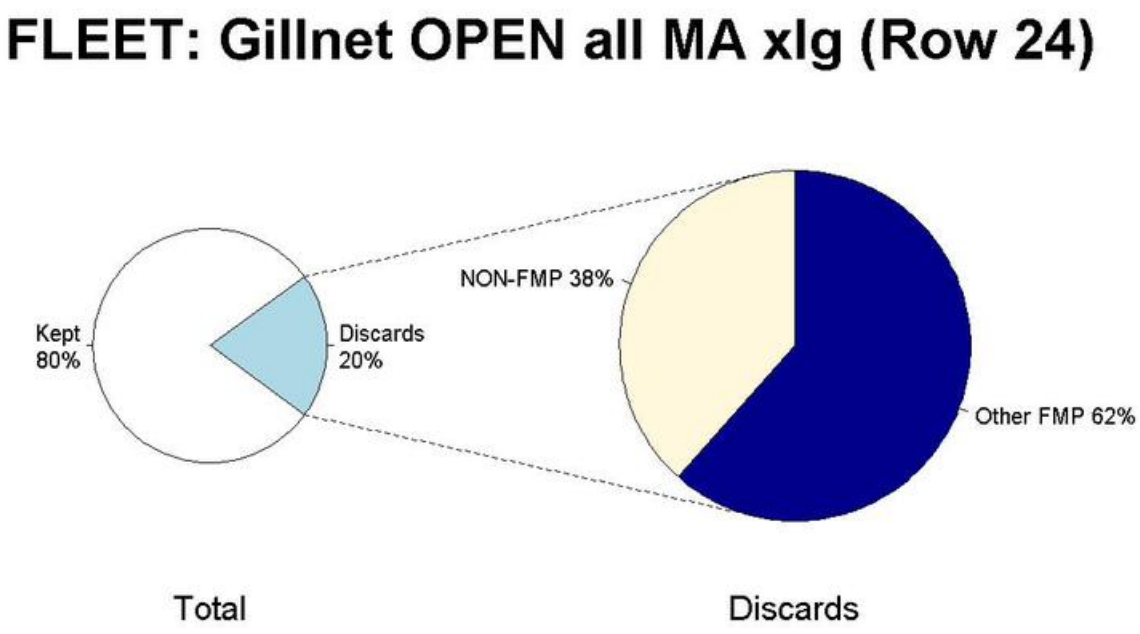

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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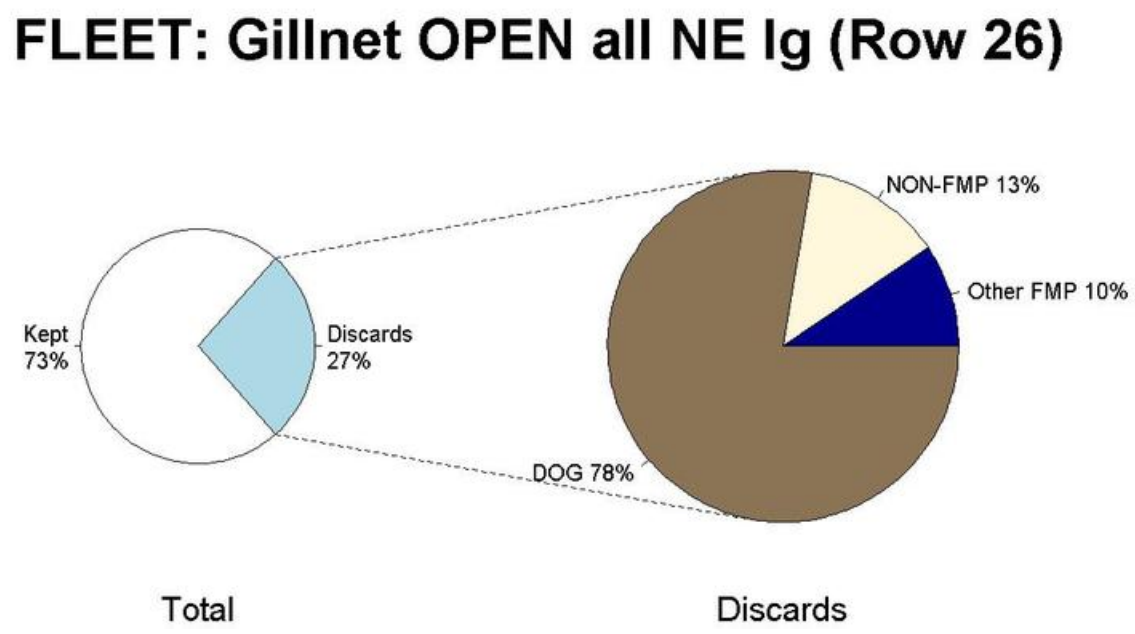

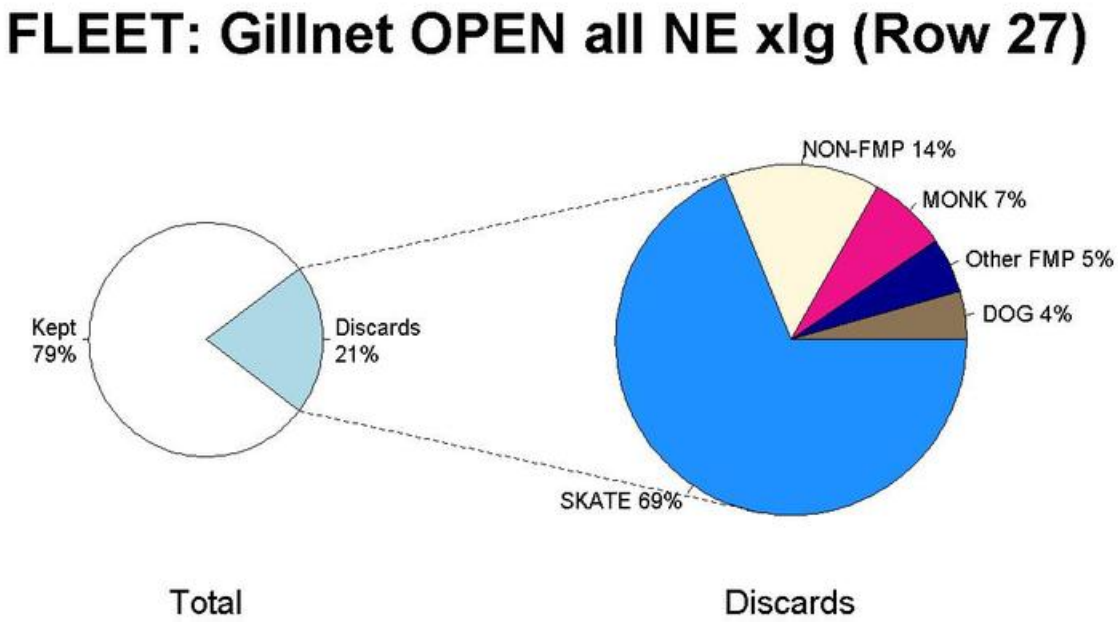

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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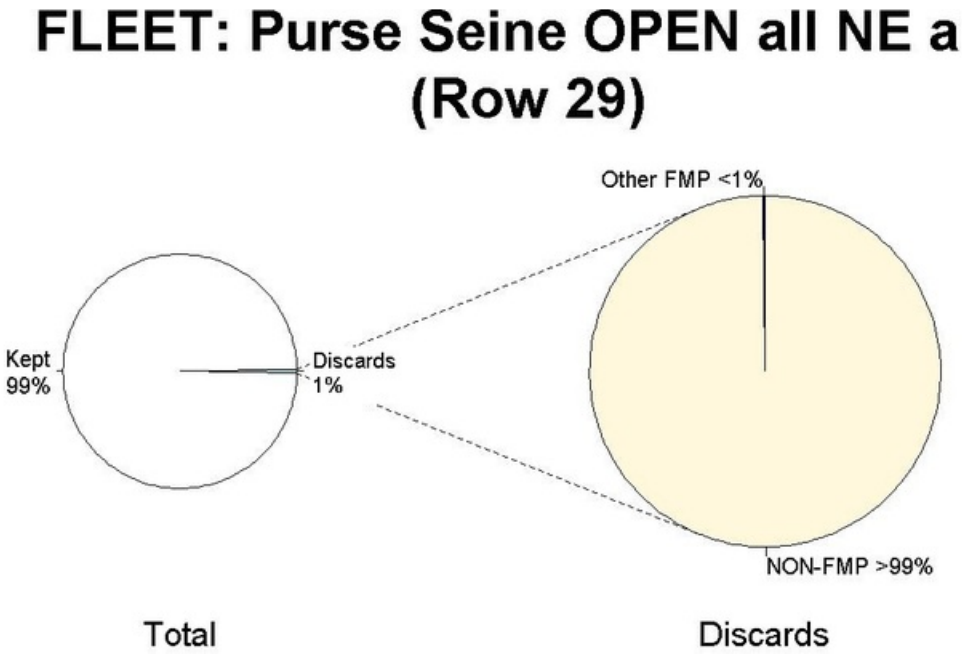

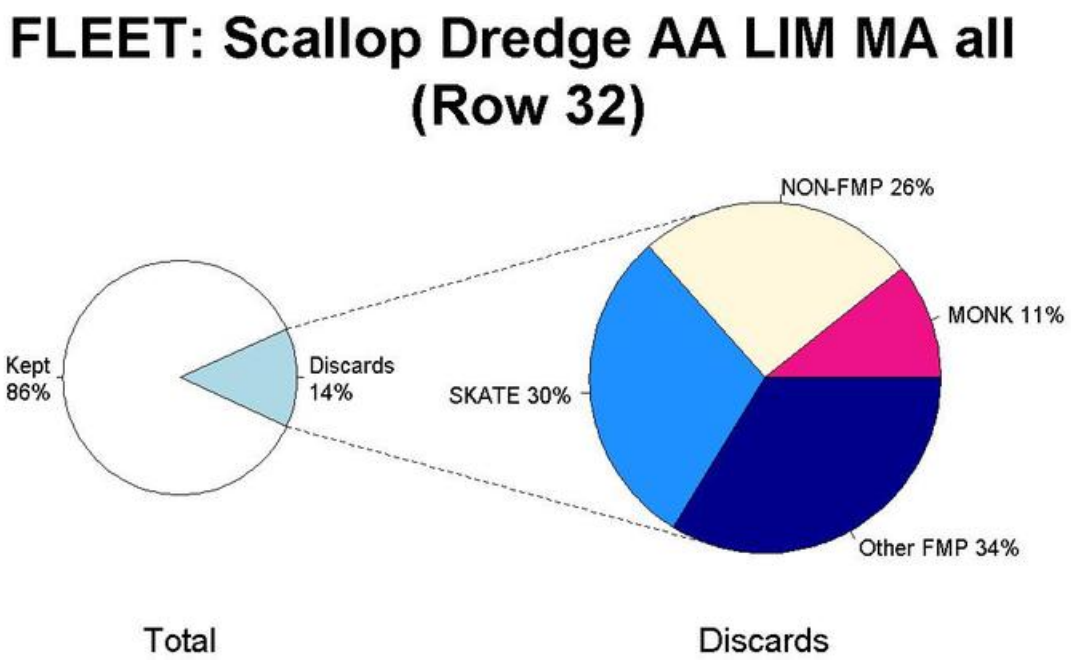

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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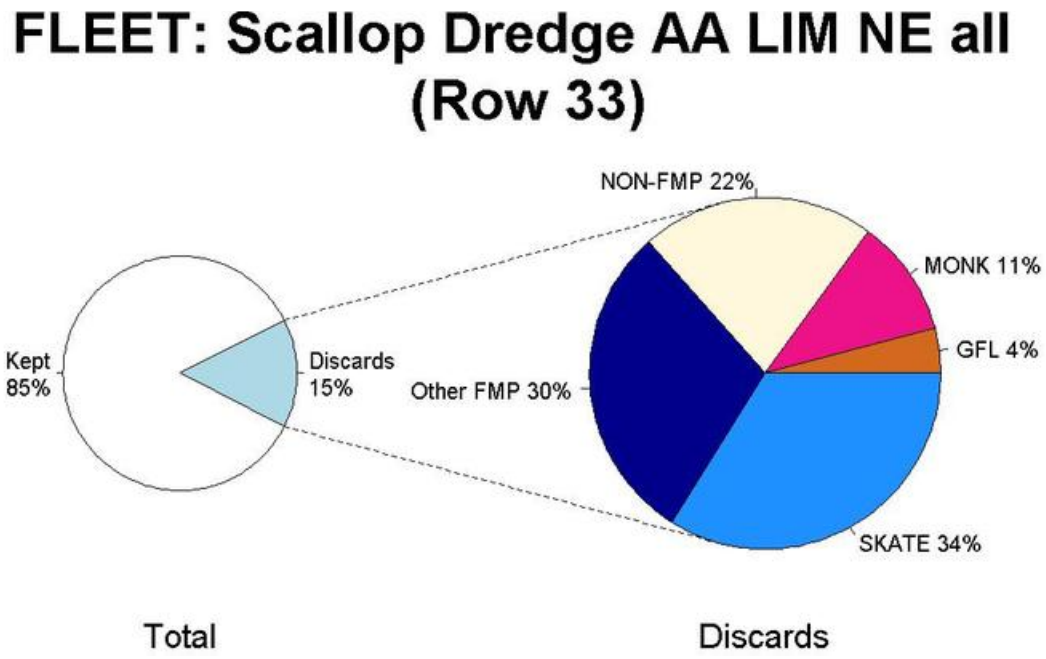

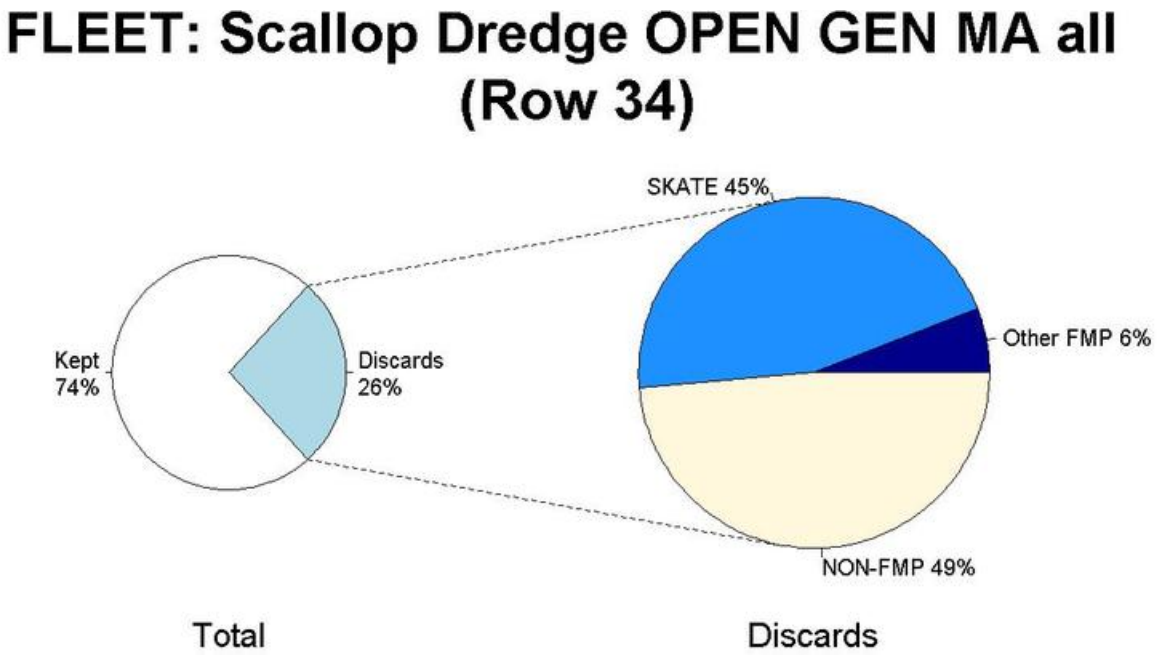

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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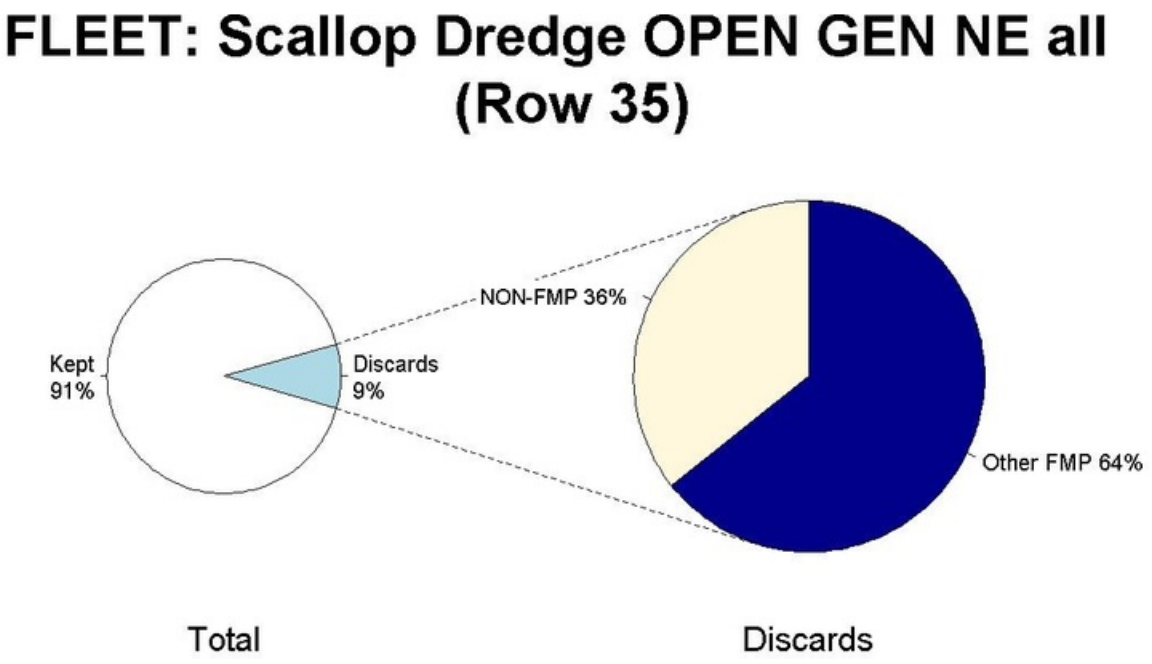

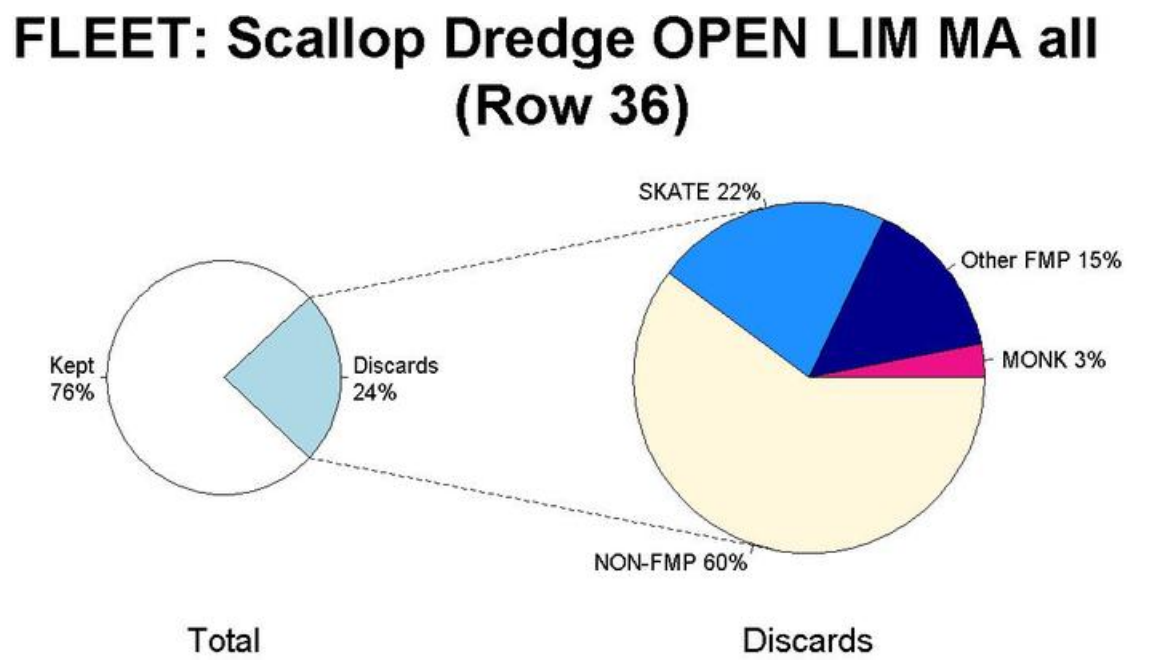

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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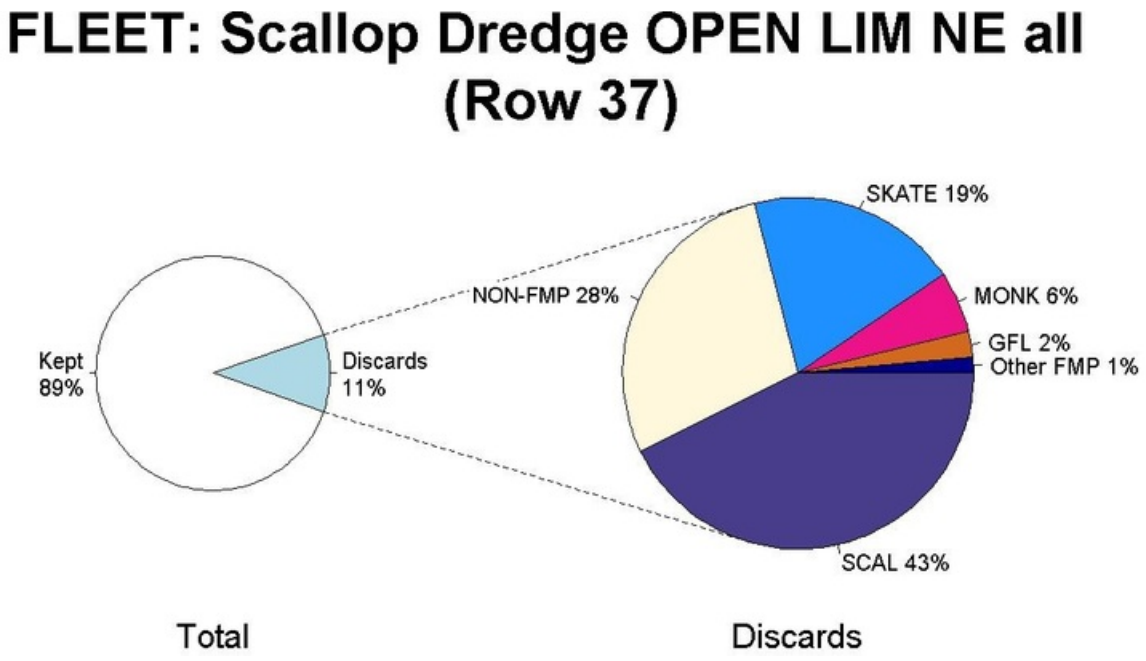

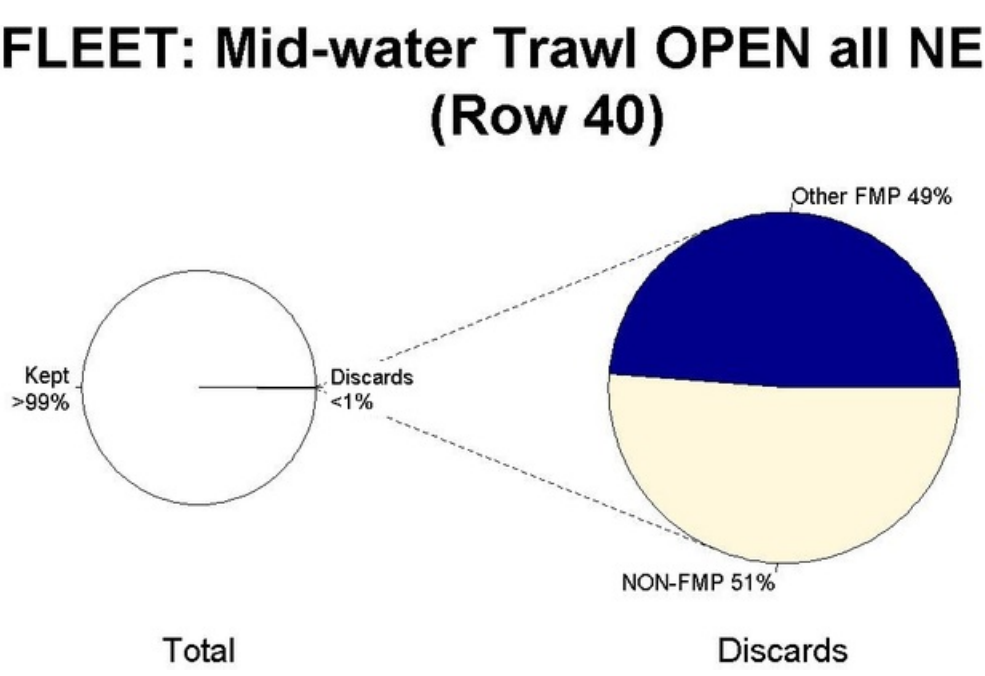

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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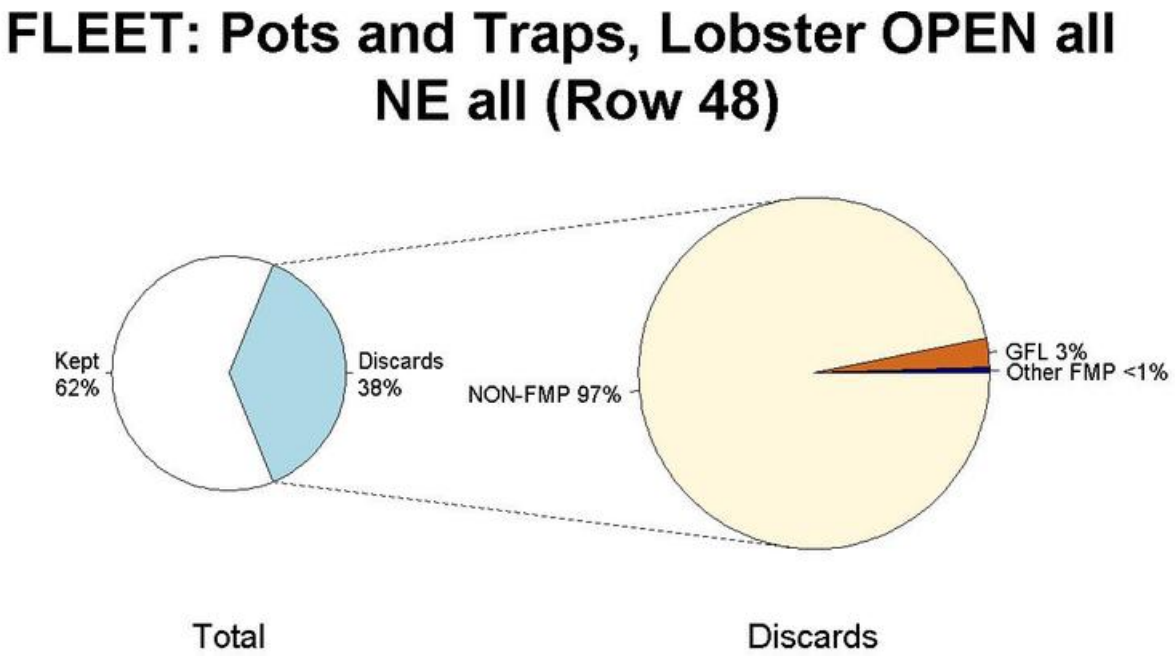

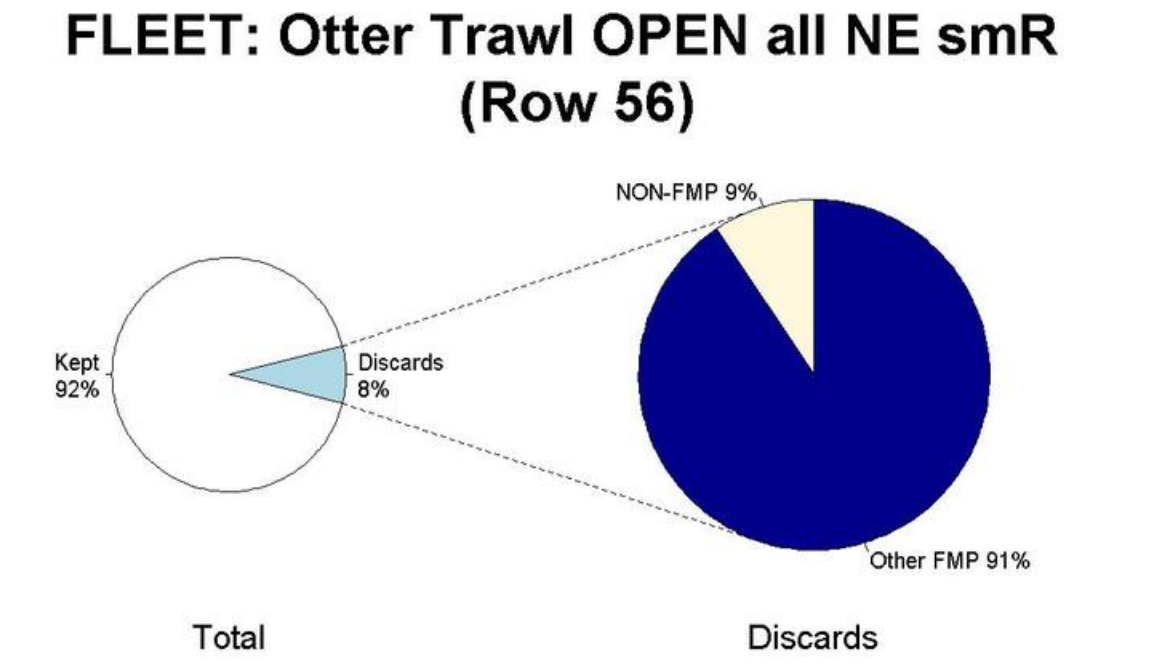

Figure 2, continued. Percentage of Vessel Trip Report landings (kept) and estimated discards (Total, left pie) and the percentage of estimated discards by species groups (Discards, right pie) for 22 selected fleets, based on July 2012 through June 2013 data. Because percentages have been rounded, they may not always sum to 100%. See Table 1 for species group abbreviations; fishery management plan (FMP) species groups that were filtered out through the importance filter have been aggregated and labeled "Other FMP;" non-FMP species have been grouped and labeled "Non-FMP."

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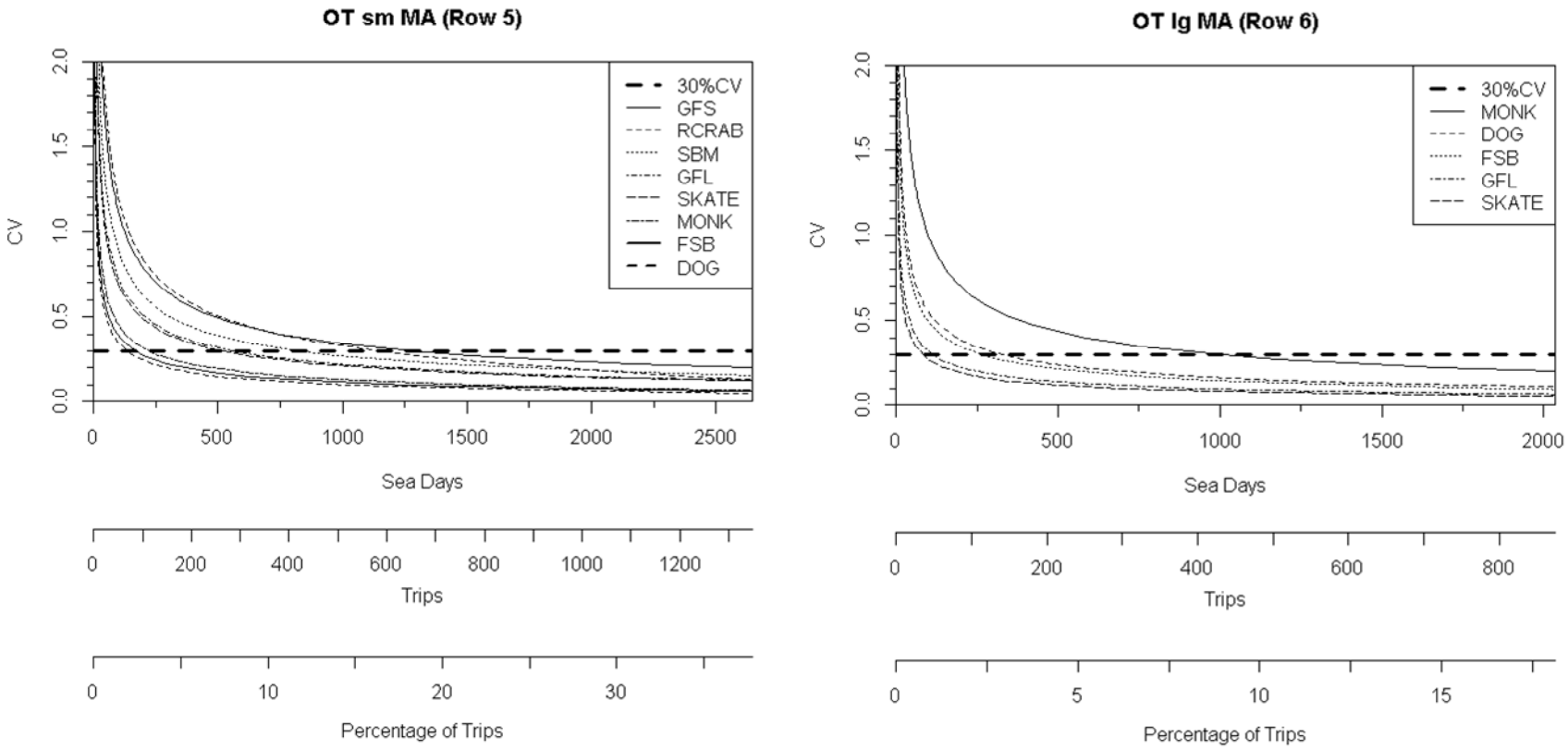


Figure 3. Results from the 2014 sample size analysis conducted for selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips and percent of trips) for each of the species groups that was not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Tables 1 and Appendix Table 4, respectively.

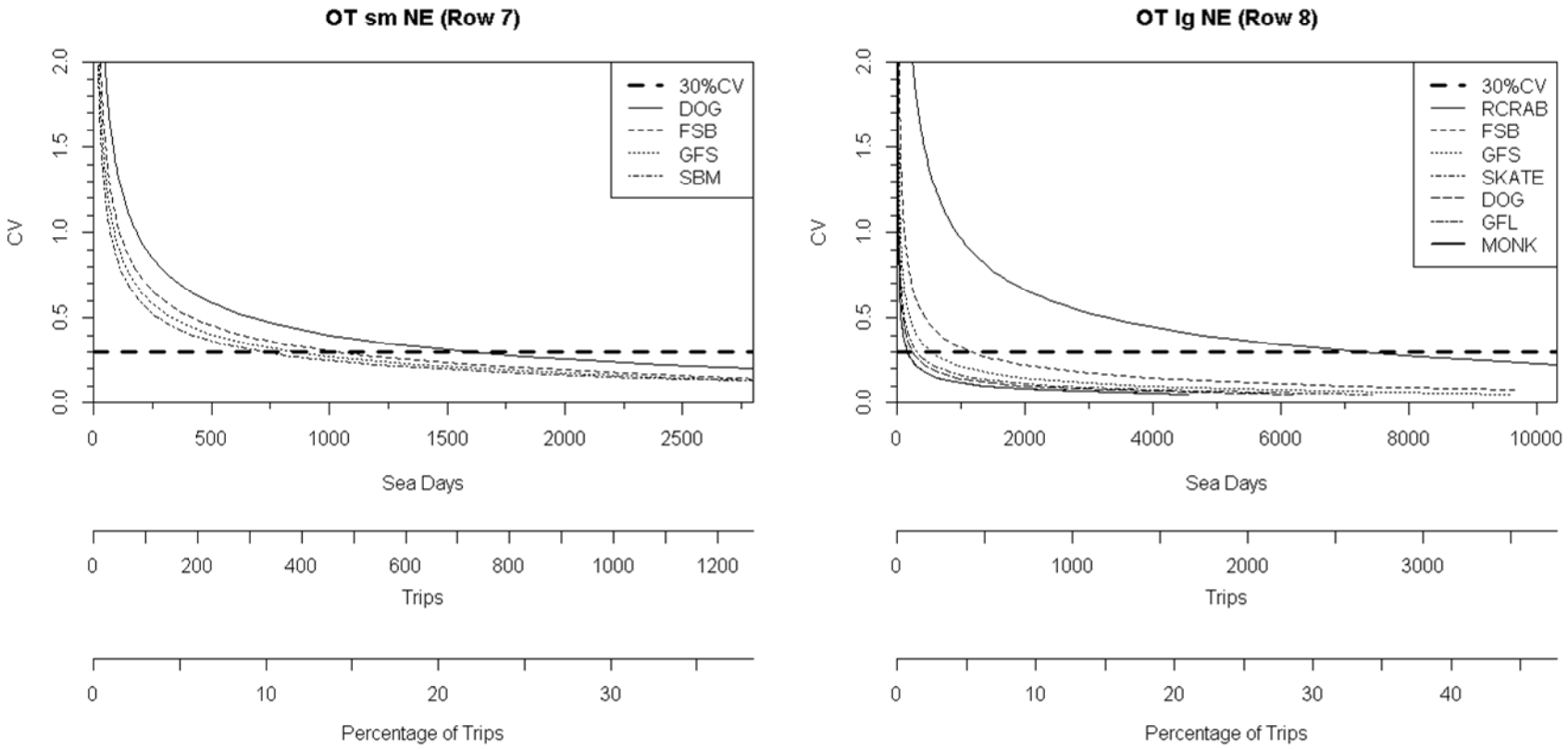
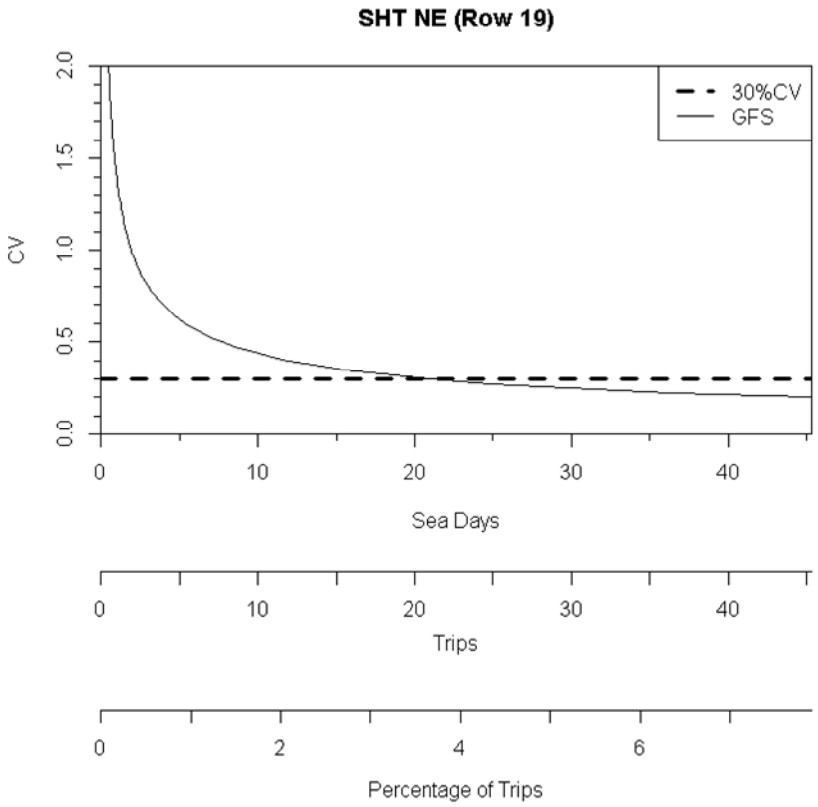
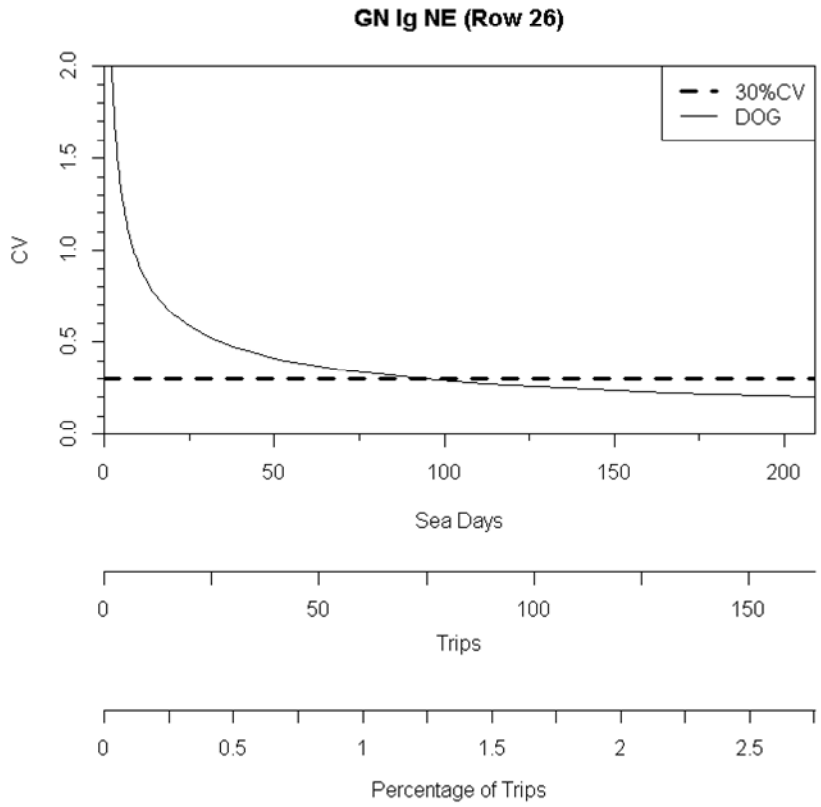


Figure 3, continued. Results from the 2014 sample size analysis conducted for selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips and percent of trips) for each of the species groups that was not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Tables 1 and Appendix Table 4, respectively.





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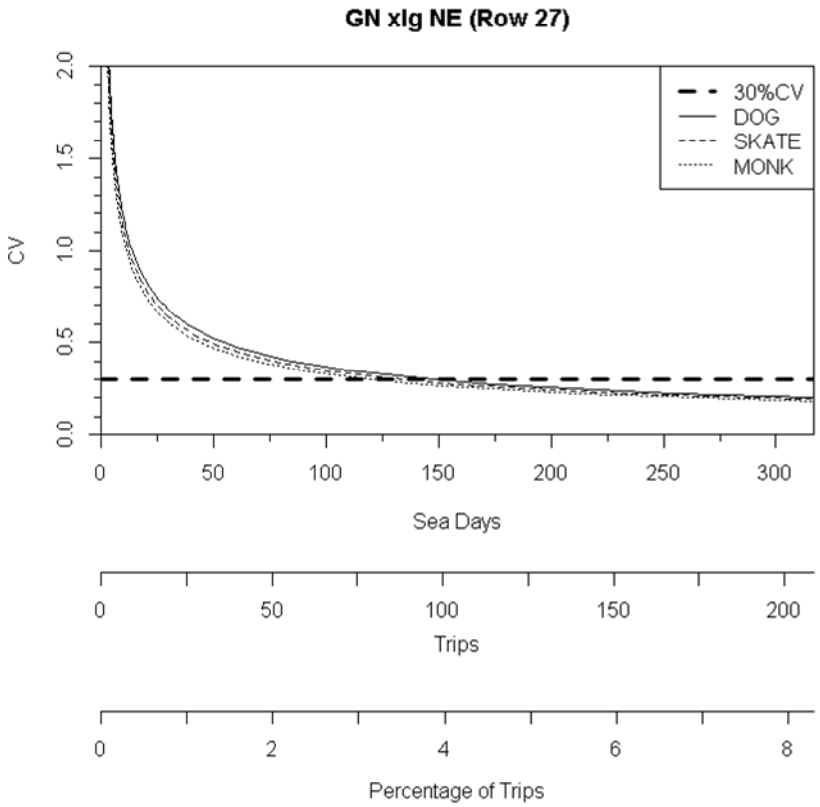


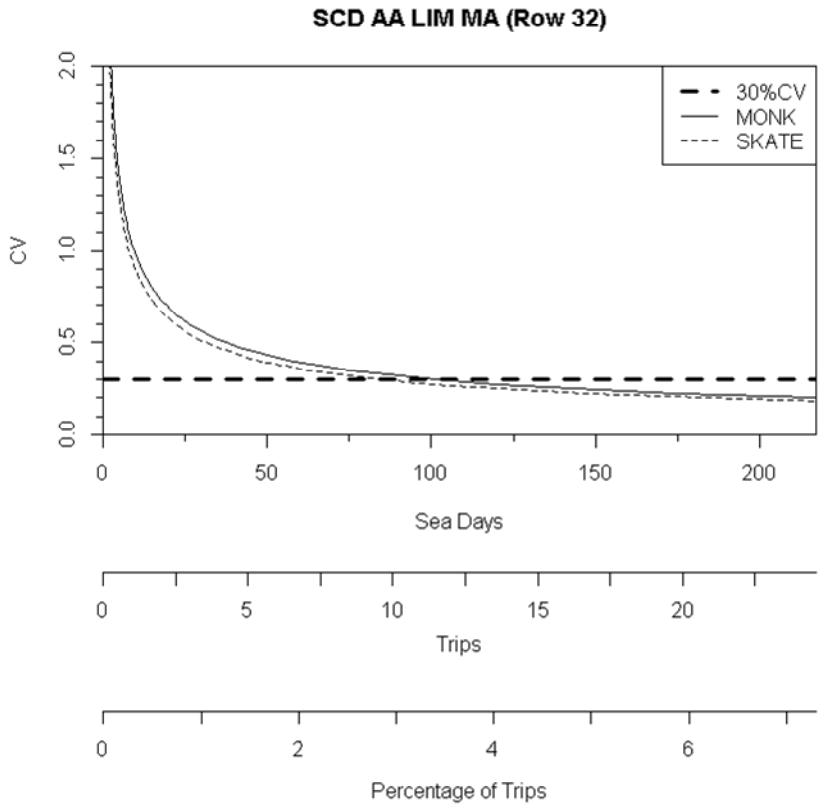
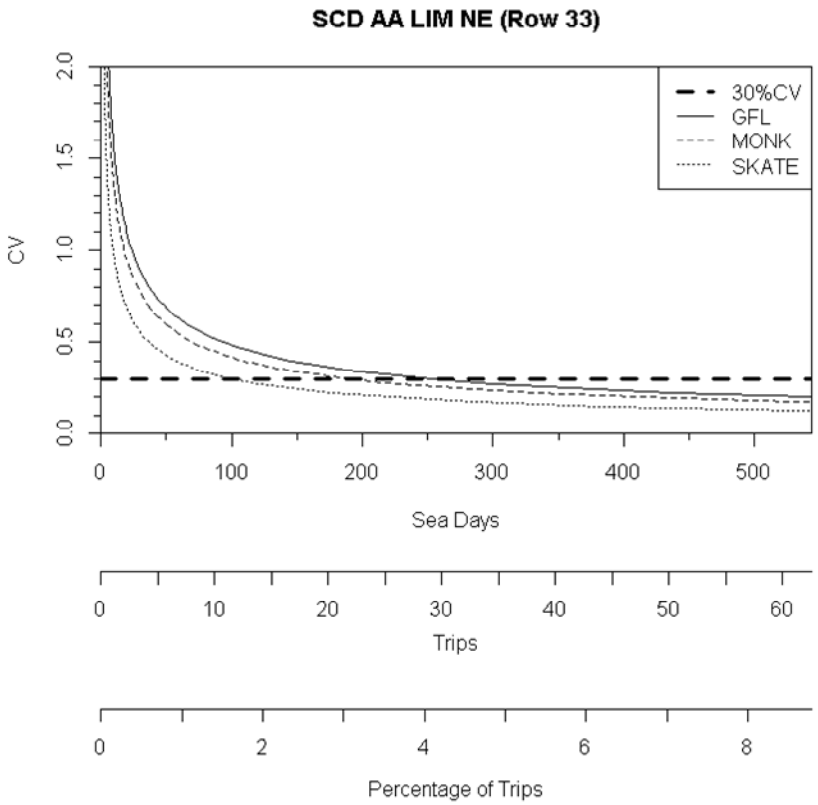


Figure 3, continued. Results from the 2014 sample size analysis conducted for selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips and percent of trips) for each of the species groups that was not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Tables 1 and Appendix Table 4, respectively.



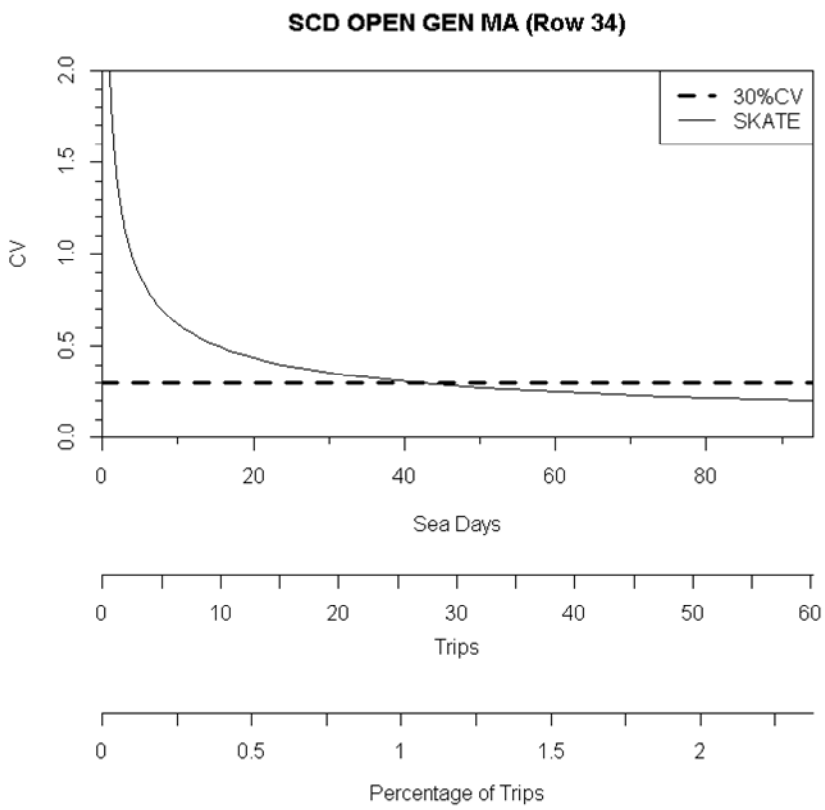
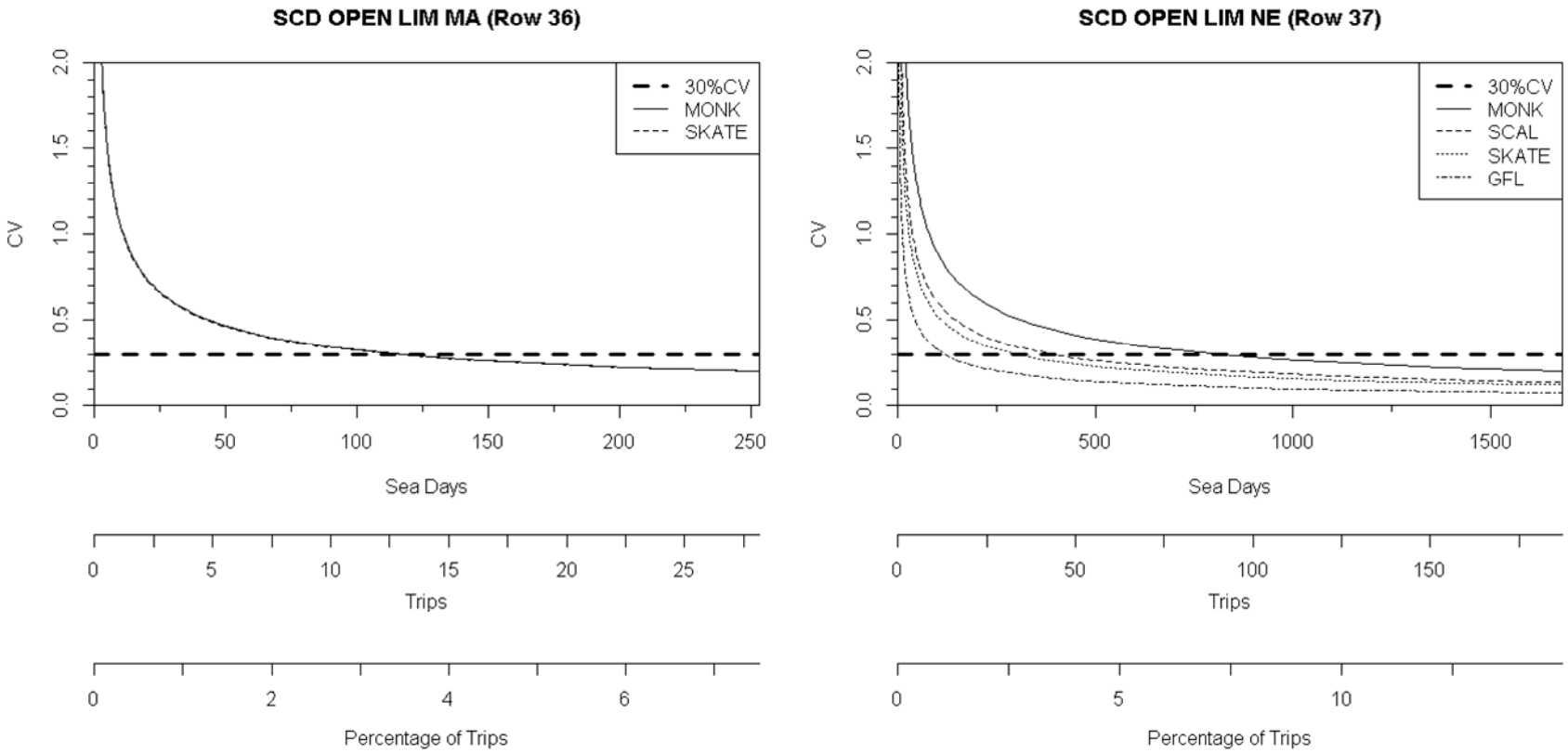


Figure 3, continued. Results from the 2014 sample size analysis conducted for selected fleets. The curves represent the relationship between the coefficient of variance (CV) and the sample size (sea days, trips and percent of trips) for each of the species groups that was not filtered out. The dash line is the 30% CV. For species group and fleet abbreviations, see Tables 1 and Appendix Table 4, respectively.



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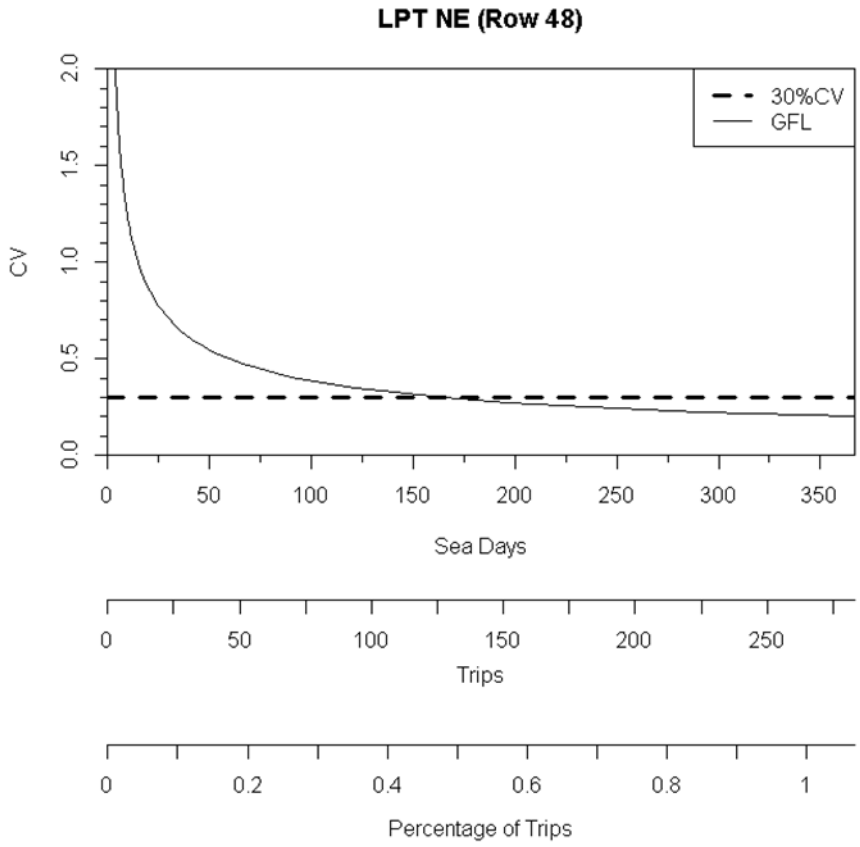

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Appendix Table 1. The number of fleets used in analyses and reported in the tables of this report.

56 fleets uniquely identified in Tables 2 & 3

28 fleets with no NEFOP coverage
discard estimation not conducted
pilot fleet designation for sample size analysis

7 confidential fleets
aggregated into “Confidential fleets” in Tables 4 & 5

21 nonconfidential fleets

6 fleets with sparse NEFOP coverage
discard estimation conducted
pilot fleet designation for sample size analysis

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

5 nonconfidential fleets

22 fleets with sufficient NEFOP coverage
discard estimation conducted
variance of discard used for sample size analysis
non-pilot fleets

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

22 non-confidential fleets

Other minor fleets
not uniquely identified
includes twin trawl fleets and 1 confidential fleet with sparse NEFOP 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 2012 through June 2013 data.

Species Group: ATLANTIC SALMON (Salmo salar)

						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
	27 Other fleets filtered out					49	0.0	0.0	100.0	0.0	0.0	0.0	100.0

Species Group: BLUEFISH (Pomatomus saltatrix)

						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
	27 Other fleets filtered out					181,332	82.1	0.2	10.6	0.0	6.7	0.4	100.0

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

						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	2,703,984	13.2	64.3	21.5	0.0	0.1	0.8	100.0
6	Otter Trawl	OPEN	all	MA	lg	482,749	3.9	51.2	42.5	0.4	1.0	1.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	471,242	6.4	45.4	46.2	0.0	0.0	2.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	558,620	4.5	10.3	77.3	0.2	1.2	6.6	100.0
	23 Other fleets filtered out					746,565	54.8	3.4	37.4	0.0	2.5	1.9	100.0

Species Group: HERRING, ATLANTIC (Clupea harengus)

						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
	27 Other fleets filtered out					310,722	69.5	0.0	12.9	0.0	0.0	17.6	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 2012 through June 2013 data.

Species Group: LARGE MESH GROUNDFISH

							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	1,189,503	20.8	0.9	76.9	1.4	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	966,162	12.8	8.3	77.8	0.1	1.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	4,335,681	7.0	67.6	24.8	0.0	0.5	0.1	100.0
33	Scallop Dredge	AA	LIM	NE	all	569,479	79.6	5.6	14.7	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	617,889	81.2	2.8	15.3	0.6	0.1	0.0	100.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	419,879	48.9	0.4	50.6	0.0	0.0	0.0	100.0
	21 Other fleets filtered out					1,054,749	19.2	29.1	31.3	0.0	17.5	2.8	100.0

Species Group: MONKFISH (Lophius americanus)

							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	298,839	13.0	70.3	10.6	0.0	0.0	6.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	482,356	0.2	80.0	18.0	0.0	0.1	1.7	100.0
8	Otter Trawl	OPEN	all	NE	lg	814,448	0.3	95.9	2.4	0.0	0.1	1.4	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	247,941	0.2	2.9	0.0	0.0	96.9	0.0	100.0
32	Scallop Dredge	AA	LIM	MA	all	495,492	60.5	35.6	0.0	0.0	0.0	3.9	100.0
33	Scallop Dredge	AA	LIM	NE	all	1,503,360	77.3	21.1	0.0	0.0	0.1	1.5	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	471,489	72.6	19.2	6.5	0.0	0.0	1.7	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	1,440,189	72.4	23.8	2.8	0.0	0.1	0.9	100.0
	19 Other fleets filtered out					315,917	11.6	35.8	17.2	0.0	34.1	1.2	100.0

Appendix Table 3A, continued. Estimated discards (live lb) and percentage by discard reason category for 14 species groups, based on July 2012 through June 2013 data.

Species Group: RED CRAB (Chaceon quinquedens)

							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	489,502	99.9	0.0	0.1	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	235,459	99.9	0.0	0.1	0.0	0.0	0.0	100.0
25 Other fleets filtered out						10,553	29.0	0.0	71.0	0.0	0.0	0.0	100.0

Species Group: SEA SCALLOP (Placopecten magellanicus)

							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
37	Scallop Dredge	OPEN	LIM	NE	all	10,862,408	83.5	0.2	0.0	0.0	13.9	2.4	100.0
26 Other fleets filtered out						7,783,377	56.8	0.0	5.8	0.0	25.4	12.0	100.0

Species Group: SKATE COMPLEX (Rajidae)

							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	11,437,129	93.5	0.1	6.2	0.1	0.0	0.1	100.0
6	Otter Trawl	OPEN	all	MA	lg	15,330,383	87.7	0.0	10.1	0.0	0.0	2.2	100.0
8	Otter Trawl	OPEN	all	NE	lg	30,192,389	76.2	0.1	20.7	0.1	0.0	2.9	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	2,369,330	30.9	0.1	51.8	0.3	12.5	4.4	100.0
32	Scallop Dredge	AA	LIM	MA	all	1,369,177	97.9	0.0	2.0	0.1	0.0	0.0	100.0
33	Scallop Dredge	AA	LIM	NE	all	4,671,428	97.9	0.0	2.1	0.0	0.0	0.0	100.0
34	Scallop Dredge	OPEN	GEN	MA	all	1,930,617	98.7	0.0	1.3	0.0	0.0	0.0	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	3,245,702	99.9	0.0	0.1	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	4,955,705	98.0	0.0	1.9	0.0	0.0	0.0	100.0
18 Other fleets filtered out						2,925,574	77.0	0.0	20.1	0.9	0.2	1.8	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 2012 through June 2013 data.

Species Group: SMALL MESH GROUNDFISH

							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	1,368,737	84.3	13.2	0.1	0.0	0.5	1.9	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,979,522	61.2	0.2	19.7	0.0	6.8	12.1	100.0
8	Otter Trawl	OPEN	all	NE	lg	479,570	95.9	0.1	2.8	0.0	1.1	0.0	100.0
19	Shrimp Trawl	OPEN	all	NE	all	133,507	77.7	21.7	0.6	0.0	0.0	0.0	100.0
23 Other fleets filtered out						310,255	95.6	0.1	1.1	0.0	3.1	0.1	100.0

Species Group: SPINY DOGFISH (Squalus acanthias)

							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	5,262,860	94.1	0.0	4.1	0.0	0.0	1.8	100.0
6	Otter Trawl	OPEN	all	MA	lg	1,511,303	98.4	0.0	1.6	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	675,517	92.0	0.0	8.0	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	5,748,524	95.3	0.0	4.6	0.0	0.0	0.1	100.0
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	4,195,911	69.4	0.0	24.1	0.0	3.4	3.1	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	153,652	60.7	0.0	8.1	0.0	29.3	1.9	100.0
21 Other fleets filtered out						846,861	91.4	0.0	3.6	0.0	1.0	4.0	100.0

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

							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	1,090,839	67.4	7.5	17.9	0.0	3.5	3.8	100.0
7	Otter Trawl	OPEN	all	NE	sm	928,183	89.1	0.8	1.0	0.0	3.5	5.6	100.0
25 Other fleets filtered out						106,009	96.4	0.4	2.1	0.0	0.9	0.2	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 2012 through June 2013 data.

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

							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
27 Other fleets filtered out						134,583	100.0	0.0	0.0	0.0	0.0	0.0	100.0

Species Group: TILEFISH (Lopholatilus chamaeleonticeps)

							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
27 Other fleets filtered out						6,718	21.0	28.2	10.7	0.0	40.1	0.0	100.0

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 2012 through June 2013 data.

Species Group: BLACK SEA BASS (Centropristis striata)

							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	471,513	1.7	27.6	66.3	0.0	0.0	4.3	100.0
7	Otter Trawl	OPEN	all	NE	sm	59,293	1.8	31.1	67.0	0.2	0.0	0.0	100.0
25 Other fleets filtered out						81,614	9.3	28.3	60.1	2.3	0.0	0.0	100.0

Species Group: FLUKE (Paralichthys dentatus)

							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	286,927	13.4	19.5	66.2	0.0	0.3	0.5	100.0
6	Otter Trawl	OPEN	all	MA	lg	207,083	0.6	26.8	69.4	0.0	1.0	2.3	100.0
8	Otter Trawl	OPEN	all	NE	lg	462,636	0.7	3.5	86.2	0.2	1.4	7.9	100.0
33	Scallop Dredge	AA	LIM	NE	all	213,657	78.7	0.0	21.1	0.0	0.2	0.0	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	159,772	66.6	5.7	18.4	0.1	0.2	9.1	100.0
22 Other fleets filtered out						420,256	31.5	5.3	58.9	0.0	4.2	0.2	100.0

Species Group: SCUP (Stenotomus chrysops)

							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	1,945,543	16.0	79.1	4.7	0.0	0.1	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	354,052	6.7	52.7	38.2	0.0	0.0	2.3	100.0
25 Other fleets filtered out						300,813	12.9	69.4	16.8	0.0	0.9	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 2012 through June 2013 data.

Species Group: AMERICAN PLAICE (Hippoglossoides platessoides)

							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
7	Otter Trawl	OPEN	all	NE	sm	27,662	0.7	47.6	51.7	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	493,323	0.0	99.2	0.0	0.0	0.8	0.0	100.0
25 Other fleets filtered out						48,511	52.5	14.3	9.9	0.0	23.3	0.0	100.0

Species Group: ATLANTIC COD (Gadus morhua)

							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	399,471	0.0	99.6	0.3	0.0	0.1	0.0	100.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	257,993	19.5	0.8	79.6	0.0	0.0	0.0	100.0
25 Other fleets filtered out						147,252	8.8	54.8	9.1	0.0	27.3	0.0	100.0

Species Group: ATLANTIC HALIBUT (Hippoglossus hippoglossus)

							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	89,424	0.0	84.4	14.5	0.0	0.0	1.1	100.0
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,010	0.0	97.8	0.8	0.4	1.0	0.0	100.0
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	19,707	0.8	66.3	20.8	0.0	9.1	2.9	100.0
24 Other fleets filtered out						2,176	9.9	64.3	25.9	0.0	0.0	0.0	100.0

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 2012 through June 2013 data.

Species Group: ATLANTIC WOLFFISH (Anarhichas lupus)

							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	43,615	1.5	0.0	98.5	0.0	0.0	0.0	100.0
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7,027	2.7	0.0	96.7	0.7	0.0	0.0	100.0
25 Other fleets filtered out						2,566	37.9	0.0	62.1	0.0	0.0	0.0	100.0

Species Group: HADDOCK (Melanogrammus aeglefinus)

							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
7	Otter Trawl	OPEN	all	NE	sm	26,302	0.0	3.3	96.7	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	705,042	0.2	99.7	0.0	0.0	0.1	0.0	100.0
40	Mid-water paired & single Trawl	OPEN	all	NE	all	31,347	9.9	0.0	0.8	0.0	0.0	89.3	100.0
24 Other fleets filtered out						55,353	19.5	73.0	3.4	0.0	4.1	0.0	100.0

Species Group: OCEAN POUT (Zoarces americanus)

							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	12,204	59.9	0.0	40.1	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	24,735	74.5	0.0	25.5	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	6,900	12.3	0.0	87.7	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	90,810	32.9	0.0	67.1	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	5,964	90.0	0.0	9.8	0.2	0.0	0.0	100.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	6,170	62.5	0.0	37.5	0.0	0.0	0.0	100.0
21 Other fleets filtered out						3,751	66.1	0.0	33.9	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 2012 through June 2013 data.

Species Group: POLLOCK (Pollachius virens)

						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
	27 Other fleets filtered out					281,124	0.1	62.1	1.2	0.0	36.2	0.4	100.0

Species Group: REDFISH (Sebastes fasciatus)

						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	868,947	12.2	86.2	0.0	0.0	1.5	0.1	100.0
	26 Other fleets filtered out					51,844	20.8	76.6	1.0	0.2	0.7	0.7	100.0

Species Group: WHITE HAKE (Urophycis tenuis)

						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	125,266	79.8	0.0	20.2	0.0	0.0	0.0	100.0
	26 Other fleets filtered out					77,284	44.8	2.4	1.9	0.1	50.6	0.2	100.0

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 2012 through June 2013 data.

Species Group: WINDOWPANE FLOUNDER (Scophthalmus aquosus)

							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	515,169	29.1	1.0	69.5	0.4	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	704,597	13.3	0.3	86.4	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	698,357	19.6	0.2	80.2	0.0	0.0	0.0	100.0
33	Scallop Dredge	AA	LIM	NE	all	166,523	85.2	0.0	14.8	0.0	0.0	0.0	100.0
34	Scallop Dredge	OPEN	GEN	MA	all	45,665	50.6	0.0	49.4	0.0	0.0	0.0	100.0
36	Scallop Dredge	OPEN	LIM	MA	all	73,560	53.9	0.0	46.1	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	99,862	70.6	0.0	29.3	0.0	0.0	0.0	100.0
20 Other fleets filtered out						75,059	50.6	0.0	49.4	0.0	0.0	0.0	100.0

Species Group: WINTER FLOUNDER (Pseudopleuronectes americanus)

							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	210,150	7.4	2.4	83.5	6.7	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	127,938	3.0	7.2	89.8	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	89,770	6.7	0.5	92.7	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	393,511	0.7	12.2	86.8	0.0	0.3	0.0	100.0
33	Scallop Dredge	AA	LIM	NE	all	180,320	89.3	0.0	10.6	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	360,088	83.7	0.2	15.2	0.9	0.1	0.0	100.0
21 Other fleets filtered out						83,170	66.6	3.8	28.8	0.2	0.6	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 2012 through June 2013 data.

Species Group: WITCH FLOUNDER (Glyptocephalus cynoglossus)

							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	331,994	21.2	0.1	78.8	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	22,818	4.4	64.8	30.8	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	130,426	0.3	99.0	0.4	0.0	0.3	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	31,238	83.6	3.6	12.8	0.0	0.0	0.0	100.0
23 Other fleets filtered out						40,772	61.3	6.8	29.6	2.2	0.1	0.0	100.0

Species Group: YELLOWTAIL FLOUNDER (Limanda ferruginea)

							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	109,774	3.6	0.9	95.5	0.0	0.0	0.0	100.0
6	Otter Trawl	OPEN	all	MA	lg	75,551	0.9	67.7	31.4	0.0	0.0	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	279,933	1.1	97.7	0.9	0.0	0.2	0.1	100.0
33	Scallop Dredge	AA	LIM	NE	all	187,064	63.5	16.2	20.3	0.0	0.1	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	91,832	76.0	16.9	6.0	0.4	0.6	0.0	100.0
22 Other fleets filtered out						109,421	32.6	20.9	45.7	0.0	0.5	0.2	100.0

Species Group: OFFSHORE HAKE (Merluccius albidus)

							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	5,859	100.0	0.0	0.0	0.0	0.0	0.0	100.0
26 Other fleets filtered out						704	100.0	0.0	0.0	0.0	0.0	0.0	100.0

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 2012 through June 2013 data.

Species Group: RED HAKE (Merluccius albidus)

							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	335,308	91.6	8.4	0.0	0.0	0.0	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	929,785	87.2	0.1	4.3	0.0	8.4	0.0	100.0
8	Otter Trawl	OPEN	all	NE	lg	149,064	98.5	0.2	1.3	0.0	0.1	0.0	100.0
33	Scallop Dredge	AA	LIM	NE	all	63,028	100.0	0.0	0.0	0.0	0.0	0.0	100.0
37	Scallop Dredge	OPEN	LIM	NE	all	51,876	99.9	0.0	0.1	0.0	0.0	0.0	100.0
48	Pots and Traps, Lobster	OPEN	all	NE	all	38,864	94.4	0.0	5.6	0.0	0.0	0.0	100.0
	21 Other fleets filtered out					42,883	98.0	0.5	1.3	0.0	0.2	0.0	100.0

Species Group: SILVER HAKE (Merluccius bilinearis)

							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	1,027,570	80.1	16.0	0.1	0.0	0.8	3.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	1,049,364	39.6	0.3	32.5	0.0	5.6	22.1	100.0
8	Otter Trawl	OPEN	all	NE	lg	330,188	94.9	0.1	3.5	0.0	1.5	0.0	100.0
	24 Other fleets filtered out					247,096	83.7	11.8	0.5	0.0	3.8	0.2	100.0

Species Group: ATLANTIC MACKEREL (Scomber scombrus)

							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
	27 Other fleets filtered out					32,980	97.4	0.1	0.1	0.0	2.4	0.0	100.0

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 2012 through June 2013 data.

Species Group: BUTTERFISH (Peprilus triacanthus)

							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	426,575	91.3	8.3	0.0	0.0	0.4	0.0	100.0
7	Otter Trawl	OPEN	all	NE	sm	283,143	81.5	2.2	0.1	0.0	0.2	16.0	100.0
25 Other fleets filtered out						8,677	93.8	4.1	1.9	0.0	0.3	0.0	100.0

Species Group: NORTHERN SHORTFIN SQUID (Illex illecebrosus)

							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
7	Otter Trawl	OPEN	all	NE	sm	466,608	97.2	0.0	1.4	0.0	1.3	0.1	100.0
26 Other fleets filtered out						64,038	92.0	0.0	6.2	0.0	0.1	1.6	100.0

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

							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	618,261	35.1	7.5	44.9	0.0	3.2	9.4	100.0
26 Other fleets filtered out						188,665	92.2	0.0	2.0	0.0	5.7	0.2	100.0

See text for fleet abbreviations.

Appendix Table 4. Fleet abbreviations used in Figures 1A, 1B, and 3. Fleets that were filtered out through the importance filter and fleets designated as in need of pilot coverage have been aggregated into "Other fleets."

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Fleet Abbreviation
1	Longline	OPEN	all	MA	all	LL MA (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)
14	Otter Trawl, Ruhle	OPEN	all	MA	lg	OTR lg MA (Row 14)
15	Otter Trawl, Ruhle	OPEN	all	NE	sm	OTR sm NE (Row 15)
16	Otter Trawl, Ruhle	OPEN	all	NE	lg	OTR lg NE (Row 16)
17	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	OTH lg NE (Row 17)
18	Shrimp Trawl	OPEN	all	MA	all	SHT MA (Row 18)
19	Shrimp Trawl	OPEN	all	NE	all	SHT NE (Row 19)
20	Floating Trap	OPEN	all	MA	all	FT MA (Row 20)
21	Floating Trap	OPEN	all	NE	all	FT NE (Row 21)
22	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	GN sm MA (Row 22)
23	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	GN lg MA (Row 23)
24	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	GN xlg MA (Row 24)
25	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	GN sm NE (Row 25)
26	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	GN lg NE (Row 26)
27	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	GN xlg NE (Row 27)
28	Purse Seine	OPEN	all	MA	all	PS MA (Row 28)
29	Purse Seine	OPEN	all	NE	all	PS NE (Row 29)
30	Scallop Dredge	AA	GEN	MA	all	SCD AA GEN MA (Row 30)
31	Scallop Dredge	AA	GEN	NE	all	SCD AA GEN NE (Row 31)
32	Scallop Dredge	AA	LIM	MA	all	SCD AA LIM MA (Row 32)
33	Scallop Dredge	AA	LIM	NE	all	SCD AA LIM NE (Row 33)
34	Scallop Dredge	OPEN	GEN	MA	all	SCD OPEN GEN MA (Row 34)
35	Scallop Dredge	OPEN	GEN	NE	all	SCD OPEN GEN NE (Row 35)
36	Scallop Dredge	OPEN	LIM	MA	all	SCD OPEN LIM MA (Row 36)
37	Scallop Dredge	OPEN	LIM	NE	all	SCD OPEN LIM NE (Row 37)
38	Danish Seine	OPEN	all	MA	all	DS MA (Row 38)
39	Mid-water Paired & Single Trawl	OPEN	all	MA	all	MWT MA (Row 39)
40	Mid-water Paired & Single Trawl	OPEN	all	NE	all	MWT NE (Row 40)
41	Pots and Traps, Fish	OPEN	all	MA	all	FPT MA (Row 41)
42	Pots and Traps, Fish	OPEN	all	NE	all	FPT NE (Row 42)
43	Pots and Traps, Conch	OPEN	all	MA	all	CPT MA (Row 43)
44	Pots and Traps, Conch	OPEN	all	NE	all	CPT NE (Row 44)
45	Pots and Traps, Hagfish	OPEN	all	NE	all	HPT NE (Row 45)
46	Pots and Traps, Shrimp	OPEN	all	NE	all	SPT 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)

Appendix Table 4, continued. Fleet abbreviations used in Figures 1A, 1B, and 3. Fleets that were filtered out through the importance filter and fleets designated as in need of pilot coverage have been aggregated into "Other fleets."

Row	Gear Type	Access Area	Trip Category	Region	Mesh Group	Fleet Abbreviation
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	OPEN	all	NE	smR	OT smR NE (Row 56)
	Other fleets filtered out					Other fleets

APPENDIX: EQUATIONS USED IN DISCARD ESTIMATION AND SAMPLE SIZE ANALYSES

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

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

where

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

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

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

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

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

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

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

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

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

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

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

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:

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

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

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

(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, $\hat{T}F_h$ for stratum *h* is defined as:

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

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

The achieved coefficient of variation (CV) of $\hat{D}_j$ is based on the variance of the composite annual total discards for species group *j* in stratum *h* and the number of funded trips in stratum *h* and rewriting Eq. 8.

From Eq. 8, let

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

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