Northeast Fisheries Science Center Reference Document 17-12

A Brief Description of Greater Atlantic Region Fish and Invertebrate Discard Estimation for the National Bycatch Report First Edition Update 3

by C Tholke, SE Wigley, M Mood, and MC Palmer

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Fisheries Science Center
Woods Hole, Massachusetts

October 2017

Northeast Fisheries Science Center Reference Documents

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

This document may be cited as:

Tholke C, Wigley SE, Mood M, Palmer MC. 2017. A brief description of Greater Atlantic Region fish and invertebrate discard estimation for the National Bycatch Report First Edition Update 3. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 17-12; 143 p. Available from: http://www.nefsc.noaa.gov/publications/

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LIST OF ACRONYMS AND ABBREVIATIONS

AA = Access area
AMS = Allocation Management System
ASM = At-Sea Monitoring
CV = coefficient of variation
d/k = discard/kept
FMP = Fishery Management Plan
GEN = general
lg = large
LIM = limited
MA = Mid-Atlantic
MAFMC = Mid-Atlantic Fishery Management Council
NBR = National Bycatch Report
NE = New England
NEFMC = New England Fishery Management Council
NEFOP = Northeast Fisheries Observer Program
NEFSC = Northeast Fisheries Science Center
NMFS = National Marine Fisheries Service
OPEN = nonaccess area
sm = small
US = United States
VTR = Vessel Trip Report
xlg = extra-large

EXECUTIVE SUMMARY

This report describes the discard estimation analysis performed for Greater Atlantic Region fish and invertebrates for the forthcoming National Bycatch Report First Edition Update 3. Estimates of discards that occurred during the 2014 and 2015 calendar years in federally managed fisheries in the northeast United States were derived for 165 individual species and groups of finfish and invertebrates by using a combined discard/kept ratio estimator. Based on this analysis, approximately 101,356 mt (live weight) of discards occurred in 34 fleets in 2014, and approximately 99,542 mt (live weight) of discards occurred in 35 fleets in 2015 across the 165 individual species and groups considered. In both years, the predominant species discarded were (1) skates (Rajidae), (2) benthic species, other, and (3) American lobster (*Homarus americanus)*. Sand dollars (*Echinarachnius parma*) was the driving species in the "Benthic Species, Other" group, contributing approximately 89% of the group's total discards in 2014 and approximately 88% of the group's total discards in 2015. Of the 2014 and 2015 discards, approximately 60,077 mt and 64,621 mt of discards occurred respectively for the 34 fish and invertebrate species with fishery management plans developed by the Mid-Atlantic Fishery Management Council and the New England Fishery Management Council in the waters off the northeastern United States. 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, data, and estimation methods. Hence, the discard estimates presented here are not definitive but indicative of where discarding is occurring among commercial fisheries and for which species.

INTRODUCTION

In 2011, the National Marine Fisheries Service (NMFS) published the first edition of the National Bycatch Report (NBR) (NMFS 2011; Wigley et al. 2008b), which summarized estimates of discards, by species, that occurred in 2005 in federally managed fisheries in the United States. New comprehensive editions of the NBR are scheduled to occur every 6 years, with online updates produced on a biennial basis. The NBR First Edition Update 1 was published in 2013 and summarized estimates of discards that occurred in 2010 (Blaylock et al. 2013; NMFS 2013). The NBR First Edition Update 2 was published in 2016 and summarized estimates of discards that occurred in the 2011, 2012, and 2013 calendar years (Blaylock et al. 2015; NMFS 2016). The NBR Second Edition, which was scheduled to be published in 2017, has been delayed. Instead of a second edition, a third update to the First Edition is scheduled to be published in 2017 that will summarize estimates of discards that occurred in the 2014 and 2015 calendar years.

This document describes the methods used to derive the 2014 and 2015 discard estimates of finfish and invertebrate species and groups in the Greater Atlantic Region's fisheries.

For this analysis, the Greater Atlantic Region expanded the list of species considered for bycatch estimates to include 319 species, partitioned into 165 individual species and species groups, and 69 fleets[1]. The analysis did not consider stock components and only included fleets with sufficient data to derive discard estimates.

The discard estimation process used a stratification approach broad enough to encompass all species and employed a combined ratio method using a discard/kept weight ratio. The discard

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

estimates reported in this document will not necessarily correspond directly with those contained in individual stock assessments because of differences in stratification and data. However, the various estimates should be of the same order of magnitude.

METHODS

Data Sources and Stratification

The data sets include January 2014 through December 2015 data from the Northeast Fisheries Observer Program (NEFOP) database, the Vessel Trip Report (VTR; including logbooks from the surfclam [*Spisula solidissima*] and ocean quahog [*Arctica islandica*] fishery) database, the Allocation Management System (AMS) database, and the Northeast Fisheries Science Center (NEFSC) commercial landings (i.e., dealer) database.

Northeast Fisheries Observer Program (NEFOP)

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 2013a, 2013b). The NEFOP employs trained sea-going observers and monitors to collect these data[2]. Amounts of fish and invertebrate species caught are recorded in weight. Conversion factors were applied to convert any dressed weight data to live[3] 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, "set only" trips, carrier trips (*fleet_type* = "050"; no fishing effort occurred on these trips), trips fishing in a statistical area associated with the Southeast Region (statistical area ≥ 700) or Grand Banks (statistical area ≤ 400), and trips landing outside the Greater Atlantic Region were excluded. Additionally, there were 8 observed trips with no corresponding VTR trips for the gear type and quarter, including 1 New England (NE) purse seine, 3 NE tuna purse seine, 1 NE scallop beam trawl, 1 Mid-Atlantic (MA) other dredge, and 2 MA crab dredge, in 2014 and 7 observed trips with no corresponding VTR trips for the gear type and quarter, including 3 NE small-mesh haddock separator trawl, 2 NE tuna purse seine, and 2 NE scallop beam trawl, in 2015. Consequently, these 15 trips were removed from the analysis.

Finally, offwatch hauls, hauls with missing fleet information (e.g., unknown gear/mesh/area), and hauls with missing catch were omitted as well, as were records of species weight with discard reason "039" ("previously discarded"), unknown species or unknown catch disposition, and catch of nonliving items (items that would not be kept and sold, such as debris, shells).

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[2] Comparisons of discard rates derived from observer and at-sea monitor (ASM) data revealed there were generally similar discard rates between the 2 data collection programs for the 18 fish species associated with Amendment 16 to the Northeast Multispecies Fishery Management Plan for 4 gear types (bottom longline, large-mesh otter trawl, large-mesh gillnet, and extra-large-mesh gillnet) where at-sea monitor data exist (Wigley et al. 2015, 2016); hence, these data were pooled. See the ASM Fact Sheet and ASM Monitor Duties for more information on at-sea monitoring.

[3] In this document, "live" is equivalent to "round" grade.

The same broad stratification scheme used in the analysis for the NBR First Edition Update 1 and NBR First Edition Update 2 (Blaylock et al. 2013, 2015; NMFS 2013, 2016) was applied here, with trips partitioned into fleets by using 6 classification variables: calendar quarter, gear type, access area, trip category, area fished, and mesh size. Calendar quarter was based on landed date and used to capture seasonal variations in fishing activity and discard rates. Gear type was based on Northeast fishing gear codes (*negear)*. Some gear codes were combined: troll line and bottom longline; handline and auto jig handline; sink, anchored, and drift gillnets; herring and other (nontuna) purse seines; single and paired midwater trawls; and clam and quahog dredges. Two access area categories were formed based on gear and program code: access area (AA) and open (OPEN). The sea scallop (*Placopecten magellanicus*) fishery was divided into general (GEN) and limited (LIM) category trips based on trip length as a surrogate for permit category (single day is general category, multiday is limited access). All other fisheries were combined into a trip category called "all." Two regional areas were defined based on area fished: New England, which includes statistical reporting areas < "600" (encompassing southern New England, Georges Bank, and the Gulf of Maine), and Mid-Atlantic, composed of statistical areas >= "600." This area fished definition was applied to all trips except shrimp trawl trips fishing in southern New England (statistical areas 530-539), which were assigned to the MA area to separate shrimp trips using a Nordmore grate in the northern shrimp fishery from other shrimp trips using turtle excluder devices in the Mid-Atlantic. Mesh size groups were defined for otter trawl and gillnet gear types. For otter trawls, 2 mesh groups were formed: small (sm; mesh less than 5.5 in) and large (lg; mesh 5.5 in and greater). For gillnets, 3 mesh groups were formed: small (sm; mesh less than 5.5 in), large (lg; mesh between 5.5 and 7.99 in), and extra-large (xlg; mesh 8 in and greater). All other fisheries were classified into a mesh category called "all."

Vessel Trip Report (VTR)

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, except vessels holding only a federal lobster permit (see NMFS-Greater Atlantic Regional Fisheries Office VTR instructions). These self-reported data[4] 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, all 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. However, access area determination for VTR trips using scallop gear (*negear* 052 and 132) was based on activity declaration code[5] located in the AMS database. A description of the methods used to assemble VTR-AMS analytical datasets is provided in the Appendix; AMS trip information was linked[6] to VTR trip data based on matching permit number or hull identification number and trip midpoint.

[4] See Wigley et al. 2007 for more details on self-reported VTR data.

[5] The format of an activity declaration code is: CCC-PPP-AADGTB, where CCC represents the plan code, PPP represents the program code, and AA represents the area identifier. For more details about activity declaration codes, see the VMS glossary.

[6] When linking the VTR and AMS databases, a majority of scallop gear trips (*negear* 052 and 132) could successfully be matched to determine activity code and access area classification: 85% for 2014 and 90% for 2015.

Trips with plan code of “SES” (Scallop) and program code of either “SAA” (Special Access Area) or “SCG” (Limited Access General Category) were assigned to access area category, unless the area identifier was “OP” (Open area), in which case the trips were classified as open. Trips without an activity declaration code were classified as open. 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.

Other Data Sources

The clam fishery has a separate logbook system from the VTR logbook. The commercial clam logbook data were used to augment the VTR data for the clam dredge fishery.

As mentioned above, the AMS data were used to stratify VTR data into fleets. See the Appendix for further details.

Species Considered for Analysis

This analysis differs from previous analyses (Wigley et al. 2008b; Blaylock et al. 2013, 2015) in number of species considered. Previous analyses focused on the 34 fish and invertebrate species with fishery management plans (FMPs) developed by the Mid-Atlantic Fishery Management Council (MAFMC) and the New England Fishery Management Council (NEFMC) and implemented in the waters off the northeastern United States. For 2014 and 2015 the list of species considered encompassed all fish and invertebrate species with observed discards in the January 2011 to December 2015 timeframe. Species that have management plans developed by at least 1 of the following groups: NEFMC, MAFMC, NOAA’s Atlantic Highly Migratory Species Management Division, and Atlantic States Marine Fisheries Commission, were reported at the genus or species level, except for skates, which are managed and reported as a complex. The remaining species were reported as groups defined by their taxonomy, starting at the family level. If a family group had fewer than 4 species, those species were reassessed at the next taxon up, i.e. order, and so on. The remaining species that were not grouped by the class level were classified as other. The groups were then subdivided by the species’ zone in the water column (i.e., benthic, demersal, pelagic), if multiple zones within a group occurred. When categorized in this manner, the 319 individual fish and invertebrate species considered contribute to 165 individual species or species groups. Grouping was used to limit the number of nonmanaged species reported yet maintain their presence in the analyses; this approach minimized the estimation of rare bycatch events.

Discard Estimation

Annual discards of each of the 165 individual species and groups were estimated for the January 2014 to December 2015 timeframe by using a combined discard/kept (d/k) ratio estimator (Cochran 1963), where d = discarded pounds of a given species or species group, and k = the kept pounds of all species. Estimated annual discards (in weight) were derived by multiplying the estimated discard rate of each fleet by the corresponding fleet landings in the VTR database, and then summing over fleets. In this analysis, no assumptions about discard mortality were made.

Simple imputation methods were used to fill quarterly cells for which there were 0, 1, or 2 observed trips. Data from adjoining strata were pooled to impute estimates for cells with 0, 1, or 2 trips. In this imputation, only the temporal stratification (calendar quarter) was relaxed to the

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 discard estimates for the fleets were not derived.

Total annual discarded pounds for species *j* in fleet *h* (i.e., gear type, access area, trip category, area fished, and mesh group stratum combination) is defined as:

$$(1) \quad \hat{D}_{j,h} = \sum_{q=1}^{Q} K_{q,h} r_{c,j,h}$$

where

$$(2) \quad r_{c,j,h} = \frac{\sum_{q=1}^{Q} N_{q,h} \sum_{i=1}^{n_{q,h}} \frac{d_{j,i,q,h}}{n_{q,h}}}{\sum_{q=1}^{Q} N_{q,h} \sum_{i=1}^{n_{q,h}} \frac{k_{i,q,h}}{n_{q,h}}}$$

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

Variance of $\hat{D}_{j,h}$ for species *j* in fleet *h* is defined as:

$$(3) \quad V(\hat{D}_{j,h}) = \sum_{q=1}^{Q} K_{q,h}^2 \left(\frac{N_{q,h} - n_{q,h}}{n_{q,h} N_{q,h}} \right) \frac{1}{\left(\frac{\sum_{i=1}^{n_{q,h}} k_{i,q,h}}{n_{q,h}} \right)^2} \left[\frac{\sum_{i=1}^{n_{q,h}} \left(d_{j,i,q,h}^2 + \left(r_{c,j,h}\right)^2 k_{i,q,h}^2 - 2 r_{c,j,h}\, d_{j,i,q,h} k_{i,q,h} \right)}{n_{q,h} - 1} \right]$$

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

Coefficient of variation (CV) of $\hat{D}_{j,h}$ is defined as:

(4) $$CV(\hat{D}_{j,h}) = \frac{\sqrt{V(\hat{D}_{j,h})}}{\hat{D}_{j,h}}$$

Total discarded pounds of species *j* over all fleet, *h*, from 1 to *H* fleets, is defined as:

(5) $$\hat{D}_{T,j} = \sum_{h=1}^{H} \hat{D}_{j,h}$$

Variance of $\hat{D}_{T,j}$ for species *j* over all fleets is defined as:

(6) $$V(\hat{D}_{T,j}) = \sum_{h=1}^{H} V(\hat{D}_{j,h}) + \sum_{h=1}^{H} \sum_{k \neq h} Cov(\hat{D}_{j,h}, \hat{D}_{j,k})$$

where the covariance term equals zero (fleets are independent; nonoverlapping strata).

Coefficient of variation of $\hat{D}_{T,j}$ for species *j* over all fleets is defined as:

(7) $$CV(\hat{D}_{T,j}) = \frac{\sqrt{V(\hat{D}_{T,j})}}{\hat{D}_{T,j}}$$

Equations (1), (2), (3), and (4) are the same as in Blaylock et al. (2015); however, the notations have been edited to improve clarity. Equations (5), (6), and (7) were used in Blaylock et al. (2013 and 2015) and Wigley et al. (2008b); however, they are described here for the first time.

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

RESULTS

The list of the 165 fish and invertebrate species and species groups analyzed for the NBR First Edition Update 3 is given in Table 1.

There were 69 unique fleets identified during the January 2014 to December 2015 timeframe (Tables 2A-2B). There were 4 new fleets added to the analysis since previous NBR analyses (Blaylock et al. 2013, 2015; Wigley et al. 2008b): MA twin trawl (Row 17), NE small-mesh Ruhle trawl (Row 21), NE small-mesh haddock separator trawl (Row 23), and NE access area midwater paired and single trawl (Row 48). These 4 fleets are indicated with a "+" in Tables 2A-2B. Seven fleets included in the NBR First Edition Update 2 (Blaylock et al. 2015) are not present in 2014 and 2015: MA LIM AA scallop trawl, NE LIM open scallop trawl, MA small-mesh haddock separator trawl, NE shrimp pots and traps, NE stop seine, MA urchin dredge, and NE urchin dredge because there was no activity in either year. The inclusion of a fleet in a given year depends on industry activity for that year. Consequently, fleets may appear in one year but not the other, as reflected by the dark shading in Tables 2A-2B. On an annual basis, there were 68 individual fleets considered in 2014 and 66 in 2015.

Discard Estimation

Of the 69 fleets examined, little or no observer data in 2014 and 2015 precluded the calculation of annual discard estimates for 31 fleets: 8 fleets (Rows 16, 18, 19, 20, 25, 40, 49, and 66) had sparse observer data across some quarters in either year, while 23 fleets (Rows 5-7, 13, 15, 26-30, 34, 37, 47, 55, 58-65, and 67) either had no fleet activity (i.e., dark shading in Tables 2A-2B) or were missing observer data in all quarterly cells in 2014 and 2015 (Table 2A-2B). The 23 fleets with no observer coverage ranged in gear type from trawl (7 fleets), pot and trap (5 fleets), seine, diving gear, rake, pelagic longline (2 fleets each), dredge, harpoon, and gillnet (1 fleet each). For the 38 remaining fleets (Rows 1-4, 8-12, 14, 17, 21-24, 31-33, 35, 36, 38, 39, 41-46, 48, 50-54, 56, 57, 68, and 69), estimates of discards and their associated CV were derived for 2014 and 2015 where sufficient NEFOP data existed: these included 34 fleets in 2014 and 35 fleets in 2015. Simple imputation was applied to 19 fleets in 2014 and 18 fleets in 2015 (Table 2A-2B).

A total of 4,207 NEFOP trips was observed during 2014 and 3,659 trips during 2015. When these trips were stratified, some trips were partitioned between strata resulting in 4,729 trips in 2014, and 4,154 trips in 2015 (Tables 2A-2B). The percentage of observed trips varied by fleet and calendar quarter. On an annual basis, the percentage of observed trips by fleet ranged from 0.17% (NE pots and traps, lobster, Row 57) to 100% (NE small-mesh haddock separator, Row 23) in 2014 (Table 2A), and from 0.12% (MA hand line, Row 3) to 100% (NE access area midwater trawl fleet, Row 48) in 2015 (Table 2B). Over all fleets, the percentage of observed trips was 5.5% and 5.1% in 2014 and 2015, respectively (Tables 2A-2B).

The 2014 and 2015 VTR landings (all species combined, live weight, by fleet and quarter) used to expand the discard ratios are presented in Tables 3A-3B. Total VTR landings varied by calendar year and fleet. Total VTR landings by fleet ranged from 5.02 mt in the NE small-mesh gillnet fleet (Row 34) to 135,814 mt in the MA ocean quahog/surfclam dredge fleet (Row 68), with total VTR landings over all fleets equal to 558,991 mt in 2014. In 2015, total VTR landings by fleet ranged from 2.1 mt in the NE floating trap fleet (Row 30) to 140,575 mt in the MA ocean quahog/surfclam dredge fleet (Row 68), with total VTR landings over all fleets equal to 550,915 mt (Table 3B).

Estimated annual discards (live weight in mt, no assumptions about survival rates have been made) with associated CVs and combined d/k ratios by species and fleet for 2014 and 2015 are presented in Tables 4A-4B for species with observed discards. Estimated annual discards and CV by species for 2014 and 2015 are presented in Table 5. Because data limitations prevented an estimation of discards for all fisheries, the values in Tables 4A-4B and 5 underestimate the actual total discards by species in 2014 and 2015.

Based on this analysis, approximately 101,356 mt (live weight; CV = 3.6%) of discards of the species considered occurred in the 34 fleets in calendar year 2014, and 99,542 mt (CV = 4.1%) in the 35 fleets in 2015 (Tables 4A-4B and 5). In both years, the predominant species discarded were (1) skates (Rajidae; 37% and 38% of estimated annual discards in 2014 and 2015 respectively), (2) other benthic species ("Benthic Species, Other"; 18% and 15%), and (3) American lobster (*Homarus americanus;* 11% and 7%*)*. In 2014 and 2015 respectively, approximately 81% and 77% of skate discards occurred in 4 fleets: MA large-mesh otter trawl (Row 9), NE large-mesh otter trawl (Row 11), MA LIM OPEN scallop dredge (Row 45), and NE LIM OPEN scallop dredge (Row 46). Sand dollars (*Echinarachnius parma*) was the predominant species in the "Benthic Species, Other" group for both years, contributing approximately 89% of the group's total discards in 2014 and approximately 88% of the group's total discards in 2015.

The majority of American lobster (*Homarus americanus*) discards occurred in the NE lobster pot and trap fleet (Row 57) in each year, with that fleet contributing approximately 91% in 2014 and 86% in 2015. The CVs associated with the annual discard estimates for these 3 species or groups were less than or equal to 15.1% (Tables 4A-4B and 5). The remaining species and groups each represented less than 8% and 6% of the estimated annual discards in 2014 and 2015, respectively (Tables 4A-4B and 5).

The CVs of the annual discard estimates varied across species and years. In 2014, of the 140 individual species and species groups with discards estimated, 48 had a CV less than 30%, 78 had a CV between 30% and 100%, and 14 had a CV greater than 100% (Table 5; Figure 1). The CV for spinner shark (*Carcharhinus brevipinna*) was highest in 2014, at approximately 535% (Tables 4A and 5). In 2015, of the 151 individual species and species groups with discards estimated, 55 had a CV less than 30%, 81 had a CV between 30% and 100%, and 15 had a CV greater than 100% (Table 5; Figure 1). The CV for smooth hammerhead shark (*Sphyrna zygaena*) was highest in 2015, at approximately 224% (Tables 4B and 5). The skate complex (Rajidae) had the lowest CV in 2014 and 2015, with 4.1% and 5.3% respectively. The highest CVs were typically associated with species with small annual discard estimates, such as spinner shark (*Carcharhinus brevipinna*), American eel (*Anguilla rostrata*), cusk (*Brosme brosme*), and wahoo (*Acanthocybium solandri*; Tables 4A-4B, and 5).

In each year, over half of the discards came from a small number of fleets (Tables 4A-4B). In 2014, 3 fleets accounted for 55% of the discards: MA LIM OPEN scallop dredge (Row 45; 23%), NE large-mesh otter trawl (Row 11; 19%), and NE lobster pot and trap (Row 57; 13%). In 2015, 4 fleets accounted for 54% of the discards: NE large-mesh otter trawl (Row 11; 21%), MA LIM OPEN scallop dredge (Row 45; 12%), MA large-mesh otter trawl (Row 9; 11%), and NE LIM OPEN scallop dredge (Row 46; 10%). The CVs associated with the annual discard estimates for these fleets were less than 18% (Tables 4A-4B). The remaining fleets each represented less than 10% of the estimated annual discards for a given year.

The CVs of the annual discard estimates varied across fleets and years, with high CVs generally associated with fleets with small annual discard estimates, such as MA small-mesh gillnet (Row 31), MA handline (Row 3), NE OPEN midwater trawl (Row 50), MA fish pots and traps (Row 51), and MA large-mesh Ruhle trawl (Row 22; Table 4A-4B; Figure 2). The combined d/k ratio[7] varied among the species and fleets considered for each year (Tables 4A-4B). Among species, the skate complex generally had the highest combined d/k ratios, followed by spiny dogfish and "Benthic Species, Other." Fleets with the highest combined d/k ratios included the MA large-mesh otter trawl fleet (Rows 9), MA GEN OPEN scallop trawl (Row 14), MA handline (Row 3), and NE conch pots and traps (Row 54).

The 34 fish and invertebrate species managed under the MAFMC and NEFMC FMPs implemented in the waters off the northeastern United States accounted for 60,077 mt and 64,621 mt of discards, representing 59% and 65% of estimated annual discards in 2014 and 2015 respectively (Table 6A-6B). In 2014, discards of all the 34 MAFMC and NEFMC FMP species together varied across fleets, ranging from 0.31 mt in the MA conch pots and traps fleet (Row 53) to 16,899 mt in the NE large-mesh otter trawl fleet (Row 11; Table 6A). In 2015, discards of the 34 MAFMC and NEFMC FMP species varied across fleets, ranging from 0.28 mt in the NE closed area midwater trawl fleet (Row 48) to 18,128 mt in the NE large-mesh otter trawl fleet

[7] The "combined d/k ratio" used in this analysis to estimate discards should not be confused with the NBR "bycatch ratio," which is defined as the ratio of bycatch to total catch where total catch equals landings plus bycatch (NMFS 2011).

(Row 11; Table 6B). In 2014, the CV for the 34 MAFMC and NEFMC FMP species varied by fleet, ranging from 5.5% in the MA LIM AA scallop dredge fleet (Row 45) to 375.5% in the MA small-mesh gillnet fleet (Row 31), with a CV across all fleets of 3% (Table 6A). In 2015, the CV for the 34 MAFMC and NEFMC FMP species varied by fleet, ranging from 7.3% in the NE extra-large-mesh gillnet fleet (Row 36) to 252.1% in the MA conch pots and traps fleet (Row 53), with a CV across all fleets of 4.6% (Table 6B).

DISCUSSION

The analysis presented in this document used a broad stratification and a combined ratio method to estimate the 2014 and 2015 annual discards of 165 individual species and species groups in commercial fisheries of the Greater Atlantic Region of the United States. Stock assessment discard estimation may differ from this report because of differences in stratification, data used (VTR landings versus dealer landings), discard mortality assumptions, and estimation methods. It is expected, however, that estimates using similar methods would be in the same order of magnitude for species with high discard mortality rates. The discard estimates presented here are not definitive estimates but are indicative of where discarding occurred among the commercial fleets for the species considered in this region.

This analysis used VTR data to define the sampling frame of commercial fleets and expand the discard ratios to estimated annual discards. While it would be ideal to use dealer (*CFDERSyyyy*) data instead, these data do not contain mesh or area fished information until the trip-based allocation is performed (Wigley et al. 2008a). The trip-based allocation of dealer (*CFDETT/SyyyyAA*) data is conducted annually and is not always available for all years when the analysis is initiated. The self-reported nature of the VTR data implies that the results of this analysis should be interpreted tentatively.

New fleets were added to reflect VTR activity in the time period examined. The access area midwater trawl fleet (*negear* code 170) has required observer coverage and therefore may not be representative of the rest of the midwater trawl fleet. Bias may be introduced if these trips were used to expand the estimates to the entire NE midwater trawl fleet. The new fleets for Ruhle trawl (*negear* code 054) and haddock separator trawl (*negear* code 057) reflect the use of an Exempted Fishing Permit allowing the use of small-mesh codends inside portions of the groundfish Closed Areas I and II. The MA twin trawl fleet (*negear* code 053) reflects an increase in the use of the new code in the VTR database. Prior to 2012, industry vessels fishing a twin trawl reported their gear as Otter Trawl, Fish (*negear* code 050).

During the data preparation for this analysis, some possible misreporting was encountered for NE small-mesh haddock separator trawl (Row 23), with the number of observed trips greater than VTR trips in the second quarter of 2014; NE purse seine (Row 38), with the number of observed trips greater than VTR trips in the first quarter of 2014; and MA other dredge (Row 66), with the number of observed trips greater than VTR trips in the third quarter of 2014. In addition, caution should be used when interpreting results associated with otter trawl (*negear* code 050), scallop trawl (*negear* code 052), and shrimp trawl (*negear* code 058) because of data irregularity issues associated with these fleets caused by some confusion in the proper use of the VTR gear code "OTS" (shrimp trawl), "OTC" (scallop trawl), and "OTF" (otter trawl)[8]. The implications of changed and/or misreported gear types are variable among fleets, and the

[8] See Wigley et al. 2014 for more details concerning this issue.

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. The VTR and AMS databases do not contain the requisite information to directly match trips (i.e., 1 to 1 match) across databases; hence, an ad hoc method was developed to accomplish this. Some misclassification of trips to various fleets is therefore inevitable and may also occur because the limited auditing of the VTR data resulted in instances of overlapping trip dates, incorrect gear codes, and/or incorrect area fished. In addition, misclassification of trips into access area categories is possible for trips using scallop gear (*negear* codes 052 and 132) because of limitations associated with the use of the activity declaration code present in the AMS database.

Previous validation analyses have indicated that the discard estimation method is appropriate for most species, and the discard estimates reported in this document are generally expected to represent discarding patterns accurately. It is recognized that for some species, e.g., those that are encountered rarely, that the design-based ratio estimator may not be the most appropriate estimator to use (e.g., model-based, delta-GLM approaches may perform better for some rarely encountered species). Underestimation is likely in some cases, primarily because VTR landings are usually lower than dealer landings because of the different nature of the data (i.e., VTR data report the good-faith weights whereas dealer data provide actual landings weight; Blaylock et al. 2013; Wigley et al. 2008b). Additionally, some VTR trips had incomplete data (e.g., unknown mesh) and had to be excluded from the VTR analytical dataset. Observer coverage also affects the accuracy of the discard estimates. Any discards that occurred in fleets with no or insufficient observer coverage to perform the analysis or in fleets otherwise excluded are not reflected in the discard estimates presented in this report. Some species (e.g. Atlantic hagfish, deep sea red crab, and tilefish) have targeted fisheries that were not observed in 2014 and 2015. Finally, possible misreporting of product forms (e.g., monkfish tails vs. whole fish) in the VTR landings could also contribute to underestimation. The magnitude of the underestimation will vary by species, fleet, and year. Despite these caveats, data were deemed adequate for use.

The annual imputation approach may not be appropriate for all fleets and species and, in some cases, quarterly d/k ratios were based on very small sample sizes. This contributed to the lower precision (higher CVs) associated with several of the discard estimates (Tables 4A-4B, 5).

Discard estimates in Tables 4A-4B, 5, and 6A-6B 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 important to note that survival ratios are applied in stock assessments for Georges Bank and Gulf of Maine stocks of Atlantic cod, Atlantic sea scallop, spiny dogfish, summer flounder, southern New England and Gulf of Maine stocks of winter flounder, and southern New England yellowtail flounder.

ACKNOWLEDGEMENTS

We thank all the NEFOP observers and at-sea monitors for their diligent efforts to collect the data used in this report. We thank our reviewers for their helpful comments on this report.

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Table 1. List of the 165 species and species groups, and the 319 fish and invertebrate species, with their relevant taxon, that compose the groups examined in the National Bycatch Report First Edition Update 3. Species that have management plans developed by at least 1 of the following groups: New England Fishery Management Council (NEFMC), Mid Atlantic Fishery Management Council (MAFMC), NOAA's Atlantic Highly Migratory Species Management Division, and Atlantic States Marine Fisheries Commission are presented at the genus or species level, except for skates, which are managed and reported as a complex. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 NEFMC and MAFMC developed fishery management plans implemented in the waters off the northeastern United States.

SPECIES/GROUP	COMPOSITION	TAXON
ACADIAN REDFISH	Individual	*Sebastes fasciatus*
AFRICAN POMPANO	Individual	*Alectis ciliaris*
ALEWIFE	Individual	*Alosa pseudoharengus*
AMBERJACK, UNC	Unclassified Amberjack Species	*Seriola*
AMERICAN EEL	Individual	*Anguilla rostrata*
AMERICAN LOBSTER	Individual	*Homarus americanus*
AMERICAN PLAICE	Individual	*Hippoglossoides platessoides*
AMERICAN SHAD	Individual	*Alosa sapidissima*
ATLANTIC ANGEL SHARK	Individual	*Squatina dumeril*
ATLANTIC BONITO	Individual	*Sarda sarda*
ATLANTIC COD	Individual	*Gadus morhua*
ATLANTIC CROAKER	Individual	*Micropogonias undulatus*
ATLANTIC HAGFISH	Individual	*Myxine glutinosa*
ATLANTIC HALIBUT	Individual	*Hippoglossus hippoglossus*
ATLANTIC HERRING	Individual	*Clupea harengus*
ATLANTIC MACKEREL	Individual	*Scomber scombrus*
ATLANTIC MOONFISH	Individual	*Selene setapinnis*
ATLANTIC SALMON	Individual	*Salmo salar*
ATLANTIC SHARPNOSE SHARK	Individual	*Rhizoprionodon terraenovae*
ATLANTIC SHEEPSHEAD	Individual	*Archosargus probatocephalus*
ATLANTIC STURGEON	Individual	*Acipenser oxyrinchus*
ATLANTIC SURFCLAM	Individual	*Spisula solidissima*
ATLANTIC WOLFFISH	Individual	*Anarhichas lupus*
BASKING SHARK	Individual	*Cetorhinus maximus*
BENTHIC SPECIES, OTHER	ANEMONE, UNC	Anthozoa
	BRITTLE STARFISH, UNC	Ophiuroidea
	EELGRASS	*Zostera marina*
	LAMPREY, UNC	Petromyzontidae
	MANTIS SHRIMP, UNC	Stomatopoda
	MOLLUSK, UNC	Mollusca
	ROCKWEED, UNC	Fucus
	SAND DOLLAR	*Echinarachnius parma*
	SEA CUCUMBER, UNC	Holothuroidea
	SEA PANSY	*Renilla reniformis*
	SEA PEN, UNC	Pennatulacea
	SEA POTATO	*Leathesia difformis*
	SEA SQUIRT, UNC	Ascidiacea
	SEA STARFISH, UNCH	Asteroidea
	SEA URCHIN, UNC	*Strongylocentrotus*
	SEAWEED, UNC	Phaeophyta
	SHELLFISH, UNC	Crustacea
	SPONGE, UNC	Porifera
	WORM, UNC	Nereis

Table 1, continued. List of the 165 species and species groups, and the 319 fish and invertebrate species, with their relevant taxon, that compose the groups examined in the National Bycatch Report First Edition Update 3. Species that have management plans developed by at least 1 of the following groups: New England Fishery Management Council (NEFMC), Mid Atlantic Fishery Management Council (MAFMC), Atlantic Highly Migratory Species Management Division, and Atlantic States Marine Fisheries Commission are presented at the genus or species level, except for skates, which are managed and reported as a complex. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 NEFMC and MAFMC developed fishery management plans implemented in the waters off the northeastern United States.

SPECIES/GROUP	COMPOSITION	TAXON
BIGEYE SCAD	Individual	*Selar crumenophthalmus*
BIGEYE THRESHER SHARK	Individual	*Alopias superciliosus*
BIGEYE TUNA	Individual	*Thunnus obesus*
BIGNOSE SHARK	Individual	*Carcharhinus altimus*
BIVALVES, OTHER (CLASS: Bivalvia)	ATLANTIC JACKKNIFE CLAM	*Ensis directus*
	BAY SCALLOP	*Argopecten irradians*
	BLOOD ARK CLAM	*Anadara ovalis*
	BLUE MUSSEL	*Mytilus edulis*
	CLAM, UNC	Bivalvia
	EASTERN (COMMON) OYSTER	*Crassostrea virginica*
	ICELANDIC SCALLOP	*Chlamys islandica*
	SCALLOP, UNC	Pectinidae
BLACK DRUM	Individual	*Pogonias cromis*
BLACK SEA BASS	Individual	*Centropristis striata*
BLACKFIN TUNA	Individual	*Thunnus atlanticus*
BLACKNOSE SHARK	Individual	*Carcharhinus acronotus*
BLACKTIP SHARK	Individual	*Carcharhinus limbatus*
BLUE RUNNER	Individual	*Caranx crysos*
BLUE SHARK	Individual	*Prionace glauca*
BLUEBACK HERRING	Individual	*Alosa aestivalis*
BLUEFIN TUNA	Individual	*Thunnus thynnus*
BLUEFISH	Individual	*Pomatomus saltatrix*
BLUELINE TILEFISH	Individual	*Caulolatilus microps*
BONNETHEAD SHARK	Individual	*Sphyrna tiburo*
BONY FISHES, OTHER	FISH, UNC	Osteichthyes
BUTTERFISH	Individual	*Peprilus triacanthus*
CARCHARHINID SHARK, UNC	Unclassified Carcharhinid Shark Species	*Carcharhinus*
CHAIN DOGFISH	Individual	*Scyliorhinus retifer*
COBIA	Individual	*Rachycentron canadum*
CREVALLE JACK	Individual	*Caranx hippos*
CROAKERS AND DRUMS, OTHER (FAMILY: Sciaenidae)	BANDED DRUM	*Larimus fasciatus*
	DRUM, UNC	Sciaenidae
	GULF KINGFISH	*Menticirrhus littoralis*
	KINGFISH, UNC	*Menticirrhus*
	NORTHERN KINGFISH	*Menticirrhus saxatilis*
	SEATROUT, UNC	Cynoscion
	SOUTHERN KINGFISH	*Menticirrhus americanus*
CUNNER	Individual	*Tautogolabrus adspersus*
CUSK	Individual	*Brosme brosme*

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SPECIES/GROUP		COMPOSITION	TAXON
DECAPOD CRABS	(ORDER: Decapoda)	ATLANTIC ROCK CRAB	*Cancer irroratus*
		BLUE CRAB	*Callinectes sapidus*
		CANCER CRAB, UNC	*Cancer*
		CRAB, UNC	Brachyura
		GREEN CRAB	*Carcinus maenas*
		HERMIT CRAB, UNC	Decapoda
		LADY CRAB	*Ovalipes ocellatus*
		NORWAY KING CRAB	*Lithodes maja*
		PORTLY SPIDER CRAB	*Libinia emarginata*
		SNOW CRAB	*Chionoecetes opilio*
		SPECKLED SWIMMING CRAB	*Arenaeus cribrarius*
DECAPOD SHRIMPS	(ORDER: Decapoda)	ROYAL RED SHRIMP	*Pleoticus robustus*
		SCARLET SHRIMP	*Aristaeopsis edwardsiana*
		SHRIMP, UNC	Caridea
DEMERSAL SPECIES, OTHER		ATLANTIC TORPEDO	*Torpedo nobiliana*
		DOGFISH, UNC	Squalidae
		OCTOPUS, UNC	Octopodidae
		RAYS, UNC	Rajiformes
DOLPHINFISH, UNC		Unclassified Dolphinfish Species	*Coryphaena*
DORIES, OTHER	(ORDER: Zeiformes)	BOARFISH, UNC	Caproidae
		BUCKER (JOHN) DORY	*Zenopsis conchifera*
		DEEPBODY BOARFISH	*Antigonia capros*
		DORY, UNC	Zeiformes
		SHORTSPINE BOARFISH	*Antigonia combatia*
DUSKY SHARK		Individual	*Carcharhinus obscurus*
FINETOOTH SHARK		Individual	*Carcharhinus isodon*
FLATFISHES, OTHER	(ORDER: Pleuronectiformes)	FLOUNDER, UNC	*Pleuronectiformes*
		FOURSPOT FLOUNDER	*Hippoglossina oblonga*
		GREENLAND HALIBUT	*Reinhardtius hippoglossoides*
		GULFSTREAM FLOUNDER	*Citharichthys arctifrons*
		HOGCHOCKER	*Trinectes maculatus*
		LEFTEYE FLOUNDER, UNC	Bothidae
		SOUTHERN FLOUNDER	*Paralichthys lethostigma*
FLORIDA POMPANO		Individual	*Trachinotus carolinus*

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SPECIES/GROUP		COMPOSITION	TAXON
GADIFORMES, OTHER	(ORDER: Gadiformes)	BLUE HAKE	*Antimora rostrata*
		COMMON GRENADIER	*Nezumia bairdii*
		FOURBEARD ROCKLING	*Enchelyopus cimbrius*
		GRENADIER, UNC	Macrouridae
		HAKE, UNC	Gadiformes
		LONGFIN HAKE	*Phycis chesteri*
		RED/WHITE HAKE MIX	*Urophycis*
		SOUTHERN HAKE	*Urophycis floridana*
		SPOTTED HAKE	*Urophycis regia*
GASTROPOD SNAILS, OTHER	(CLASS: Gastropoda)	COMMON PERIWINKLE	Littorinidae
		MOON SNAIL	Naticidae
		SNAIL, UNC	Gastropoda
		TRUE WHELK, UNC	Buccinidae
GREAT HAMMERHEAD SHARK		Individual	*Sphyrna mokarran*
GREENLAND SHARK		Individual	*Somniosus microcephalus*
GROUPERS, UNC		Unclassified Groupers Species	Serranidae
HADDOCK		Individual	*Melanogrammus aeglefinus*
HAMMERHEAD SHARK, UNC		Unclassified Hammerhead Shark Species	Sphyrnidae
HERRINGS, OTHER	(ORDER: Clupeiformes)	ANCHOVY, UNC	Engraulidae
		BAY ANCHOVY	*Anchoa mitchilli*
		GIZZARD SHAD	*Dorosoma cepedianum*
		HERRING, UNC	Clupeidae
		ROUND HERRING	*Etrumeus teres*
		STRIPED ANCHOVY	*Anchoa hepsetus*
HICKORY SHAD		Individual	*Alosa mediocris*
HOGFISH		Individual	*Lachnolaimus maximus*
HORSESHOE CRAB		Individual	*Limulus polyphemus*
JACK, UNC		Unclassified Jack Species	Carangidae
JONAH CRAB		Individual	*Cancer borealis*
KING MACKEREL		Individual	*Scomberomorus cavalla*
LITTLE TUNA (TUNNY)		Individual	*Euthynnus alletteratus*
LONGFIN INSHORE SQUID		Individual	*Doryteuthis (Amerigo) pealeii*
LOOKDOWN		Individual	*Selene vomer*
MACKEREL SCAD		Individual	*Decapterus macarellus*
MACKERELS, OTHER	(FAMILY: Scombridae)	BULLET MACKEREL	*Auxis rochei*
		CHUB MAKEREL	*Scomber colias*
		FRIGATE MACKEREL	*Auxis thazard*
		MACKEREL, UNC	*Scomber*
MARLIN, UNC		Unclassified Marlin Species	Istiophoridae
MENHADEN, UNC		Unclassified Menhaden Species	*Brevoortia*
MONKFISH (GOOSEFISH)		Individual	*Lophius americanus*
NIGHT SHARK		Individual	*Carcharhinus signatus*

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SPECIES/GROUP	COMPOSITION	TAXON
NORTHERN SHORTFIN SQUID	Individual	*Illex illecebrosus*
OCEAN POUT	Individual	*Zoarces americanus*
OCEAN QUAHOG	Individual	*Arctica islandica*
OFFSHORE HAKE	Individual	*Merluccius albidus*
PANDALID SHRIMP (NORTHERN)	Individual	*Pandalus borealis*
PELAGIC SHARKS, UNC	Unclassified Pelagic Sharks Species	Lamniformes
PELAGIC SPECIES, OTHER	JELLYFISH, UNC	Scyphozoa
PENAEID SHRIMP (SOUTHERN), UNC	Unclassified Penaeid Shrimp (Southern) Species	*Penaeus*
PERCIFORMES, OTHER (DEMERSAL) (ORDER: Perciformes)	BIGSCALE POMFRET	*Taractichthys longipin*
	EELPOUT, UNC	Zoarcidae
	NORTHERN STARGAZER	*Astroscopus guttatus*
	NORTHERN WOLFFISH	*Anarhichas denticulatus*
	ROCK GUNNEL	*Pholis gunnellus*
	SAND LANCE, UNC	*Ammodytes*
	SHANNY, UNC	Stichaeidae
	SNAKEBLENNY	*Lumpenus lampretaeform*
	WHITE PERCH	*Morone americana*
	WRECKFISH	*Polyprion americanus*
	WRYMOUTH	*Cryptacanthodes maculatus*
PERCIFORMES, OTHER (PELAGIC) (ORDER: Perciformes)	BARRACUDA, UNC	Sphyraenidae
	BARRELFISH	*Hyperoglyphe perciformis*
	HARVESTFISH	*Peprilus paru*
	REMORA, UNC	Echeneidae
	SNAKE MACKEREL, UNC	Gempylidae
	TRIPLETAIL	*Lobotes surinamensis*
PIGFISH	Individual	*Orthopristis chrysoptera*
PILOTFISH	Individual	*Naucrates ductor*
PINFISH	Individual	*Lagodon rhomboides*
PIPEFISHES (DEMERSAL) (ORDER: Gasterosteiformes)	LONGSPINE SNIPEFISH	*Macroramphosus scolopax*
	SLENDER SNIPEFISH	*Macroramphosus gracilis*
	SNIPEFISH, UNC	Centriscidae
PIPEFISHES (PELAGIC) (ORDER: Gasterosteiformes)	BLUESPOTTED CORNETFISH	*Fistularia tabacaria*
	PIPEFISH/SEAHORSE, UNC	Syngnathidae
POLLOCK	Individual	*Pollachius virens*
PORBEAGLE SHARK	Individual	*Lamna nasus*
PORGY, UNC	Unclassified Porgy Species	Sparidae
QUAHOG (HARD SHELL CLAM)	Individual	*Mercenaria mercenaria*

Table 1, continued. List of the 165 species and species groups, and the 319 fish and invertebrate species, with their relevant taxon, that compose the groups examined in the National Bycatch Report First Edition Update 3. Species that have management plans developed by at least 1 of the following groups: New England Fishery Management Council (NEFMC), Mid Atlantic Fishery Management Council (MAFMC), Atlantic Highly Migratory Species Management Division, and Atlantic States Marine Fisheries Commission are presented at the genus or species level, except for skates, which are managed and reported as a complex. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 NEFMC and MAFMC developed fishery management plans implemented in the waters off the northeastern United States.

SPECIES/GROUP		COMPOSITION	TAXON
RAY-FINNED FISHES, OTHER (DEMERSAL)	(CLASS: Actinopterygii)	ATLANTIC ARGENTINE	Argentinidae
		ATLANTIC BATFISH	*Dibranchus atlanticus*
		ATLANTIC SILVERSIDE	*Menidia menidia*
		BATFISH, UNC	Ogcocephalidae
		BEARDFISH	*Polymixia lowei*
		BIG ROUGHY	*Gephyroberyx darwinii*
		CARP	*Cyprinus carpio*
		CONGER EEL	*Conger oceanicus*
		CUSK-EEL, UNC	Ophidiidae
		EEL, UNC	Anguilliformes
		LIZARDFISH	Synodontidae
		RED EYE GAPER	*Chaunax stigmaeus*
		ROUGHY, UNC	Trachichthyidae
		SILVERSIDE, UNC	Atherinidae
		SQUIRRELFISHES	Holocentridae
		STRIPED MULLET	*Mugil cephalus*
		STURGEONS, UNC	Acipenseridae
		TOADFISHES	Batrachoididae
RAY-FINNED FISHES, OTHER (PELAGIC)	(CLASS: Actinopterygii)	ATLANTIC NEEDLEFISH	*Strongylura marina*
		ATLANTIC SAURY	*Scomberesox saurus*
		CAPELIN	*Mallotus villosus*
		GARFISHES	Lepisosteidae
		HOUNDFISH	*Tylosurus crocodilus*
		LADYFISH	*Elops saurus*
		LANTERNFISH, UNC	Myctophidae
		RAINBOW SMELT	*Osmerus mordax*
		RIBBONFISH, UNC	*Trachipteridae*
		SLENDER SNIPE EEL	*Nemichthys scolopaceus*
RAYS, OTHER (DEMERSAL)	(ORDER: Myliobatiformes)	BULLNOSE RAY	*Myliobatis freminvillii*
		BUTTERFLY RAY, UNC	*Gymnura*
		COWNOSE RAY	*Rhinoptera bonasus*
		EAGLE RAY, UNC	Myliobatidae
		SMOOTH BUTTERFLY RAY	*Gymnura micrura*
		SPINY BUTTERFLY RAY	*Gymnura altavela*
RAYS, OTHER (PELAGIC)	(ORDER: Myliobatiformes)	ATLANTIC MANTA RAY	*Manta birostris*
		DEVIL RAY	*Mobula hypostoma*
		MANTA RAY, UNC	Mobulidae
RED DEEPSEA CRAB		Individual	*Chaceon quinquedens*
RED DRUM		Individual	*Sciaenops ocellatus*
RED HAKE		Individual	*Urophycis chuss*
RED SNAPPER		Individual	*Lutjanus campechanus*
ROUGH SCAD		Individual	*Trachurus lathami*

Table 1, continued. List of the 165 species and species groups, and the 319 fish and invertebrate species, with their relevant taxon, that compose the groups examined in the National Bycatch Report First Edition Update 3. Species that have management plans developed by at least 1 of the following groups: New England Fishery Management Council (NEFMC), Mid Atlantic Fishery Management Council (MAFMC), Atlantic Highly Migratory Species Management Division, and Atlantic States Marine Fisheries Commission are presented at the genus or species level, except for skates, which are managed and reported as a complex. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 NEFMC and MAFMC developed fishery management plans implemented in the waters off the northeastern United States.

SPECIES/GROUP	COMPOSITION	TAXON
SAND PERCH	Individual	*Diplectrum formosum*
SAND TIGER SHARK	Individual	*Carcharias taurus*
SANDBAR SHARK	Individual	*Carcharhinus plumbeus*
SCALLOPED HAMMERHEAD SHARK	Individual	*Sphyrna lewini*
SCORPIONFISHES, OTHER (ORDER: Scorpaeniformes)	ALLIGATORFISH	*Aspidophoroides monopterygius*
	ARMORED SEA ROBIN	*Peristedion miniatum*
	BLACKBELLY ROSEFISH	*Helicolenus dactylopterus*
	LONGHORN SCULPIN	*Myoxocephalus octodecemspinosus*
	LUMPFISH	*Cyclopterus lumpus*
	NORTHERN SEAROBIN	*Prionotus carolinus*
	SCORPIONFISH, UNC	Scorpaenidae
	SCULPIN, UNC	Cottidae
	SEA RAVEN	*Hemitripterus americanus*
	SEA ROBIN, UNC	Triglidae
	STRIPED SEAROBIN	*Prionotus evolans*
SCUP	Individual	*Stenotomus chrysops*
SEA BASS, UNC	Unclassified Sea Bass Species	*Centropristis*
SEA SCALLOP	Individual	*Placopecten magellanicus*
SHARK, UNC	Unclassified Shark Species	Chondrichthyes
SHARPNOSE SEVENGILL SHARK	Individual	*Heptranchias perlo*
SHORTFIN MAKO SHARK	Individual	*Isurus oxyrinchus*
SILKY SHARK	Individual	*Carcharhinus falciformis*
SILVER HAKE	Individual	*Merluccius bilinearis*
SKATE COMPLEX (FAMILY: Rajidae)	BARNDOOR SKATE	*Dipturus laevis*
	CLEARNOSE SKATE	*Raja eglanteria*
	LITTLE SKATE	*Leucoraja erinacea*
	LITTLE/WINTER SKATE MIX	*Leucoraja*
	ROSETTE SKATE	*Leucoraja garmani*
	SKATES, UNC	*Rajidae*
	SMOOTH SKATE	*Malacoraja senta*
	THORNY SKATE	*Amblyraja radiata*
	WINTER SKATE	*Leucoraja ocellata*
SKIPJACK TUNA	Individual	*Katsuwonus pelamis*
SMALLTOOTH SAND SHARK	Individual	*Odontaspis ferox*
SMOOTH DOGFISH	Individual	*Mustelus canis*
SMOOTH HAMMERHEAD SHARK	Individual	*Sphyrna zygaena*
SNAPPER, UNC	Unclassified Snapper Species	Lutjanidae
SNOWY GROUPER	Individual	*Epinephelus niveatus*
SOFT CORAL, UNC	Unclassified Soft Coral Species	Alcyonacea
SPADEFISHES, UNC	Unclassified Spadefishes Species	Ephippidae
SPANISH MACKEREL	Individual	*Scomberomorus maculatus*
SPINNER SHARK	Individual	*Carcharhinus brevipinna*

Table 1, continued. List of the 165 species and species groups, and the 319 fish and invertebrate species, with their relevant taxon, that compose the groups examined in the National Bycatch Report First Edition Update 3. Species that have management plans developed by at least 1 of the following groups: New England Fishery Management Council (NEFMC), Mid Atlantic Fishery Management Council (MAFMC), Atlantic Highly Migratory Species Management Division, and Atlantic States Marine Fisheries Commission are presented at the genus or species level, except for skates, which are managed and reported as a complex. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 NEFMC and MAFMC developed fishery management plans implemented in the waters off the northeastern United States.

SPECIES/GROUP		COMPOSITION	TAXON
SPINY DOGFISH		Individual	*Squalus acanthias*
SPOT		Individual	*Leiostomus xanthurus*
SPOTTED SEATROUT		Individual	*Cynoscion nebulosus*
SQUIDS, UNC		Unclassified Squids Species	Loliginidae
STINGRAYS, OTHER (DEMERSAL)	(FAMILY: Dasyatidae)	ATLANTIC STINGRAY	*Dasyatis sabina*
		BLUNTNOSE STINGRAY	*Dasyatis say*
		ROUGHTAIL STINGRAY	*Dasyatis centroura*
		SOUTHERN STINGRAY	*Dasyatis americana*
		STINGRAYS	Dasyatidae
STINGRAYS, OTHER (PELAGIC)	(FAMILY: Dasyatidae)	PELAGIC STINGRAY	*Pteroplatytrygon violacea*
STONY CORAL		Individual	Scleractinia
STRIPED BASS		Individual	*Morone saxatilis*
SUMMER FLOUNDER		Individual	*Paralichthys dentatus*
SWORDFISH		Individual	*Xiphias gladius*
TAUTOG		Individual	*Tautoga onitis*
TETRAODONTIFORMES, OTHER (DEMERSAL)	(ORDER: Tetraodontiformes)	NORTHERN PUFFER	*Sphoeroides maculatus*
		PUFFER, UNC	*Sphoeroides*
TETRAODONTIFORMES, OTHER (PELAGIC)	(ORDER: Tetraodontiformes)	MOLA, OCEAN SUNFISH	*Mola mola*
		MOLA, UNC	Molidae
		SHARPTAIL MOLA	*Masturus lanceolatus*
THRESHER SHARK		Individual	*Alopias vulpinus*
TIGER SHARK		Individual	*Galeocerdo cuvier*
TILEFISH		Individual	*Lopholatilus chamaeleonticeps*
TILEFISH, UNC		Unclassified Tilefish Species	Malacanthidae
TRIGGERFISHES, UNC		Unclassified Triggerfishes Species	Balistidae
TUNA, UNC		Unclassified Tuna Species	*Thunnus*
WAHOO		Individual	*Acanthocybium solandri*
WEAKFISH		Individual	*Cynoscion regalis*
WHELKS, OTHER	(FAMILY: Melongenidae)	CHANNELED WHELK	*Busycotypus canaliculatus*
		CONCH	Melongenidae
		KNOBBED WHELK	*Busycon carica*
		LIGHTNING WHELK	*Busycon sinistrum*
WHITE HAKE		Individual	*Urophycis tenuis*
WHITE MARLIN		Individual	*Tetrapturus albidus*
WHITE SHARK		Individual	*Carcharodon carcharias*
WINDOWPANE		Individual	*Scophthalmus aquosus*
WINTER FLOUNDER		Individual	*Pseudopleuronectes americanus*
WITCH FLOUNDER		Individual	*Glyptocephalus cynoglossus*
YELLOWFIN TUNA		Individual	*Thunnus albacares*
YELLOWTAIL FLOUNDER		Individual	*Limanda ferruginea*

Table 2A. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) for calendar year 2014. An "X" in the "VTR < NEFOP" column indicates a fleet that contains a calendar quarter where the number of VTR trips is less than the number of NEFOP trips. Dark shading indicates fleets with no NEFOP trips and no VTR trips in 2014.

							NEFOP					VTR						
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	VTR < NEFOP	Comments Imputation
1	Longline	OPEN	all	MA	all	060, 010			4	2	**6**	23	48	85	61	**217**		impute q1, q2, and q4
2	Longline	OPEN	all	NE	all	060, 010	20	6	9	3	**38**	71	87	695	179	**1,032**		
3	Hand Line	OPEN	all	MA	all	020, 021		1	5		**6**	69	755	1,516	688	**3,028**		impute q1, q2, and q4
4	Hand Line	OPEN	all	NE	all	020, 021		1	8	6	**15**	8	458	1,759	513	**2,738**		
5	Harpoon	OPEN	all	NE	all	030							13	18		**31**		no discard estimation
6	Longline, Pelagic	OPEN	all	MA	all	040						1		2	3	**6**		no discard estimation
7	Longline, Pelagic	OPEN	all	NE	all	040							1	4	1	**6**		no discard estimation
8	Otter Trawl	OPEN	all	MA	sm	050	63	121	162	99	**445**	425	1,210	1,524	991	**4,150**		
9	Otter Trawl	OPEN	all	MA	lg	050	43	76	94	41	**254**	698	1,129	1,336	710	**3,873**		
10	Otter Trawl	OPEN	all	NE	sm	050	36	97	118	66	**317**	418	958	1,170	647	**3,193**		
11	Otter Trawl	OPEN	all	NE	lg	050	218	353	274	331	**1,176**	1,474	1,629	1,972	1,385	**6,460**		
12	Scallop Trawl	AA	GEN	MA	all	052							12	13		**25**		no discard estimation
13	Scallop Trawl	AA	LIM	NE	all	052							1	2		**3**		no discard estimation
14	Scallop Trawl	OPEN	GEN	MA	all	052	2	11	2	4	**19**	6	134	56	29	**225**		impute q1 and q3
15	Scallop Trawl	OPEN	GEN	NE	all	052							1			**1**		no discard estimation
16	Scallop Trawl	OPEN	LIM	MA	all	052						7	4	1	4	**16**		no discard estimation
17+	Twin Trawl	OPEN	all	MA	all	053	1	3	4	11	**19**	10	53	55	51	**169**		impute q1
18	Twin Trawl	OPEN	all	NE	all	053				1	**1**	6		1	3	**10**		no discard estimation
19	Otter Trawl, Ruhle	OPEN	all	MA	sm	054		1		1	**2**	13	1		1	**15**		no discard estimation
20	Otter Trawl, Ruhle	OPEN	all	MA	lg	054						2				**2**		no discard estimation
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	054		1	3	1	**5**	4	2	3	3	**12**		impute q1, q2, and q4
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	054		1			**1**	1	6	7	3	**17**		no discard estimation
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	057		7	3	1	**11**		6	3	1	**10**	X	impute q4
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	057	1	20	10	21	**52**	12	73	51	85	**221**		impute q1
25	Shrimp Trawl	OPEN	all	MA	all	058		1	1	1	**3**	4	48	44	13	**109**		no discard estimation
26	Shrimp Trawl	OPEN	all	NE	all	058							1	41		**42**		no discard estimation
27	Otter Trawl, Bottom, Other	OPEN	all	MA	all	059						2		2	5	**9**		no discard estimation
28	Otter Trawl, Bottom, Other	OPEN	all	NE	all	059							10	5	2	**17**		no discard estimation
29	Floating Trap	OPEN	all	MA	all	080							38	39		**77**		no discard estimation
30	Floating Trap	OPEN	all	NE	all	080							1	15		**16**		no discard estimation
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	100, 110		5	16	8	**29**	339	467	673	439	**1,918**		impute q1

See text for fleet abbreviations; "+" = new fleet since the 2015 NBR Update (Blaylock et al. 2015).

Table 2A, continued. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) for calendar year 2014. An "X" in the "VTR < NEFOP" column indicates a fleet that contains a calendar quarter where the number of VTR trips is less than the number of NEFOP trips. Dark shading indicates fleets with no NEFOP trips and no VTR trips in 2014.

							NEFOP					VTR						
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	VTR < NEFOP	Comments Imputation
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	100, 110		5	10	29	**44**	306	458	416	870	**2,050**		impute q1
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	100, 110	6	29	3	47	**85**	247	1,095	105	635	**2,082**		
34	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	100, 110								5	3	**8**		no discard estimation
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	100, 110	80	182	429	228	**919**	257	833	1,859	853	**3,802**		
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	100, 110	26	107	341	114	**588**	249	916	1,331	678	**3,174**		
37	Purse Seine	OPEN	all	MA	all	120, 121						2	124	17		**143**		no discard estimation
38	Purse Seine	OPEN	all	NE	all	120, 121	1	5	10	1	**17**		37	239	39	**315**		
39	Scallop Dredge	AA	GEN	MA	all	132		1	7		**8**	6	40	337		**383**		impute q1 and q2
40	Scallop Dredge	AA	GEN	NE	all	132		1	1		**2**	183	173	91	29	**476**		no discard estimation
41	Scallop Dredge	AA	LIM	MA	all	132	3	2	27		**32**	21	56	210	1	**288**		impute q2 and q4
42	Scallop Dredge	AA	LIM	NE	all	132	2	5	29	13	**49**	22	60	192	83	**357**		impute q1
43	Scallop Dredge	OPEN	GEN	MA	all	132	18	30	22	22	**92**	510	1,020	634	534	**2,698**		
44	Scallop Dredge	OPEN	GEN	NE	all	132	10	45	42	27	**124**	974	818	689	678	**3,159**		
45	Scallop Dredge	OPEN	LIM	MA	all	132	15	69	27	13	**124**	141	501	223	104	**969**		
46	Scallop Dredge	OPEN	LIM	NE	all	132	15	17	12	8	**52**	116	171	137	49	**473**		
47	Danish Seine	OPEN	all	MA	all	160							61	12		**73**		no discard estimation
48+	Midwater Paried & Single Trawl	AA	all	NE	all	170, 370		4	17	3	**24**		4	19	3	**26**		
49	Midwater Paired & Single Trawl	OPEN	all	MA	all	170, 370	1				**1**	56	1		8	**65**		no discard estimation
50	Midwater Paired & Single Trawl	OPEN	all	NE	all	170, 370	28	15	18	18	**79**	113	56	87	102	**358**		
51	Pots and Traps, Fish	OPEN	all	MA	all	181		4	3	2	**9**	59	266	417	266	**1,008**		impute q1 and q4
52	Pots and Traps, Fish	OPEN	all	NE	all	181			3	1	**4**	2	106	480	62	**650**		impute q1, q2, and q4
53	Pots and Traps, Conch	OPEN	all	MA	all	183		2	1	3	**6**	96	259	162	514	**1,031**		impute q1, q2, and q3
54	Pots and Traps, Conch	OPEN	all	NE	all	183		1	2	9	**12**		377	421	385	**1,183**		impute q2 and q3
55	Pots and Traps, Hagfish	OPEN	all	NE	all	186						4	15	27	16	**62**		no discard estimation
56	Pots and Traps, Lobster	OPEN	all	MA	all	200		2	6	4	**12**	101	415	754	346	**1,616**		impute q1 and q2
57	Pots and Traps, Lobster	OPEN	all	NE	all	200	10	9	16	11	**46**	1,786	4,779	11,752	8,305	**26,622**		
58	Rakes, Other	OPEN	all	MA	all	250							29	28	19	**76**		no discard estimation
59	Rakes, Other	OPEN	all	NE	all	250						12	40	43	55	**150**		no discard estimation
60	Pots and Traps, Crab	OPEN	all	MA	all	300						6	19	61	22	**108**		no discard estimation
61	Pots and Traps, Crab	OPEN	all	NE	all	300						27	21	8	9	**65**		no discard estimation
62	Diving Gear	OPEN	all	MA	all													
63	Diving Gear	OPEN	all	NE	all	330							53	33	1	**87**		no discard estimation

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							NEFOP					VTR						
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	VTR < NEFOP	Comments Imputation
64	Beam Trawl	OPEN	all	MA	all	350						10	39	41	10	**100**		no discard estimation
65	Beam Trawl	OPEN	all	NE	all	350							12	12	2	**26**		no discard estimation
66	Dredge, Other	OPEN	all	MA	all	381			1		**1**	184	64		74	**322**		no discard estimation
67	Dredge, Other	OPEN	all	NE	all	381						2				**2**		no discard estimation
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	386, 400						449	476	456	415	**1,796**		no discard estimation
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	386, 400						503	761	655	398	**2,317**		no discard estimation
						Totals	**599**	**1,240**	**1,740**	**1,150**	**4,729**	**10,037**	**21,301**	**33,045**	**21,385**	**85,768**		

See text for fleet abbreviations; "+" = new fleet since the 2015 NBR Update (Blaylock et al. 2015).

Table 2B. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) for calendar year 2015. An "X" in the "VTR < NEFOP" column indicates a fleet that contains a calendar quarter where the number of VTR trips is less than the number of NEFOP trips. Dark shading indicates fleets with no NEFOP trips and no VTR trips in 2015.

							NEFOP					VTR						
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	VTR < NEFOP	Comments Imputation
1	Longline	OPEN	all	MA	all	060, 010	1	3	2		**6**	10	35	43	37	**125**		impute q1, q3, and q4
2	Longline	OPEN	all	NE	all	060, 010	3	1	1	1	**6**	13	53	560	146	**772**		impute q2, q3, and q4
3	Hand Line	OPEN	all	MA	all	020, 021		1	1	1	**3**	28	577	1,376	589	**2,570**		no discard estimation
4	Hand Line	OPEN	all	NE	all	020, 021		2	13	9	**24**	13	472	1,561	682	**2,728**		impute q1 and q2
5	Harpoon	OPEN	all	NE	all	030							15	21		**36**		no discard estimation
6	Longline, Pelagic	OPEN	all	MA	all	040								1	3	**4**		no discard estimation
7	Longline, Pelagic	OPEN	all	NE	all	040								7	2	**9**		no discard estimation
8	Otter Trawl	OPEN	all	MA	sm	050	87	76	108	106	**377**	442	666	1,166	1,006	**3,280**		
9	Otter Trawl	OPEN	all	MA	lg	050	58	66	54	32	**210**	807	1,297	1,393	749	**4,246**		
10	Otter Trawl	OPEN	all	NE	sm	050	46	75	118	51	**290**	354	911	1,393	625	**3,283**		
11	Otter Trawl	OPEN	all	NE	lg	050	205	259	241	171	**876**	895	1,519	1,849	1,190	**5,453**		
12	Scallop Trawl	AA	GEN	MA	all	052		3			**3**		116	41		**157**		impute q3
13	Scallop Trawl	AA	LIM	NE	all													
14	Scallop Trawl	OPEN	GEN	MA	all	052	1	1	3	1	**6**	10	42	39	3	**94**		impute q1, q2, and q4
15	Scallop Trawl	OPEN	GEN	NE	all													
16	Scallop Trawl	OPEN	LIM	MA	all	052		1			**1**	3	2		3	**8**		no discard estimation
17+	Twin Trawl	OPEN	all	MA	all	053	9	1	5	1	**16**	46	36	50	29	**161**		impute q2 and q4
18	Twin Trawl	OPEN	all	NE	all	053							1	5	5	**11**		no discard estimation
19	Otter Trawl, Ruhle	OPEN	all	MA	sm	054				2	**2**	6	1		3	**10**		no discard estimation
20	Otter Trawl, Ruhle	OPEN	all	MA	lg	054		1			**1**	2	1			**3**		no discard estimation
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	054	1	1			**2**	14	1		5	**20**		no discard estimation
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	054		4			**4**	5	9	1		**15**		impute q1 and q3
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm													
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	057	9	20	9	5	**43**	88	100	46	37	**271**		
25	Shrimp Trawl	OPEN	all	MA	all	058		1	1		**2**		25	61	42	**128**		no discard estimation
26	Shrimp Trawl	OPEN	all	NE	all	058						5		31		**36**		no discard estimation
27	Otter Trawl, Bottom, Other	OPEN	all	MA	all	059						2			6	**8**		no discard estimation
28	Otter Trawl, Bottom, Other	OPEN	all	NE	all	059							13			**13**		no discard estimation
29	Floating Trap	OPEN	all	MA	all	080							41	30	1	**72**		no discard estimation
30	Floating Trap	OPEN	all	NE	all	080							2	14		**16**		no discard estimation
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	100, 110	8	37	67	50	**162**	404	432	488	345	**1,669**		

See text for fleet abbreviations; "+" = new fleet since the 2015 NBR Update (Blaylock et al. 2015).

Table 2B, continued. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) for calendar year 2015. An "X" in the "VTR < NEFOP" column indicates a fleet that contains a calendar quarter where the number of VTR trips is less than the number of NEFOP trips. Dark shading indicates fleets with no NEFOP trips and no VTR trips in 2015.

							NEFOP					VTR						
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	VTR < NEFOP	Comments Imputation
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	100, 110	3	28	25	85	**141**	214	376	383	904	**1,877**		
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	100, 110	29	53	3	41	**126**	299	919	137	536	**1,891**		
34	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	100, 110							3	1	2	**6**		no discard estimation
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	100, 110	33	55	286	97	**471**	114	445	1,328	478	**2,365**		
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	100, 110	22	66	283	79	**450**	278	909	1,351	639	**3,177**		
37	Purse Seine	OPEN	all	MA	all	120, 121							155	31		**186**		no discard estimation
38	Purse Seine	OPEN	all	NE	all	120, 121		2	6	1	**9**		37	180	29	**246**		impute q2 and q4
39	Scallop Dredge	AA	GEN	MA	all	132		22	28	1	**51**	1	1,058	786	25	**1,870**		impute q1 and q4
40	Scallop Dredge	AA	GEN	NE	all	132	1				**1**	205	262	53	59	**579**		no discard estimation
41	Scallop Dredge	AA	LIM	MA	all	132		55	44	35	**134**	2	409	435	313	**1,159**		impute q1
42	Scallop Dredge	AA	LIM	NE	all	132	9	2			**11**	27	5		1	**33**		impute q2 and q4
43	Scallop Dredge	OPEN	GEN	MA	all	132	22	23	21	21	**87**	582	545	588	405	**2,120**		
44	Scallop Dredge	OPEN	GEN	NE	all	132	22	36	26	20	**104**	676	706	535	439	**2,356**		
45	Scallop Dredge	OPEN	LIM	MA	all	132	14	19	15	1	**49**	83	165	182	74	**504**		impute q4
46	Scallop Dredge	OPEN	LIM	NE	all	132	19	44	24	9	**96**	111	340	240	78	**769**		
47	Danish Seine	OPEN	all	MA	all	160							44	16	1	**61**		no discard estimation
48+	Midwater Paried & Single Trawl	AA	all	NE	all	170, 370			5		**5**			5		**5**		
49	Mid-water Paired & Single Trawl	OPEN	all	MA	all	170, 370	2			1	**3**	38	4		15	**57**		no discard estimation
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	170, 370	2	4	1	4	**11**	81	73	79	115	**348**		impute q1 and q3
51	Pots and Traps, Fish	OPEN	all	MA	all	181		1	4	3	**8**	34	243	233	147	**657**		impute q1 and q2
52	Pots and Traps, Fish	OPEN	all	NE	all	181			14		**14**	7	65	411	40	**523**		impute q1, q2, and q4
53	Pots and Traps, Conch	OPEN	all	MA	all	183		3	2	13	**18**	57	231	187	599	**1,074**		impute q1 and q3
54	Pots and Traps, Conch	OPEN	all	NE	all	183		7	8	7	**22**		303	422	517	**1,242**		
55	Pots and Traps, Hagfish	OPEN	all	NE	all	186						7	17	13	11	**48**		no discard estimation
56	Pots and Traps, Lobster	OPEN	all	MA	all	200	3	6	5	6	**20**	120	311	697	350	**1,478**		
57	Pots and Traps, Lobster	OPEN	all	NE	all	200	8	57	118	83	**266**	1,451	4,813	12,172	8,562	**26,998**		
58	Rakes, Other	OPEN	all	MA	all	250						1	29	29	17	**76**		no discard estimation
59	Rakes, Other	OPEN	all	NE	all	250						14	48	35	62	**159**		no discard estimation
60	Pots and Traps, Crab	OPEN	all	MA	all	300						7	11	16	26	**60**		no discard estimation
61	Pots and Traps, Crab	OPEN	all	NE	all	300						11	18	6	6	**41**		no discard estimation
62	Diving Gear	OPEN	all	MA	all	330							2	6	1	**9**		no discard estimation
63	Diving Gear	OPEN	all	NE	all	330						3	35	24	2	**64**		no discard estimation

See text for fleet abbreviations; "+" = new fleet since the 2015 NBR Update (Blaylock et al. 2015).

Table 2B, continued. Number of Northeast Fisheries Observer Program (NEFOP) and Vessel Trip Report (VTR) trips, by fleet and calendar quarter (Q) for calendar year 2015. An "X" in the "VTR < NEFOP" column indicates a fleet that contains a calendar quarter where the number of VTR trips is less than the number of NEFOP trips. Dark shading indicates fleets with no NEFOP trips and no VTR trips in 2015.

							NEFOP					VTR						
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	VTR < NEFOP	Comments Imputation
64	Beam Trawl	OPEN	all	MA	all	350						5	24	43	13	**85**		no discard estimation
65	Beam Trawl	OPEN	all	NE	all	350						1	4	66	6	**77**		no discard estimation
66	Dredge, Other	OPEN	all	MA	all	381						146	34		95	**275**		no discard estimation
67	Dredge, Other	OPEN	all	NE	all	381						10				**10**		no discard estimation
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	386, 400			3	7	**10**	414	527	475	438	**1,854**		no discard estimation
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	386, 400			6	7	**13**	347	632	712	391	**2,082**		no discard estimation
						Totals	**617**	**1,036**	**1,550**	**951**	**4,154**	**8,493**	**20,169**	**32,053**	**20,904**	**81,619**		

See text for fleet abbreviations; "+" = new fleet since the 2015 NBR Update (Blaylock et al. 2015).

Table 3A. Vessel Trip Report (VTR) landings (live weight, metric tons), by fleet and calendar quarter (Q) for calendar year 2014. Dark shading indicates fleets with no reported VTR landings in 2014.

Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL
1	Longline	OPEN	all	MA	all	060, 010	74.72	112.92	195.61	162.43	**545.68**
2	Longline	OPEN	all	NE	all	060, 010	121.44	189.74	1,303.87	344.02	**1,959.08**
3	Hand Line	OPEN	all	MA	all	020, 021	14.55	46.33	109.79	48.67	**219.32**
4	Hand Line	OPEN	all	NE	all	020, 021	1.08	28.94	569.33	269.89	**869.23**
5	Harpoon	OPEN	all	NE	all	030		4.24	4.45		**8.69**
6	Longline, Pelagic	OPEN	all	MA	all	040	2.46		5.95	8.24	**16.65**
8	Otter Trawl	OPEN	all	MA	sm	050	4,780.27	4,506.17	10,246.56	4,289.34	**23,822.36**
9	Otter Trawl	OPEN	all	MA	lg	050	2,258.96	1,467.51	1,217.19	1,498.83	**6,442.49**
10	Otter Trawl	OPEN	all	NE	sm	050	6,286.10	4,081.32	4,598.24	4,267.73	**19,233.40**
11	Otter Trawl	OPEN	all	NE	lg	050	7,224.94	6,878.31	5,127.26	5,773.79	**25,004.30**
12	Scallop Trawl	AA	GEN	MA	all	052		26.47	29.34		**55.81**
14	Scallop Trawl	OPEN	GEN	MA	all	052	8.09	261.98	43.38	38.45	**351.90**
16	Scallop Trawl	OPEN	LIM	MA	all	052	24.62	33.89	18.93	5.75	**83.18**
17	Twin Trawl	OPEN	all	MA	all	053	211.06	130.45	90.59	177.66	**609.76**
19	Otter Trawl, Ruhle	OPEN	all	MA	sm	054	296.37	22.27		0.59	**319.23**
21	Otter Trawl, Ruhle	OPEN	all	NE	sm	054	79.38	16.19	14.54	91.63	**201.73**
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	054	2.95	21.83	133.57	50.79	**209.15**
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	057		91.68	31.16	1.36	**124.20**
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	057	98.51	737.80	352.87	569.62	**1,758.80**
25	Shrimp Trawl	OPEN	all	MA	all	058	7.26	70.72	83.31	33.96	**195.26**
28	Otter Trawl, Bottom, Other	OPEN	all	NE	all	059		8.05	42.03	0.02	**50.11**
29	Floating Trap	OPEN	all	MA	all	080		146.69	80.26		**226.96**
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	100, 110	511.39	478.24	460.18	438.08	**1,887.88**
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	100, 110	701.48	543.15	182.24	1,301.09	**2,727.96**
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	100, 110	289.88	1,711.20	177.53	1,013.34	**3,191.95**
34	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	100, 110			4.30	0.71	**5.02**
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	100, 110	258.79	755.53	2,493.43	1,289.03	**4,796.79**
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	100, 110	786.32	2,198.38	3,483.64	1,689.36	**8,157.70**
37	Purse Seine	OPEN	all	MA	all	120, 121	58.97	9,854.29	1,347.17		**11,260.43**
38	Purse Seine	OPEN	all	NE	all	120, 121		2,063.67	20,617.70	4,573.21	**27,254.58**
39	Scallop Dredge	AA	GEN	MA	all	132	16.40	89.18	876.53		**982.11**
40	Scallop Dredge	AA	GEN	NE	all	132	65.19	86.82	102.27	15.37	**269.65**
41	Scallop Dredge	AA	LIM	MA	all	132	318.30	2,221.69	8,325.06	44.29	**10,909.34**
42	Scallop Dredge	AA	LIM	NE	all	132	699.74	2,449.04	7,902.96	3,145.06	**14,196.80**
43	Scallop Dredge	OPEN	GEN	MA	all	132	807.32	1,772.17	1,013.73	797.25	**4,390.47**
44	Scallop Dredge	OPEN	GEN	NE	all	132	647.31	1,235.45	968.71	680.81	**3,532.28**
45	Scallop Dredge	OPEN	LIM	MA	all	132	4,910.05	38,123.67	12,729.93	2,933.56	**58,697.20**
46	Scallop Dredge	OPEN	LIM	NE	all	132	7,018.91	11,797.16	8,346.46	2,165.86	**29,328.39**
47	Danish Seine	OPEN	all	MA	all	160		1,260.45	419.90		**1,680.35**
48	Mid-water Paired & Single Trawl	AA	all	NE	all	170, 370		478.69	5,090.95	509.38	**6,079.03**
49	Mid-water Paired & Single Trawl	OPEN	all	MA	all	170, 370	4,542.43	0.37		608.66	**5,151.46**
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	170, 370	18,043.62	8,892.88	13,822.98	13,568.89	**54,328.37**
51	Pots and Traps, Fish	OPEN	all	MA	all	181	27.26	53.34	77.42	72.59	**230.60**
52	Pots and Traps, Fish	OPEN	all	NE	all	181	0.09	7.41	73.14	5.95	**86.59**
53	Pots and Traps, Conch	OPEN	all	MA	all	183	119.61	197.89	167.84	505.55	**990.88**
54	Pots and Traps, Conch	OPEN	all	NE	all	183		95.69	101.53	137.75	**334.96**
55	Pots and Traps, Hagfish	OPEN	all	NE	all	186	29.94	120.56	413.71	318.99	**883.20**
56	Pots and Traps, Lobster	OPEN	all	MA	all	200	89.66	197.46	316.37	214.90	**818.38**

See text for fleet abbreviations.

Table 3A, continued. Vessel Trip Report (VTR) landings (live weight, metric tons), by fleet and calendar quarter (Q) for calendar year 2014. Dark shading indicates fleets with no reported VTR landings in 2014.

Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL
57	Pots and Traps, Lobster	OPEN	all	NE	all	200	2,364.06	2,054.25	4,395.57	5,214.20	**14,028.08**
59	Rakes, Other	OPEN	all	NE	all	250	54.11	62.71	17.34	48.07	**182.23**
60	Pots and Traps, Crab	OPEN	all	MA	all	300	128.31	141.64	202.53	170.37	**642.85**
61	Pots and Traps, Crab	OPEN	all	NE	all	300	252.75	84.91	114.04	212.43	**664.13**
62	Diving Gear	OPEN	all	MA	all						
64	Beam Trawl	OPEN	all	MA	all	350	45.75	38.87	18.74	23.20	**126.56**
66	Dredge, Other	OPEN	all	MA	all	381	75.55	78.60		27.41	**181.56**
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	386, 400	34,591.73	36,709.88	32,496.29	32,016.10	**135,814.00**
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	386, 400	17,084.88	21,381.68	21,371.41	12,495.00	**72,332.97**
	12 Confidential fleets						288.59	47.50	133.07	69.85	**539.01**
					TOTAL		**116,321.11**	**166,167.93**	**172,562.90**	**103,939.10**	**558,991.05**

See text for fleet abbreviations.

Table 3B. Vessel Trip Report (VTR) landings (live weight, metric tons), by fleet and calendar quarter (Q) for calendar year 2015. Dark shading indicates fleets with no reported VTR landings in 2015.

Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL
1	Longline	OPEN	all	MA	all	060, 010	64.13	172.26	121.07	75.55	**433.02**
2	Longline	OPEN	all	NE	all	060, 010	70.96	66.05	1,135.03	269.42	**1,541.46**
3	Hand Line	OPEN	all	MA	all	020, 021	5.81	34.60	116.27	40.77	**197.45**
4	Hand Line	OPEN	all	NE	all	020, 021	1.92	100.09	503.96	556.42	**1,162.40**
5	Harpoon	OPEN	all	NE	all	030		8.16	7.72		**15.88**
8	Otter Trawl	OPEN	all	MA	sm	050	4,309.11	1,974.95	4,861.95	3,928.41	**15,074.42**
9	Otter Trawl	OPEN	all	MA	lg	050	2,488.31	1,542.18	806.98	1,893.67	**6,731.14**
10	Otter Trawl	OPEN	all	NE	sm	050	3,612.74	4,440.54	4,913.79	10,774.83	**23,741.91**
11	Otter Trawl	OPEN	all	NE	lg	050	5,228.40	7,124.54	5,689.03	5,570.33	**23,612.30**
12	Scallop Trawl	AA	GEN	MA	all	052		260.64	91.23		**351.87**
13	Scallop Trawl	AA	LIM	NE	all						
14	Scallop Trawl	OPEN	GEN	MA	all	052	21.36	38.90	24.47	4.38	**89.11**
15	Scallop Trawl	OPEN	GEN	NE	all						
16	Scallop Trawl	OPEN	LIM	MA	all	052	16.31	6.92		5.54	**28.76**
17	Twin Trawl	OPEN	all	MA	all	053	430.31	43.50	121.45	316.81	**912.06**
19	Otter Trawl, Ruhle	OPEN	all	MA	sm	054	108.64	0.25		11.30	**120.19**
21	Otter Trawl, Ruhle	OPEN	all	NE	sm	054	459.26	1.80		4,696.95	**5,158.01**
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	054	64.59	68.33	12.95		**145.87**
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	057	751.16	1,274.00	519.62	223.66	**2,768.43**
25	Shrimp Trawl	OPEN	all	MA	all	058		24.60	169.82	141.55	**335.98**
26	Shrimp Trawl	OPEN	all	NE	all	058	3.13		25.53		**28.66**
30	Floating Trap	OPEN	all	NE	all	080		0.11	1.99		**2.10**
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	100, 110	687.14	473.00	307.03	373.75	**1,840.92**
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	100, 110	468.36	372.16	156.17	1,272.99	**2,269.68**
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	100, 110	438.76	1,515.34	197.81	791.47	**2,943.38**
34	Sink, Anchor, Drift Gillnet	OPEN	all	NE	sm	100, 110		6.83	0.56	0.46	**7.84**
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	100, 110	186.18	404.20	1,892.69	692.30	**3,175.37**
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	100, 110	897.12	2,480.18	3,216.81	1,345.86	**7,939.97**
37	Purse Seine	OPEN	all	MA	all	120, 121		13,062.16	3,567.50		**16,629.66**
38	Purse Seine	OPEN	all	NE	all	120, 121		2,430.48	17,878.92	2,705.91	**23,015.31**
39	Scallop Dredge	AA	GEN	MA	all	132	2.23	2,503.51	1,928.50	172.77	**4,607.00**
40	Scallop Dredge	AA	GEN	NE	all	132	93.90	102.90	25.19	84.17	**306.15**
41	Scallop Dredge	AA	LIM	MA	all	132	47.07	22,761.02	21,827.08	15,766.60	**60,401.77**
42	Scallop Dredge	AA	LIM	NE	all	132	968.58	204.34		46.10	**1,219.02**
43	Scallop Dredge	OPEN	GEN	MA	all	132	939.30	686.80	849.31	601.11	**3,076.52**
44	Scallop Dredge	OPEN	GEN	NE	all	132	566.30	1,039.70	685.76	396.31	**2,688.07**
45	Scallop Dredge	OPEN	LIM	MA	all	132	2,503.63	7,363.15	6,441.85	806.55	**17,115.19**
46	Scallop Dredge	OPEN	LIM	NE	all	132	4,790.42	23,399.72	10,849.78	2,356.83	**41,396.75**
47	Danish Seine	OPEN	all	MA	all	160		742.59	514.79	0.23	**1,257.60**
48	Mid-water Paired & Single Trawl	AA	all	NE	all	170, 370			776.17		**776.17**
49	Mid-water Paired & Single Trawl	OPEN	all	MA	all	170, 370	5,303.87	208.28		569.94	**6,082.09**
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	170, 370	12,336.02	12,440.83	12,231.13	13,136.85	**50,144.84**
51	Pots and Traps, Fish	OPEN	all	MA	all	181	16.56	50.28	44.54	54.99	**166.37**
52	Pots and Traps, Fish	OPEN	all	NE	all	181	1.65	16.86	78.49	13.96	**110.97**
53	Pots and Traps, Conch	OPEN	all	MA	all	183	40.52	264.32	146.31	438.63	**889.77**
54	Pots and Traps, Conch	OPEN	all	NE	all	183		78.87	102.74	182.96	**364.57**
55	Pots and Traps, Hagfish	OPEN	all	NE	all	186	40.76	206.85	347.29	220.63	**815.53**
56	Pots and Traps, Lobster	OPEN	all	MA	all	200	60.92	191.60	326.94	293.55	**873.01**
57	Pots and Traps, Lobster	OPEN	all	NE	all	200	1,921.30	2,150.94	4,377.55	4,849.05	**13,298.84**

See text for fleet abbreviations.

Table 3B, continued. Vessel Trip Report (VTR) landings (live weight, metric tons), by fleet and calendar quarter (Q) for calendar year 2015. Dark shading indicates fleets with no reported VTR landings in 2015.

Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	Gear Codes	Q1	Q2	Q3	Q4	TOTAL
59	Rakes, Other	OPEN	all	NE	all	250	40.26	10.55	2.86	38.89	**92.55**
60	Pots and Traps, Crab	OPEN	all	MA	all	300	241.26	165.08	303.30	322.96	**1,032.59**
61	Pots and Traps, Crab	OPEN	all	NE	all	300	205.73	131.73	142.25	208.39	**688.11**
63	Diving Gear	OPEN	all	NE	all	330	0.29	827.76	4.74	0.26	**833.05**
64	Beam Trawl	OPEN	all	MA	all	350	16.77	12.48	20.47	24.89	**74.62**
65	Beam Trawl	OPEN	all	NE	all	350	7.42	0.76	15.07	2.35	**25.60**
66	Dredge, Other	OPEN	all	MA	all	381	39.70	41.95		36.97	**118.62**
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	386, 400	31,274.90	43,780.89	33,779.14	31,740.05	**140,574.98**
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	386, 400	9,116.85	16,694.13	22,414.56	12,883.19	**61,108.72**
	10 Confidential fleets						20.35	164.17	223.15	95.25	**502.91**
					TOTAL		**90,910.29**	**174,168.80**	**164,799.30**	**121,036.74**	**550,915.13**

See text for fleet abbreviations.

Table 4A. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						ACADIAN REDFISH (*Sebastes fasciatus*)			ALEWIFE (*Alosa pseudoharengus*)			AMBERJACK, UNC (*Seriola*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	< 0.01	11.873	0.000002	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.06	1.655	0.000071	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.26	1.937	0.000011	8.56	0.529	0.000359	0.04	0.421	0.000002
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.50	0.426	0.000077	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	3.44	0.502	0.000179	48.24	0.184	0.002508	< 0.01	0.560	0.000000
11	Otter Trawl	OPEN	all	NE	lg	435.42	0.269	0.017414	2.11	0.160	0.000084	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	< 0.01	0.293	0.000002	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.01	0.518	0.000023	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	< 0.01	0.232	0.000006	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	6.97	0.312	0.003961	0.07	0.440	0.000041	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3.85	0.192	0.000803	0.15	0.660	0.000031	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	< 0.01	0.842	0.000000	< 0.01	0.899	0.000001	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.10	0.819	0.000007	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.02	0.571	0.000005	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.01	0.995	0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	< 0.01	0.311	0.000000	< 0.01	0.360	0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	1.19	0.899	0.000022	0.01	0.336	0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	1.54	1.935	0.000110	0.00		0.000000	0.00		0.000000
					TOTAL	452.84	0.259		59.67	0.167		0.04	0.387	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						AMERICAN EEL (*Anguilla rostrata*)			AMERICAN LOBSTER (*Homarus americanus*)			AMERICAN PLAICE (*Hippoglossoides platessoides*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.12	1.203	0.000223	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.36	0.475	0.000186	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.06	2.164	0.000002	5.62	0.413	0.000236	0.30	0.512	0.000013
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	10.70	0.641	0.001662	3.73	0.783	0.000579
10	Otter Trawl	OPEN	all	NE	sm	< 0.01	0.564	0.000000	18.15	0.235	0.000944	8.95	0.302	0.000465
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	488.45	0.073	0.019535	72.72	0.073	0.002908
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.01	0.935	0.000042	0.06	0.293	0.000176
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.02	2.759	0.000031	0.02	0.518	0.000031
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.42	0.466	0.002083	0.02	0.847	0.000117
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.29	0.185	0.002362	0.02	0.204	0.000154
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	9.03	0.229	0.005136	1.49	0.291	0.000848
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.06	0.766	0.000022	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.87	0.405	0.000273	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	101.40	0.067	0.021140	1.43	0.132	0.000298
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	66.12	0.080	0.008105	0.08	0.386	0.000010
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.04	0.662	0.000004	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	12.99	0.297	0.000915	0.68	0.394	0.000048
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.15	0.473	0.000034	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	4.32	0.258	0.001222	0.32	0.386	0.000091
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	2.20	0.164	0.000038	0.04	0.692	0.000001
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	17.46	0.208	0.000595	5.11	0.441	0.000174
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	0.341	0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	9.46	0.898	0.041020	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.13	1.125	0.001472	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.03	14.705	0.000028	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.03	1.189	0.000089	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	233.20	0.399	0.284948	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	9,904.33	0.162	0.706036	0.00		0.000000
					TOTAL	0.06	2.067		10,885.98	0.148		94.99	0.074	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						AMERICAN SHAD (*Alosa sapidissima*)			ATLANTIC ANGEL SHARK (*Squatina dumeril*)			ATLANTIC BONITO (*Sarda sarda*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	10.30	0.642	0.000432	5.61	0.310	0.000236	0.25	0.609	0.000011
9	Otter Trawl	OPEN	all	MA	lg	1.06	0.621	0.000165	2.51	0.444	0.000390	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	14.99	0.541	0.000779	0.00		0.000000	0.08	1.402	0.000004
11	Otter Trawl	OPEN	all	NE	lg	8.09	0.111	0.000324	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.23	0.493	0.000380	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.02	0.395	0.000117	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.01	0.176	0.000082	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.50	0.248	0.000283	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.27	0.473	0.000141	15.92	4.055	0.008434	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.35	0.569	0.000127	0.57	2.724	0.000209	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	3.71	0.406	0.001161	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	10.54	0.137	0.002197	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.40	0.442	0.000049	0.14	0.705	0.000017	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.03	0.837	0.000006	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	4.58	0.726	0.000078	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.01	0.660	0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	51.37	0.217		28.46	2.271		0.33	0.571	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						ATLANTIC COD (*Gadus morhua*)			ATLANTIC CROAKER (*Micropogonias undulatus*)			ATLANTIC HAGFISH (*Myxine glutinosa*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	1.65	4.750	0.000840	0.00		0.000000	< 0.01	14.961	0.000002
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	8.02	0.815	0.009226	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.20	0.713	0.000008	94.88	1.419	0.003983	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.05	0.858	0.000008	0.22	0.573	0.000035	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	1.50	0.259	0.000078	0.03	0.562	0.000001	0.02	0.559	0.000001
11	Otter Trawl	OPEN	all	NE	lg	25.74	0.149	0.001030	0.13	1.051	0.000005	< 0.01	0.449	0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.99	1.108	0.002816	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.01	0.179	0.000061	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	3.29	0.329	0.001872	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.80	1.215	0.000423	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.15	0.982	0.000048	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	16.42	0.067	0.003424	< 0.01	0.973	0.000001	0.08	0.202	0.000016
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	2.61	0.170	0.000320	0.00		0.000000	0.02	0.531	0.000002
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.60	0.386	0.000042	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.03	1.069	0.000007	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.07	0.554	0.000019	0.00		0.000000	< 0.01	0.845	0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.26	0.290	0.000004	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	2.80	0.352	0.000096	0.00		0.000000	0.01	0.757	0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	1.89	1.318	0.008196	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.07	0.775	0.000793	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	33.79	0.673	0.002409	0.00		0.000000	0.00		0.000000
					TOTAL	98.26	0.258		97.96	1.374		0.12	0.588	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						ATLANTIC HALIBUT (*Hippoglossus hippoglossus*)			ATLANTIC HERRING (*Clupea harengus*)			ATLANTIC MACKEREL (*Scomber scombrus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.22	0.787	0.000250	11.54	0.787	0.013277
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	2.81	1.329	0.000118	11.98	0.451	0.000503
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.37	0.443	0.000057	0.70	1.012	0.000108
10	Otter Trawl	OPEN	all	NE	sm	0.42	0.625	0.000022	75.09	0.583	0.003904	20.88	0.749	0.001086
11	Otter Trawl	OPEN	all	NE	lg	18.99	0.086	0.000759	3.90	0.154	0.000156	1.27	0.236	0.000051
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.05	0.518	0.000080
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.01	0.395	0.000072	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.02	0.212	0.000177	0.01	0.215	0.000048	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1.45	0.328	0.000824	1.08	0.375	0.000616	1.83	0.821	0.001042
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3.64	0.109	0.000759	1.62	0.200	0.000339	0.80	0.179	0.000166
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	7.81	0.192	0.000957	0.00		0.000000	0.13	0.424	0.000016
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.07	0.253	0.000002	0.01	1.108	0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.02	0.933	0.000001	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.01	0.837	0.000002	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.11	1.290	0.000030	< 0.01	1.198	0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.01	0.901	0.000000	0.01	0.552	0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.02	1.042	0.000001	0.01	0.488	0.000000	0.05	0.602	0.000002
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	< 0.01	0.082	0.000001	< 0.01	0.220	0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	1.13	0.722	0.000021	0.02	0.264	0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	32.48	0.071		86.34	0.509		49.26	0.385	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						ATLANTIC MOONFISH (*Selene setapinnis*)			ATLANTIC SHARPNOSE SHARK (*Rhizoprionodon terraenovae*)			ATLANTIC SHEEPSHEAD (*Archosargus probatocephalus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.02	0.677	0.000001	0.46	1.578	0.000019	0.05	1.983	0.000002
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.61	0.424	0.000032	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.93	0.598	0.000493	0.08	1.563	0.000041
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.63	0.411		1.39	0.656		0.12	1.228	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						ATLANTIC STURGEON (*Acipenser oxyrinchus*)			ATLANTIC WOLFFISH (*Anarhichas lupus*)			BASKING SHARK (*Cetorhinus maximus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.12	10.250	0.000063	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.39	1.624	0.000446	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	11.45	0.639	0.000480	0.00		0.000000	22.38	0.470	0.000940
9	Otter Trawl	OPEN	all	MA	lg	3.73	0.528	0.000578	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.53	1.250	0.000027	0.30	0.999	0.000016	39.23	0.552	0.002039
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	10.79	0.127	0.000431	80.29	0.419	0.003211
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	< 0.01	0.339	0.000024	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1.21	1.020	0.000687	1.66	0.386	0.000944	0.49	0.744	0.000278
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1.11	1.873	0.000407	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	10.93	0.558	0.003424	0.00		0.000000	82.29	0.880	0.025779
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.93	0.260	0.000193	2.84	0.098	0.000593	256.05	0.349	0.053380
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.96	0.450	0.000118	0.12	0.901	0.000015	3.23	0.896	0.000396
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.09	1.024	0.000003	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	16.05	0.246	0.002640
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	30.84	0.326		16.32	0.130		500.01	0.245	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						BENTHIC SPECIES, OTHER			BIGEYE SCAD (*Selar crumenophthalmus*)			BIGEYE THRESHER SHARK (*Alopias superciliosus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.01	6.680	0.000004	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	85.87	0.435	0.003605	< 0.01	0.840	0.000000	2.94	0.795	0.000123
9	Otter Trawl	OPEN	all	MA	lg	362.62	0.237	0.056286	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	60.36	0.461	0.003138	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	170.31	0.169	0.006811	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	1.95	0.286	0.005549	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	20.70	0.951	0.033949	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.02	0.696	0.000102	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.01	0.571	0.000062	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.20	0.321	0.000113	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	5.52	0.541	0.002924	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.16	0.590	0.000058	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	27.40	1.031	0.008584	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1.99	0.121	0.000414	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	5.54	0.211	0.000680	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	8.78	0.648	0.008939	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	107.02	0.215	0.009810	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	844.48	0.274	0.059484	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	1,453.48	0.183	0.331054	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	333.25	0.207	0.094344	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	13,573.13	0.075	0.231240	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	1,118.10	0.312	0.038124	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	< 0.01	0.330	0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.25	1.001	0.001093	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.31	0.926	0.000315	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	1.24	1.856	0.001516	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	1.09	0.589	0.000078	0.00		0.000000	0.00		0.000000
					TOTAL	18,183.80	0.063		< 0.01	0.840		2.94	0.795	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						BIGNOSE SHARK (*Carcharhinus altimus*)			BIVALVES, OTHER (CLASS: Bivalvia)			BLACK DRUM (*Pogonias cromis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	3.00	0.676	0.001530	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	2.85	0.379	0.000120	1.75	1.731	0.000073
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	16.55	0.435	0.002569	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.04	0.767	0.000002	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	2.89	0.381	0.000116	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.37	0.393	0.001046	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	1.35	2.836	0.002218	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	1.55	0.561	0.000822
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.02	0.420	0.000004	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.32	0.557	0.000040	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.50	0.599	0.000046	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	6.50	0.364	0.000458	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	3.12	0.494	0.000710	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.65	0.571	0.000185	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	19.42	0.514	0.000331	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	1.10	0.425	0.000038	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.03	0.926	0.000028	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	3.00	0.676		55.71	0.239		3.30	0.954	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						BLACK SEA BASS (*Centropristis striata*)			BLUE RUNNER (*Caranx crysos*)			BLUE SHARK (*Prionace glauca*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.14	1.169	0.000655	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	6.21	1.674	0.007139
8	Otter Trawl	OPEN	all	MA	sm	130.67	0.406	0.005485	0.27	0.832	0.000011	1.78	0.605	0.000075
9	Otter Trawl	OPEN	all	MA	lg	92.48	0.362	0.014355	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	136.97	0.202	0.007121	< 0.01	0.396	0.000000	1.58	1.242	0.000082
11	Otter Trawl	OPEN	all	NE	lg	9.25	0.191	0.000370	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.66	0.942	0.001873	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.02	0.860	0.000041	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.01	0.913	0.000004	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.13	2.664	0.000048	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.05	0.908	0.000015	0.00		0.000000	9.97	0.502	0.003123
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.02	0.770	0.000004	0.00		0.000000	1.49	0.381	0.000311
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.10	0.445	0.000012	0.00		0.000000	5.39	0.329	0.000661
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	< 0.01	0.184	0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.01	0.582	0.000001	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.35	0.339	0.000080	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.01	1.200	0.000002	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	7.05	0.227	0.000120	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.23	0.860	0.000008	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.32	0.183	0.000052
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.02	0.764	0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	62.52	0.536	0.271126	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	28.82	0.362	0.332830	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.31	0.926	0.000315	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	1.10	0.377	0.003269	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	4.60	0.805	0.005625	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	6.99	0.673	0.000498	0.00		0.000000	0.00		0.000000
					TOTAL	482.51	0.160		0.27	0.821		26.74	0.445	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						BLUEBACK HERRING (*Alosa aestivalis*)			BLUEFIN TUNA (*Thunnus thynnus*)			BLUEFISH (*Pomatomus saltatrix*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	3.92	0.730	0.000165	0.00		0.000000	3.95	0.607	0.000166
9	Otter Trawl	OPEN	all	MA	lg	0.01	0.992	0.000001	0.00		0.000000	1.17	0.548	0.000181
10	Otter Trawl	OPEN	all	NE	sm	14.58	0.374	0.000758	0.00		0.000000	2.62	0.275	0.000136
11	Otter Trawl	OPEN	all	NE	lg	0.02	0.446	0.000001	0.25	1.101	0.000010	2.02	0.544	0.000081
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	8.70	0.518	0.014275
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.30	0.513	0.000161
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	9.48	0.695	0.003476
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	3.77	0.491	0.001181
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.56	0.861	0.000116	0.69	0.376	0.000143
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.26	0.684	0.000032	6.02	0.172	0.000738
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.01	1.292	0.000001
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.06	0.836	0.000001
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	< 0.01	0.329	0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.01	0.908	0.000000	0.00		0.000000	0.09	0.764	0.000002
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	18.55	0.332		1.07	0.544		38.88	0.225	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						BLUELINE TILEFISH (*Caulolatilus microps*)			BONNETHEAD SHARK (*Sphyrna tiburo*)			BONY FISHES, OTHER		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	1.765	0.000002
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.25	0.608	0.000011	0.00		0.000000	45.33	1.931	0.001903
9	Otter Trawl	OPEN	all	MA	lg	0.04	1.105	0.000007	0.00		0.000000	0.03	0.668	0.000005
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	20.89	0.497	0.001086
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	1.64	0.827	0.000066
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.07	1.052	0.000197
17+	Twin Trawl	OPEN	all	MA	all	0.22	0.518	0.000361	0.00		0.000000	0.02	0.356	0.000034
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.12	0.727	0.000070
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.40	0.569	0.000211	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.30	0.782	0.000108
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.43	0.891	0.000134
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.90	0.382	0.000188
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	1.56	0.481	0.000191
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	9.71	0.324	0.000356
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.963	0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.04	0.937	0.000003
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	1.058	0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	1.203	0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.02	0.765	0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	35.79	0.436	0.005887
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	311.51	1.191	0.005734
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.03	0.655	0.000128
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.20	0.907	0.000014
					TOTAL	0.51	0.382		0.40	0.569		428.59	0.891	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						BUTTERFISH (*Peprilus triacanthus*)			CARCHARHINID SHARK, UNC (*Carcharhinus*)			CHAIN DOGFISH (*Scyliorhinus retifer*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	1.98	0.609	0.003625
2	Longline	OPEN	all	NE	all	0.00		0.000000	27.39	0.513	0.013980	17.69	0.392	0.009030
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	535.92	0.285	0.022496	18.78	0.408	0.000788	7.53	0.709	0.000316
9	Otter Trawl	OPEN	all	MA	lg	6.65	0.227	0.001032	0.17	0.875	0.000027	7.58	0.261	0.001177
10	Otter Trawl	OPEN	all	NE	sm	578.38	0.218	0.030071	0.00		0.000000	8.86	0.618	0.000461
11	Otter Trawl	OPEN	all	NE	lg	1.90	0.201	0.000076	0.00		0.000000	0.44	0.297	0.000017
14	Scallop Trawl	OPEN	GEN	MA	all	< 0.01	0.877	0.000008	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	52.34	0.514	0.085831	0.00		0.000000	0.07	0.302	0.000108
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	< 0.01	0.524	0.000014	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	< 0.01	0.375	0.000001	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.06	0.528	0.000032	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.03	0.474	0.000014	0.79	1.697	0.000419	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	< 0.01	2.217	0.000001	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.01	0.267	0.000002	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.01	0.636	0.000002	0.13	0.842	0.000015	< 0.01	0.898	0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.04	0.700	0.000044
41	Scallop Dredge	AA	LIM	MA	all	0.07	0.519	0.000006	0.00		0.000000	0.43	0.219	0.000039
42	Scallop Dredge	AA	LIM	NE	all	0.01	0.503	0.000000	0.00		0.000000	< 0.01	0.935	0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	< 0.01	0.617	0.000001	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.05	0.415	0.000001	0.00		0.000000	0.15	0.410	0.000003
46	Scallop Dredge	OPEN	LIM	NE	all	0.01	0.691	0.000000	0.00		0.000000	0.01	1.031	0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.75	0.764	0.000014	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	1,176.17	0.170		47.25	0.340		44.79	0.236	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						COBIA (*Rachycentron canadum*)			CREVALLE JACK (*Caranx hippos*)			CROAKERS AND DRUMS, OTHER (FAMILY: Sciaenidae)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	< 0.01	0.659	0.000000	0.31	1.394	0.000013
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.20	0.474	0.000032
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	1.49	0.254	0.000077
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1.27	0.569	0.000672	0.00		0.000000	0.43	0.481	0.000226
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	1.27	0.569		< 0.01	0.659		2.43	0.253	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						CUNNER (*Tautogolabrus adspersus*)			CUSK (*Brosme brosme*)			DECAPOD CRABS (ORDER: Decapoda)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	< 0.01	12.637	0.000002	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.03	1.109	0.000001	0.00		0.000000	30.15	0.364	0.001266
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	27.28	0.186	0.004235
10	Otter Trawl	OPEN	all	NE	sm	0.16	1.050	0.000008	0.00		0.000000	112.57	0.278	0.005853
11	Otter Trawl	OPEN	all	NE	lg	1.04	0.162	0.000042	0.10	0.432	0.000004	182.84	0.144	0.007312
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	3.96	0.288	0.011258
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.47	1.890	0.000771
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.395	0.000003
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	< 0.01	0.265	0.000025	0.00		0.000000	< 0.01	0.375	0.000002
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.50	0.549	0.000284	0.01	0.744	0.000005	0.29	0.330	0.000163
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	3.61	0.937	0.001911
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	3.92	0.737	0.001438
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	1.25	0.567	0.000391
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.29	0.117	0.000060	0.13	0.300	0.000027	6.85	0.143	0.001428
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.01	1.041	0.000001	0.02	0.637	0.000003	5.98	0.180	0.000734
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	3.08	0.298	0.003140
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	30.15	0.230	0.002764
42	Scallop Dredge	AA	LIM	NE	all	0.01	0.470	0.000001	0.00		0.000000	30.93	0.346	0.002178
43	Scallop Dredge	OPEN	GEN	MA	all	0.03	1.056	0.000006	0.00		0.000000	4.34	0.203	0.000988
44	Scallop Dredge	OPEN	GEN	NE	all	< 0.01	1.205	0.000000	0.00		0.000000	27.04	0.123	0.007654
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	56.83	0.183	0.000968
46	Scallop Dredge	OPEN	LIM	NE	all	0.07	0.440	0.000002	0.00		0.000000	29.74	0.165	0.001014
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	14.37	0.651	0.062325
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.96	0.391	0.011097
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	47.12	3.072	0.047549
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	36.83	0.325	0.109953
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.12	0.474	0.000149	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	8.44	0.809	0.000602	18.26	1.590	0.001302	1,300.39	0.631	0.092699
					TOTAL	10.69	0.640		18.53	1.567		1,960.96	0.426	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						DECAPOD SHRIMPS (ORDER: Decapoda)			DEMERSAL SPECIES, OTHER			DOLPHINFISH, UNC (*Coryphaena*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.41	0.381	0.000211
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	2.72	0.839	0.000114	7.28	0.326	0.000306	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	12.32	0.254	0.001913	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	1.36	1.375	0.000071	25.33	0.261	0.001317	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.02	0.637	0.000001	31.98	0.117	0.001279	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.37	0.371	0.000605	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	1.02	0.416	0.000579	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.27	0.544	0.000141	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	< 0.01	0.629	0.000000	0.14	0.589	0.000030	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	1.40	0.264	0.000171	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	1.20	0.365	0.000084	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	1.31	1.056	0.000297	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.38	0.795	0.000108	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	6.33	0.393	0.000108	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	4.39	0.419	0.000150	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.17	0.556	0.000003	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.02	0.774	0.000026	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.21	0.759	0.000015	0.00		0.000000
					TOTAL	4.10	0.719		94.09	0.098		0.41	0.381	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						DORIES, OTHER (ORDER: Zeiformes)			DUSKY SHARK (*Carcharhinus obscurus*)			FLATFISHES, OTHER (ORDER: Pleuronectiformes)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	59.91	0.179	0.002515	0.25	0.840	0.000010	78.98	0.417	0.003315
9	Otter Trawl	OPEN	all	MA	lg	0.61	0.397	0.000094	0.23	0.876	0.000036	103.82	0.172	0.016115
10	Otter Trawl	OPEN	all	NE	sm	7.43	0.378	0.000386	0.00		0.000000	136.40	0.240	0.007092
11	Otter Trawl	OPEN	all	NE	lg	0.57	0.326	0.000023	0.00		0.000000	83.35	0.114	0.003333
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	4.80	0.285	0.013641
17+	Twin Trawl	OPEN	all	MA	all	9.44	0.429	0.015479	0.00		0.000000	4.59	0.993	0.007525
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.01	0.395	0.000039	0.00		0.000000	0.03	0.198	0.000140
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.06	0.106	0.000469
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.01	0.679	0.000007	0.00		0.000000	0.29	0.276	0.000165
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.12	0.847	0.000062
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.73	2.724	0.000269	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.27	0.803	0.000084
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.01	0.609	0.000002	0.00		0.000000	0.77	0.143	0.000161
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.63	0.577	0.000077	0.32	1.038	0.000039	0.11	0.348	0.000013
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.39	0.521	0.000398
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	3.78	0.224	0.000346
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	37.67	0.203	0.002654
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	4.77	0.138	0.001087
44	Scallop Dredge	OPEN	GEN	NE	all	0.01	1.044	0.000002	0.00		0.000000	0.69	0.230	0.000195
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	94.92	0.066	0.001617
46	Scallop Dredge	OPEN	LIM	NE	all	< 0.01	0.757	0.000000	0.00		0.000000	54.73	0.215	0.001866
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.27	1.454	0.001175
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.17	0.667	0.000012
					TOTAL	78.63	0.150		1.53	1.333		610.96	0.087	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SUMMER FLOUNDER (*Paralichthys dentatus*)			GADIFORMES, OTHER (ORDER: Gadiformes)			GASTROPOD SNAILS, OTHER (CLASS: Gastropoda)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	2.04	1.018	0.003743	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	8.42	0.592	0.004295	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.72	1.169	0.003277	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	69.52	0.337	0.002918	349.96	0.281	0.014690	0.11	0.670	0.000005
9	Otter Trawl	OPEN	all	MA	lg	157.44	0.196	0.024437	27.43	0.211	0.004257	1.98	0.426	0.000308
10	Otter Trawl	OPEN	all	NE	sm	90.39	0.204	0.004700	132.77	0.388	0.006903	0.64	0.831	0.000033
11	Otter Trawl	OPEN	all	NE	lg	180.29	0.169	0.007210	15.89	0.562	0.000636	4.35	0.442	0.000174
14	Scallop Trawl	OPEN	GEN	MA	all	5.67	0.650	0.016118	0.02	0.351	0.000049	0.91	0.173	0.002586
17+	Twin Trawl	OPEN	all	MA	all	1.40	0.432	0.002298	23.65	0.287	0.038791	1.08	2.369	0.001773
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.09	0.395	0.000450	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.05	0.179	0.000402	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1.11	0.499	0.000630	0.02	0.879	0.000010	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.20	0.357	0.000108	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.89	1.501	0.000326	0.17	0.753	0.000061	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	12.11	0.477	0.003793	0.14	0.811	0.000043	0.01	0.894	0.000004
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.02	0.418	0.000005	0.15	0.244	0.000032	0.01	0.294	0.000003
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	37.77	0.202	0.004630	0.03	0.492	0.000004	0.01	0.548	0.000001
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	1.73	0.310	0.001764	0.06	0.409	0.000063
41	Scallop Dredge	AA	LIM	MA	all	2.20	0.908	0.000201	3.79	0.192	0.000348	1.98	0.414	0.000181
42	Scallop Dredge	AA	LIM	NE	all	10.59	0.280	0.000746	0.09	0.712	0.000007	10.15	0.310	0.000715
43	Scallop Dredge	OPEN	GEN	MA	all	17.99	0.168	0.004097	0.64	0.375	0.000146	3.12	0.341	0.000711
44	Scallop Dredge	OPEN	GEN	NE	all	3.00	0.352	0.000850	0.01	0.830	0.000003	3.08	0.291	0.000872
45	Scallop Dredge	OPEN	LIM	MA	all	270.70	0.105	0.004612	7.96	0.210	0.000136	33.90	0.433	0.000578
46	Scallop Dredge	OPEN	LIM	NE	all	71.87	0.307	0.002450	0.02	0.584	0.000001	13.43	0.361	0.000458
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	1.15	0.750	0.004971	0.14	0.574	0.000626	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.03	0.926	0.000028	0.01	0.926	0.000009
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.01	0.878	0.000010	0.04	0.526	0.000053	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.15	0.907	0.000011	0.19	1.086	0.000014	107.86	0.995	0.007689
					TOTAL	935.23	0.069		575.42	0.195		182.72	0.594	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						TILEFISH (*Lopholatilus chamaeleonticeps*)			GROUPERS, UNC (Serranidae)			HADDOCK (*Melanogrammus aeglefinus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	1.33	1.032	0.002444	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	3.24	0.671	0.001652	0.00		0.000000	0.22	4.593	0.000110
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.93	1.315	0.001071
8	Otter Trawl	OPEN	all	MA	sm	0.82	0.541	0.000034	0.00		0.000000	7.68	0.834	0.000322
9	Otter Trawl	OPEN	all	MA	lg	0.02	0.854	0.000003	0.00		0.000000	0.38	0.621	0.000059
10	Otter Trawl	OPEN	all	NE	sm	0.50	0.858	0.000026	0.00		0.000000	955.98	0.259	0.049704
11	Otter Trawl	OPEN	all	NE	lg	< 0.01	0.675	0.000000	0.00		0.000000	224.15	0.104	0.008965
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.25	0.412	0.000406	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	7.34	0.034	0.036405
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	5.31	0.067	0.042779
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	82.34	0.183	0.046815
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.02	0.865	0.000004	0.00		0.000000	4.65	0.062	0.000969
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.62	0.423	0.000076	0.00		0.000000	0.24	0.342	0.000030
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.956	0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	2.54	0.396	0.000179
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.01	0.542	0.000003
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.35	0.614	0.000100
45	Scallop Dredge	OPEN	LIM	MA	all	0.02	0.765	0.000000	0.00		0.000000	0.10	0.408	0.000002
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	3.78	0.294	0.000129
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	0.764	0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.04	1.336	0.000189	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.06	0.801	0.000069	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	1.15	0.536	0.000082
					TOTAL	6.88	0.387		0.04	1.336		1,297.16	0.192	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						HAMMERHEAD SHARK, UNC (Sphyrnidae)			HERRINGS, OTHER (ORDER: Clupeiformes)			HICKORY SHAD (*Alosa mediocris*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	8.60	0.433	0.004388	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	1.18	0.496	0.000050	33.47	0.292	0.001405	0.30	0.642	0.000013
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.07	1.053	0.000011	0.01	0.861	0.000002
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	21.00	0.769	0.001092	0.21	0.615	0.000011
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.71	0.497	0.000029	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.01	3.632	0.000011
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.06	0.902	0.000032	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.39	6.404	0.000208	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.45	0.690	0.000166	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.04	0.460	0.000009	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.01	0.748	0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	9.78	0.385		56.21	0.339		0.53	0.442	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						HORSESHOE CRAB (*Limulus polyphemus*)			JACK, UNC (Carangidae)			JONAH CRAB (*Cancer borealis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.35	0.640	0.000648
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	2.46	0.563	0.001257
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	92.53	0.260	0.003884	0.16	0.427	0.000007	14.27	0.322	0.000599
9	Otter Trawl	OPEN	all	MA	lg	177.36	0.266	0.027529	0.00		0.000000	63.29	0.184	0.009824
10	Otter Trawl	OPEN	all	NE	sm	3.92	0.306	0.000204	0.00		0.000000	6.84	0.333	0.000356
11	Otter Trawl	OPEN	all	NE	lg	7.31	0.260	0.000292	0.00		0.000000	710.11	0.081	0.028400
14	Scallop Trawl	OPEN	GEN	MA	all	0.14	0.617	0.000400	0.00		0.000000	0.01	0.636	0.000029
17+	Twin Trawl	OPEN	all	MA	all	0.10	2.584	0.000159	< 0.01	0.518	0.000004	0.03	3.489	0.000057
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.395	0.000002
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.610	0.000002
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	4.12	0.415	0.002345
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1.05	0.733	0.000559	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	1.34	0.553	0.000490	0.00		0.000000	0.10	0.518	0.000036
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	44.27	0.360	0.013869	0.00		0.000000	8.23	0.283	0.002579
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.02	0.556	0.000005	0.00		0.000000	22.56	0.086	0.004704
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.19	0.340	0.000023	0.00		0.000000	25.46	0.169	0.003121
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.15	0.732	0.000155	0.00		0.000000	0.19	0.833	0.000189
41	Scallop Dredge	AA	LIM	MA	all	0.83	0.308	0.000076	0.00		0.000000	9.26	0.428	0.000849
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	56.41	0.430	0.003973
43	Scallop Dredge	OPEN	GEN	MA	all	0.41	0.368	0.000092	0.00		0.000000	2.41	0.304	0.000548
44	Scallop Dredge	OPEN	GEN	NE	all	0.23	0.477	0.000064	0.00		0.000000	23.21	0.179	0.006570
45	Scallop Dredge	OPEN	LIM	MA	all	8.64	0.197	0.000147	0.00		0.000000	37.57	0.290	0.000640
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	64.37	0.305	0.002195
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	108.86	0.437	0.472074
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.17	0.775	0.001982
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	74.86	0.509	0.091473
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	1,614.61	0.462	0.115098
					TOTAL	338.48	0.164		0.17	0.421		2,849.76	0.264	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						LITTLE TUNA (TUNNY) (*Euthynnus alletteratus*)			LONGFIN INSHORE SQUID (*Doryteuthis [Amerigo] pealeii*)			MACKEREL SCAD (*Decapterus macarellus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	106.18	0.669	0.004457	< 0.01	0.839	0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	8.55	0.271	0.001327	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	145.19	0.657	0.007549	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	11.10	0.260	0.000444	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.15	0.610	0.000425	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	8.42	0.479	0.013803	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.02	0.329	0.000082	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	< 0.01	0.362	0.000015	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	3.14	0.602	0.001787	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.24	0.891	0.000074	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.55	0.594	0.000068	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	< 0.01	0.409	0.000004	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.58	0.363	0.000053	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.08	0.308	0.000006	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.30	0.357	0.000068	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.05	0.391	0.000015	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	2.87	0.221	0.000049	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.20	0.549	0.000007	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.15	0.764	0.000003	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.07	0.861	0.000005	0.00		0.000000
					TOTAL	0.79	0.494		287.06	0.415		< 0.01	0.839	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						MACKERELS, OTHER (FAMILY: Scombridae)			MENHADEN, UNC (*Brevoortia*)			MONKFISH (GOOSEFISH) (*Lophius americanus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.18	0.667	0.000331
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.20	0.740	0.000100
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	26.69	0.242	0.001120	2.55	0.695	0.000107	35.05	0.385	0.001471
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.03	0.699	0.000004	82.04	0.197	0.012734
10	Otter Trawl	OPEN	all	NE	sm	< 0.01	0.562	0.000000	0.66	0.423	0.000034	29.43	0.484	0.001530
11	Otter Trawl	OPEN	all	NE	lg	0.03	0.706	0.000001	0.01	0.793	0.000000	445.88	0.075	0.017832
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	9.10	0.254	0.025846
17+	Twin Trawl	OPEN	all	MA	all	10.02	0.518	0.016426	0.01	3.632	0.000016	1.78	0.605	0.002927
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.04	0.290	0.000187
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.241	0.000020
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	1.46	0.323	0.000832
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	59.51	1.842	0.031521	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	9.25	1.637	0.003390	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.33	0.862	0.000103	73.20	0.394	0.022934
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.02	0.974	0.000004	5.49	0.060	0.001145
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.01	1.040	0.000001	93.62	0.139	0.011476
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.94	0.262	0.000958
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	22.65	0.194	0.002076
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	175.31	0.177	0.012348
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	34.52	0.165	0.007863
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	28.57	0.248	0.008087
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	768.78	0.082	0.013097
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	627.27	0.244	0.021388
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	< 0.01	0.748	0.000000	0.01	1.242	0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.09	0.774	0.000115
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	1.20	0.635	0.000086
					TOTAL	36.74	0.226		72.37	1.529		2,436.83	0.072	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						NIGHT SHARK (*Carcharhinus signatus*)			NORTHERN SHORTFIN SQUID (*Illex illecebrosus*)			OCEAN POUT (*Zoarces americanus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	1.62	1.741	0.002971	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.01	6.448	0.000006
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	3.43	0.484	0.000144	190.24	0.868	0.007986	15.67	0.960	0.000658
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.25	0.610	0.000038	7.74	0.789	0.001202
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	192.06	1.119	0.009986	1.10	0.856	0.000057
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	13.04	0.166	0.000522	30.48	0.147	0.001219
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.14	0.982	0.000408
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	16.67	0.297	0.027343	0.10	2.810	0.000159
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.06	0.741	0.000278	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	< 0.01	0.351	0.000008	0.05	0.186	0.000428
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.88	0.336	0.000498	0.48	0.302	0.000273
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	< 0.01	1.257	0.000001
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	< 0.01	0.629	0.000000	0.02	0.405	0.000005
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	< 0.01	0.644	0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.06	0.341	0.000004	0.16	0.457	0.000011
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.01	1.056	0.000002	0.07	0.616	0.000016
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.02	0.782	0.000006	0.01	0.742	0.000002
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.02	0.449	0.000000	0.17	0.284	0.000003
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.11	0.554	0.000004	0.45	0.274	0.000015
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	< 0.01	1.242	0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.82	0.474	0.001005
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	8.77	0.811	0.000625
					TOTAL	5.05	0.648		413.42	0.655		66.25	0.277	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						OCEAN QUAHOG (*Arctica islandica*)			OFFSHORE HAKE (*Merluccius albidus*)			PANDALID SHRIMP (NORTHERN) (*Pandalus borealis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	3.15	0.785	0.000132	0.01	0.840	0.000000
9	Otter Trawl	OPEN	all	MA	lg	1.50	0.801	0.000232	0.25	0.855	0.000038	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.23	0.510	0.000012	0.38	0.564	0.000020	0.04	0.812	0.000002
11	Otter Trawl	OPEN	all	NE	lg	0.61	0.838	0.000025	0.28	0.588	0.000011	< 0.01	0.774	0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.26	1.205	0.000738	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	< 0.01	0.513	0.000002	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	< 0.01	0.973	0.000000	< 0.01	0.868	0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.01	0.937	0.000001	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.03	0.817	0.000002	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.02	1.061	0.000005	0.03	1.055	0.000006	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.02	0.847	0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	2.65	0.508		4.11	0.608		0.05	0.675	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						PELAGIC SHARKS, UNC (Lamniformes)			PELAGIC SPECIES, OTHER			PENAEID SHRIMP (SOUTHERN), UNC (*Penaeus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	9.72	0.306	0.000408	0.01	0.582	0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.02	0.704	0.000003	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	2.76	0.846	0.000144	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.06	0.271	0.000003	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	< 0.01	3.632	0.000005	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	3.41	0.641	0.001805	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.18	2.011	0.000067	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.46	0.865	0.000097	0.12	0.265	0.000025	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.01	0.627	0.000001	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.02	0.634	0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.46	0.865		16.31	0.269		0.01	0.582	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						PERCIFORMES, OTHER (DEMERSAL) (ORDER: Perciformes)			PERCIFORMES, OTHER (PELAGIC) (ORDER: Perciformes)			PIGFISH (*Orthopristis chrysoptera*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	2.75	1.126	0.000115	0.07	1.080	0.000003	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.36	0.793	0.000057	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.86	0.509	0.000045	0.03	0.725	0.000001	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.81	0.260	0.000032	0.01	1.099	0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	< 0.01	0.518	0.000001	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.02	0.899	0.000013	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.59	0.689	0.000311	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.04	0.754	0.000014	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.77	0.715	0.000242	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.13	0.264	0.000027	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	< 0.01	0.963	0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	< 0.01	1.100	0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.15	0.816	0.000042	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.36	0.490	0.000006	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.02	0.777	0.000001	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.18	0.655	0.000759	0.00		0.000000	0.06	0.655	0.000257
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.76	0.662	0.000054	0.28	0.861	0.000020	0.00		0.000000
					TOTAL	7.21	0.450		0.97	0.494		0.06	0.655	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						PILOTFISH (*Naucrates ductor*)			PINFISH (*Lagodon rhomboides*)			PIPEFISHES (DEMERSAL) (ORDER: Gasterosteiformes)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	< 0.01	0.575	0.000000	0.00		0.000000	0.12	0.648	0.000005
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.02	0.877	0.000004	0.02	0.855	0.000004
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.18	0.562	0.000010
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	< 0.01	0.675	0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.01	0.616	0.000002	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.01	0.546		0.02	0.877		0.32	0.400	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						PIPEFISHES (PELAGIC) (ORDER: Gasterosteiformes)			POLLOCK (*Pollachius virens*)			PORBEAGLE SHARK (*Lamna nasus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	< 0.01	14.953	0.000002	1.38	14.947	0.000706
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	6.05	1.002	0.006966	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	< 0.01	0.569	0.000000	0.08	1.675	0.000003	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	< 0.01	0.875	0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	2.89	1.126	0.000150	6.01	0.421	0.000313
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	36.65	0.121	0.001466	46.94	0.249	0.001877
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.03	0.308	0.000159	2.83	0.283	0.014028
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.01	0.157	0.000072	0.40	0.234	0.003228
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	3.64	0.356	0.002072	2.02	0.367	0.001148
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	< 0.01	0.754	0.000001	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	51.49	0.066	0.010735	39.95	0.138	0.008328
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	1.42	0.202	0.000175	4.73	0.343	0.000579
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	< 0.01	0.571	0.000001	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	< 0.01	0.836	0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.01	0.712	0.000000	< 0.01	0.768	0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.02	0.338	0.000004	0.83	0.279	0.000137
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.06	0.738	0.000001	2.63	0.688	0.000048
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.04	1.104	0.000003	0.00		0.000000
					TOTAL	0.02	0.391		102.40	0.088		107.72	0.229	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						PORGY, UNC (Sparidae)			QUAHOG (HARD SHELL CLAM) (*Mercenaria mercenaria*)			RAY-FINNED FISHES, OTHER (DEMERSAL) (CLASS: Actinopterygii)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.11	0.484	0.000058
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	2.01	1.169	0.009176
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	< 0.01	0.661	0.000000	0.00		0.000000	19.80	0.232	0.000831
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.25	0.691	0.000038
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	< 0.01	1.003	0.000000	2.25	0.668	0.000117
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.41	0.625	0.000016	0.09	0.665	0.000004
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.02	0.388	0.000035
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.395	0.000003
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.02	0.880	0.000012
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.36	1.289	0.000191
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	2.66	0.493	0.000975
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.19	0.674	0.000039
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.36	0.749	0.000044
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.01	0.409	0.000009
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.02	0.650	0.000002
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.04	0.761	0.000003
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.01	1.056	0.000002
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.05	0.504	0.000001
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.01	0.843	0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.46	0.926	0.000463
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.99	0.560	0.001213
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	2.53	0.454	0.000181
					TOTAL	< 0.01	0.661		0.41	0.619		32.24	0.178	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						RAY-FINNED FISHES, OTHER (PELAGIC) (CLASS: Actinopterygii)			RAYS, OTHER (DEMERSAL) (ORDER: Myliobatiformes)			RED DEEPSEA CRAB (*Chaceon quinquedens*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	28.35	0.280	0.001190	0.04	1.536	0.000001
9	Otter Trawl	OPEN	all	MA	lg	0.01	0.855	0.000001	19.93	0.379	0.003093	2.01	0.562	0.000313
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.10	1.294	0.000005	0.05	0.531	0.000003
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.04	0.772	0.000002	19.32	0.390	0.000772
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.395	0.000002
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.04	0.523	0.000022
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.78	1.700	0.000411	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.26	2.202	0.000095	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.41	0.893	0.000129	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.02	0.862	0.000003	0.00		0.000000	0.04	0.272	0.000008
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.01	0.843	0.000001	0.02	0.648	0.000002
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.06	1.059	0.000015	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.01	1.006	0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.21	0.594	0.000015
					TOTAL	0.03	0.639		49.94	0.221		21.73	0.351	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						RED DRUM (*Sciaenops ocellatus*)			RED HAKE (*Urophycis chuss*)			ROUGH SCAD (*Trachurus lathami*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.16	3.336	0.000079	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.01	2.322	0.000000	170.13	0.316	0.007142	0.81	0.415	0.000034
9	Otter Trawl	OPEN	all	MA	lg	0.04	0.875	0.000005	9.88	0.499	0.001534	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	476.18	0.258	0.024758	0.03	0.450	0.000002
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	98.72	0.105	0.003948	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.10	0.992	0.000298	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	1.20	0.448	0.001975	2.49	0.518	0.004088
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.75	0.295	0.003695	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.33	0.199	0.002670	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	3.97	0.301	0.002255	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	1.77	0.083	0.000369	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.03	0.392	0.000003	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.04	0.409	0.000042	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.15	0.475	0.000014	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	32.40	0.145	0.002282	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.76	0.504	0.000173	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	1.74	0.358	0.000491	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	8.49	0.248	0.000145	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	20.60	0.230	0.000702	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	< 0.01	1.242	0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	1.30	0.601	0.001593	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	16.30	0.806	0.001162	0.00		0.000000
					TOTAL	0.04	0.836		845.00	0.160		3.33	0.400	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SAND TIGER SHARK (*Carcharias taurus*)			SANDBAR SHARK (*Carcharhinus plumbeus*)			SCALLOPED HAMMERHEAD SHARK (*Sphyrna lewini*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	67.60	0.404	0.034505	24.56	0.676	0.012538
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	2.01	0.959	0.000084	16.27	0.342	0.000683	13.31	0.291	0.000559
9	Otter Trawl	OPEN	all	MA	lg	0.15	0.875	0.000023	0.43	0.628	0.000067	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	1.11	0.598	0.000058	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.30	0.599	0.000012	0.46	0.670	0.000018	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.35	0.518	0.000582
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1.22	6.806	0.000648	17.30	3.558	0.009166	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	4.19	2.202	0.001536	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	53.06	0.448	0.016624	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.08	0.972	0.000017	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.65	0.754	0.000080	4.70	0.442	0.000576	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	5.52	1.557		164.02	0.440		38.23	0.446	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SCORPIONFISHES, OTHER (ORDER: Scorpaeniformes)			SCUP (*Stenotomus chrysops*)			SEA BASS, UNC (*Centropristis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.08	4.390	0.000043	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.58	1.169	0.002622	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.15	0.893	0.000169	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	404.01	0.439	0.016959	200.85	0.435	0.008431	0.04	1.576	0.000002
9	Otter Trawl	OPEN	all	MA	lg	814.67	0.331	0.126453	113.42	0.322	0.017605	0.01	0.854	0.000001
10	Otter Trawl	OPEN	all	NE	sm	151.12	0.328	0.007857	207.29	0.227	0.010778	0.13	0.552	0.000007
11	Otter Trawl	OPEN	all	NE	lg	356.29	0.218	0.014249	18.60	0.204	0.000744	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.91	0.343	0.002580	0.24	0.873	0.000684	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	2.51	0.364	0.004120	0.80	0.356	0.001318	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.01	0.520	0.000067	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.06	0.111	0.000482	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	15.27	0.263	0.008681	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	2.74	1.639	0.001449	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.34	0.573	0.000126	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.05	0.591	0.000016	0.07	0.820	0.000021	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	16.33	0.064	0.003405	0.02	0.780	0.000003	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	2.22	0.116	0.000272	0.01	0.524	0.000002	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.02	0.411	0.000002	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	9.40	0.226	0.000662	0.04	0.697	0.000003	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	2.92	0.224	0.000666	0.16	0.536	0.000037	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	2.94	0.166	0.000833	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	23.43	0.186	0.000399	0.55	0.296	0.000009	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	14.95	0.181	0.000510	0.02	1.042	0.000001	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.02	0.655	0.000000	1.45	0.764	0.000027	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	5.20	1.420	0.022549	1.37	0.918	0.005935	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	3.40	0.427	0.039314	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.64	0.465	0.000779	0.00		0.000000	0.01	0.774	0.000013
57	Pots and Traps, Lobster	OPEN	all	NE	all	134.23	0.776	0.009569	1.21	1.044	0.000086	0.04	0.879	0.000003
					TOTAL	1,961.11	0.179		549.50	0.193		0.22	0.448	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SEA SCALLOP (*Placopecten magellanicus*)			SHARK, UNC (Chondrichthyes)			SHORTFIN MAKO SHARK (*Isurus oxyrinchus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	30.09	0.411	0.015359	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	287.51	1.356	1.310880	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	55.50	0.293	0.002330	7.83	0.787	0.000329	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	57.11	0.295	0.008865	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.29	0.417	0.000015	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	13.59	0.284	0.000544	0.01	0.675	0.000001	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	12.71	0.374	0.036117	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	6.94	2.408	0.011389	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	< 0.01	1.026	0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	9.17	4.482	0.004859	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.20	0.489	0.000062	42.80	0.824	0.013408	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.82	0.534	0.000171	2.01	0.334	0.000420	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.15	0.296	0.000018	4.22	0.403	0.000517	0.86	0.487	0.000105
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	12.24	0.651	0.012462	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	156.67	0.315	0.014361	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	1,062.75	0.176	0.074859	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	33.63	0.325	0.007659	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	121.82	0.285	0.034489	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	343.83	0.218	0.005858	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	688.03	0.258	0.023459	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	1.05	0.244	0.000173	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	1.75	0.957	0.000032	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	2,566.28	0.108		386.45	1.019		0.86	0.487	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SILKY SHARK (*Carcharhinus falciformis*)			SILVER HAKE (*Merluccius bilinearis*)			SKATE COMPLEX (FAMILY: Rajidae)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.03	1.741	0.000050	1.34	0.667	0.002457
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.02	0.863	0.000013	10.72	1.418	0.005472
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.44	0.614	0.000018	205.66	0.401	0.008633	1,362.52	0.183	0.057195
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	34.13	0.379	0.005297	7,320.39	0.100	1.136268
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	752.85	0.249	0.039143	715.27	0.163	0.037189
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	265.35	0.078	0.010612	12,559.45	0.081	0.502291
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.46	0.703	0.001314	275.63	0.253	0.783272
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	9.10	0.373	0.014921	405.84	1.067	0.665574
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	11.65	0.269	0.057734	5.96	0.183	0.029527
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	1.53	0.184	0.012323	5.36	0.088	0.043190
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	10.44	0.193	0.005936	292.28	0.232	0.166184
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.14	1.697	0.000074	0.00		0.000000	1.57	2.173	0.000834
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	40.06	0.718	0.014687
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.10	0.605	0.000032	353.85	0.136	0.110858
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	9.33	0.132	0.001944	54.27	0.056	0.011314
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.58	0.235	0.000071	1,001.09	0.100	0.122717
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.01	1.048	0.000011	0.60	0.323	0.000613
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.11	0.280	0.000010	89.48	0.488	0.008202
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	8.44	0.318	0.000594	1,523.67	0.133	0.107325
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.79	0.324	0.000179	856.76	0.122	0.195141
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.85	0.279	0.000242	241.25	0.171	0.068299
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	7.85	0.142	0.000134	7,701.72	0.066	0.131211
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	8.05	0.305	0.000274	2,459.60	0.179	0.083864
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	< 0.01	0.341	0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.03	0.650	0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.15	0.474	0.000180
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.83	1.047	0.000059
					TOTAL	0.58	0.621		1,327.35	0.155		37,279.68	0.041	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SKIPJACK TUNA (*Katsuwonus pelamis*)			SMOOTH DOGFISH (*Mustelus canis*)			SMOOTH HAMMERHEAD SHARK (*Sphyrna zygaena*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	16.74	0.667	0.030681	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.25	0.451	0.000127	46.33	1.741	0.023648	5.53	0.676	0.002821
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	138.85	0.352	0.005829	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	63.28	0.253	0.009822	0.20	0.876	0.000030
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	50.45	0.253	0.002623	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	22.52	0.284	0.000901	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	1.63	0.484	0.004623	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	3.55	2.029	0.005823	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.16	0.905	0.000088	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	122.59	6.629	0.064936	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	2.95	0.541	0.001080	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	5.73	0.604	0.001795	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.09	0.561	0.000018	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	1.21	0.571	0.000149	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.06	1.014	0.000014	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.37	0.411	0.000006	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	2.27	1.008	0.000161	0.00		0.000000
					TOTAL	0.25	0.451		478.77	1.710		5.72	0.653	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SNOWY GROUPER (*Epinephelus niveatus*)			SOFT CORAL, UNC (Alcyonacea)			SPADEFISHES, UNC (Ephippidae)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	< 0.01	1.003	0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.01	0.660	0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.04	0.561	0.000019
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.02	0.902	0.000006	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.03	1.336	0.000126
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	< 0.01	1.229	0.000015	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	< 0.01	1.229		0.03	0.603		0.06	0.676	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SPANISH MACKEREL (*Scomberomorus maculatus*)			SPINNER SHARK (*Carcharhinus brevipinna*)			SPINY DOGFISH (*Squalus acanthias*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.03	1.741	0.000050
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	6.63	0.966	0.003382
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.77	1.534	0.000885
8	Otter Trawl	OPEN	all	MA	sm	0.02	0.659	0.000001	0.00		0.000000	1,075.72	0.272	0.045156
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	1,939.26	0.244	0.301011
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	687.34	0.198	0.035737
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	2,103.68	0.080	0.084133
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	53.02	0.691	0.150676
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	47.30	1.287	0.077573
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	74.49	0.198	0.369226
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	26.99	0.083	0.217338
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	149.12	0.307	0.084784
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.09	0.569	0.000047	5.10	6.022	0.002701	2.73	6.630	0.001445
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.65	2.724	0.000239	53.95	0.358	0.019777
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	36.86	0.211	0.011548
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	1,547.21	0.085	0.322550
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	77.91	0.131	0.009550
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	4.57	0.455	0.000168
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.55	0.765	0.000050
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	3.90	0.320	0.000274
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	5.48	0.225	0.001247
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	4.72	0.459	0.001337
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	71.35	0.144	0.001216
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	12.14	0.375	0.000414
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.48	0.314	0.000078
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	134.80	0.757	0.002481
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.27	0.878	0.000329
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	6.85	0.573	0.000488
					TOTAL	0.11	0.474		5.75	5.348		8,128.09	0.077	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SPOT (*Leiostomus xanthurus*)			SQUIDS, UNC (Loliginidae)			STINGRAYS, OTHER (DEMERSAL) (FAMILY: Dasyatidae)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.20	1.813	0.000371
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	5.01	2.127	0.000210	< 0.01	0.614	0.000000	42.63	0.287	0.001789
9	Otter Trawl	OPEN	all	MA	lg	0.52	0.748	0.000081	0.10	0.613	0.000016	23.07	0.466	0.003582
10	Otter Trawl	OPEN	all	NE	sm	0.03	0.543	0.000001	3.18	0.860	0.000165	2.37	0.696	0.000123
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.04	0.643	0.000002	8.01	0.548	0.000320
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.76	1.194	0.002162
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.04	0.518	0.000060	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	7.39	0.550	0.003917	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	3.05	1.310	0.000956
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.46	0.897	0.000057
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	12.95	0.881		3.37	0.812		80.56	0.217	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						STINGRAYS, OTHER (PELAGIC) (FAMILY: Dasyatidae)			STRIPED BASS (*Morone saxatilis*)			ATLANTIC SURFCLAM (*Spisula solidissima*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	20.13	0.702	0.091762	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.04	0.795	0.000002	9.10	0.744	0.000382	< 0.01	0.659	0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	3.83	0.363	0.000595	0.93	0.421	0.000144
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	16.86	0.393	0.000877	0.05	1.003	0.000002
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	3.65	0.458	0.000146	0.93	0.344	0.000037
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.03	1.073	0.000092
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.16	1.680	0.000082	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	20.58	0.496	0.007545	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.20	0.733	0.000061	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.30	0.507	0.000062	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.37	0.477	0.000045	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.60	0.585	0.000171
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.56	1.024	0.000019
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.74	1.414	0.008521	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.04	0.795		75.90	0.263		3.11	0.272	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						SWORDFISH (*Xiphias gladius*)			TAUTOG (*Tautoga onitis*)			TETRAODONTIFORMES, OTHER (DEMERSAL) (ORDER: Tetraodontiformes)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	3.69	0.678	0.016829	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	3.57	0.364	0.000150	0.33	0.582	0.000014	0.95	0.685	0.000040
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.82	0.605	0.000128	0.32	0.396	0.000050
10	Otter Trawl	OPEN	all	NE	sm	0.54	0.397	0.000028	5.16	0.384	0.000268	0.27	0.472	0.000014
11	Otter Trawl	OPEN	all	NE	lg	0.04	1.102	0.000001	0.34	0.428	0.000014	< 0.01	0.682	0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	1.29	0.411	0.002118	0.00		0.000000	0.01	0.518	0.000014
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.395	0.000018
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.08	1.680	0.000041
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.15	2.196	0.000056	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.06	0.898	0.000020	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.04	0.770	0.000008	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.04	0.733	0.000005	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	1.283	0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.12	0.472	0.000002
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	1.042	0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	8.87	0.994	0.038476	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	2.88	0.775	0.033290	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.06	1.231	0.000177	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.15	0.496	0.000188	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.36	1.102	0.000025	0.00		0.000000
					TOTAL	5.45	0.261		22.96	0.421		1.76	0.392	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						TETRAODONTIFORMES, OTHER (PELAGIC) (ORDER: Tetraodontiformes)			THRESHER SHARK (*Alopias vulpinus*)			TIGER SHARK (*Galeocerdo cuvier*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	4.91	0.724	0.002508	0.00		0.000000	85.01	0.489	0.043394
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	7.56	0.312	0.000318	3.91	0.506	0.000164	4.13	0.354	0.000173
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	5.26	0.944	0.000273	0.19	1.002	0.000010	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.07	1.101	0.000003	0.22	1.101	0.000009	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	2.59	0.480	0.004242	0.00		0.000000	0.19	0.518	0.000310
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	3.31	0.656	0.001881	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.83	2.217	0.000304	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.29	1.258	0.000092	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	2.53	0.420	0.000527	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	1.85	0.896	0.000226
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.32	0.214	0.000052	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	20.40	0.327		11.60	0.315		91.18	0.457	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						TILEFISH, UNC (Malacanthidae)			TRIGGERFISHES, UNC (Balistidae)			TUNA, UNC (*Thunnus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	< 0.01	2.332	0.000000	0.05	0.431	0.000002	< 0.01	0.481	0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	1.20	0.617	0.000187	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.03	0.367	0.000002	0.01	1.002	0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.01	0.610	0.000001	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.03	1.247	0.000008
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.31	0.649	0.000038
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	4.93	0.621	0.000181
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	< 0.01	0.942	0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	1.05	1.150	0.004553	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.19	0.926	0.000194	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.07	0.878	0.000082	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.68	0.807	0.000048	0.00		0.000000
					TOTAL	< 0.01	2.332		3.28	0.466		5.28	0.582	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						WEAKFISH (*Cynoscion regalis*)			WHELKS, OTHER (FAMILY: Melongenidae)			WHITE HAKE (*Urophycis tenuis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.01	14.947	0.000003
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	5.54	1.441	0.000233	0.11	0.351	0.000004	4.14	0.832	0.000174
9	Otter Trawl	OPEN	all	MA	lg	1.38	1.048	0.000215	1.81	0.421	0.000281	0.06	0.587	0.000009
10	Otter Trawl	OPEN	all	NE	sm	5.49	0.317	0.000286	0.24	0.453	0.000012	6.87	0.393	0.000357
11	Otter Trawl	OPEN	all	NE	lg	0.04	0.457	0.000002	3.90	0.349	0.000156	5.75	0.292	0.000230
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	0.362	0.000022
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.08	0.523	0.000045
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.14	0.561	0.000075	0.20	0.388	0.000108	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.10	0.754	0.000036	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	< 0.01	1.256	0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	< 0.01	0.585	0.000001	12.20	0.117	0.002542
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	< 0.01	0.963	0.000000	0.00		0.000000	0.26	0.367	0.000032
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.33	0.937	0.000030	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	2.44	0.819	0.000172	0.48	0.449	0.000034
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.35	0.988	0.000080	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.88	0.519	0.000249	0.01	1.285	0.000001
45	Scallop Dredge	OPEN	LIM	MA	all	0.01	0.993	0.000000	9.38	0.368	0.000160	0.25	0.462	0.000004
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.47	0.560	0.000016	0.38	0.654	0.000013
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	< 0.01	0.764	0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.10	1.751	0.000420	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	101.50	0.292	0.102436	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	155.17	0.209	0.463234	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	2.83	0.763	0.003454
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	38.09	0.893	0.002715
					TOTAL	12.62	0.658		276.97	0.159		71.39	0.483	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						WHITE SHARK (*Carcharodon carcharias*)			WINDOWPANE (*Scophthalmus aquosus*)			WINTER FLOUNDER (*Pseudopleuronectes americanus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.39	0.658	0.000016	40.00	0.282	0.001679	16.22	0.317	0.000681
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	139.98	0.127	0.021728	11.80	0.287	0.001831
10	Otter Trawl	OPEN	all	NE	sm	1.32	1.244	0.000068	25.84	0.295	0.001343	43.95	0.173	0.002285
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	200.41	0.086	0.008015	21.84	0.171	0.000873
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	3.42	0.301	0.009722	2.09	0.432	0.005947
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	1.93	1.142	0.003159	0.11	2.627	0.000176
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	0.00		0.000000	0.06	0.770	0.000282	0.00		0.000000
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	0.00		0.000000	0.09	0.167	0.000691	0.01	0.151	0.000060
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	5.50	0.362	0.003127	0.74	0.400	0.000421
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.07	1.061	0.000035	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.23	0.658	0.000086	0.01	0.754	0.000002
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	< 0.01	1.258	0.000001	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.69	0.178	0.000144	0.46	0.131	0.000096
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.96	1.040	0.000118	0.07	0.210	0.000009	0.20	0.666	0.000025
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.01	1.048	0.000009	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	2.09	0.626	0.000191	< 0.01	0.963	0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	68.15	0.259	0.004801	22.06	0.301	0.001554
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	19.91	0.201	0.004536	1.09	0.307	0.000248
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	7.09	0.289	0.002008	5.05	0.172	0.001430
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	86.27	0.130	0.001470	16.41	0.316	0.000280
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	66.85	0.205	0.002279	66.46	0.188	0.002266
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	2.44	0.811	0.000174	0.15	0.907	0.000011
					TOTAL	2.67	0.725		671.10	0.057		208.65	0.088	

See text for fleet abbreviations.

Table 4A, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2014.

						WITCH FLOUNDER (*Glyptocephalus cynoglossus*)			YELLOWTAIL FLOUNDER (*Limanda ferruginea*)			All Species Combined		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	25.97	0.613	0.047593
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	357.18	0.358	0.182321
3	Hand Line	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	314.77	1.239	1.435202
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	34.33	0.713	0.039500
8	Otter Trawl	OPEN	all	MA	sm	15.69	0.463	0.000659	4.66	0.473	0.000196	6,028.62	0.169	0.253066
9	Otter Trawl	OPEN	all	MA	lg	13.92	0.302	0.002161	5.52	0.366	0.000856	11,764.55	0.093	1.826087
10	Otter Trawl	OPEN	all	NE	sm	14.30	0.942	0.000744	16.44	0.397	0.000855	6,128.41	0.128	0.318634
11	Otter Trawl	OPEN	all	NE	lg	36.17	0.077	0.001446	30.66	0.119	0.001226	19,136.18	0.060	0.765315
14	Scallop Trawl	OPEN	GEN	MA	all	0.09	0.928	0.000257	1.41	0.388	0.003996	381.79	0.252	1.084946
17+	Twin Trawl	OPEN	all	MA	all	0.09	0.534	0.000151	0.30	0.599	0.000491	648.81	0.668	1.064041
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	< 0.01	0.266	0.000010	0.09	0.201	0.000457	103.95	0.182	0.515300
23	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	< 0.01	0.150	0.000004	0.10	0.119	0.000808	40.74	0.071	0.328014
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1.31	0.450	0.000746	0.80	0.300	0.000454	613.89	0.169	0.349041
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	269.30	3.437	0.142645
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	156.20	0.265	0.057259
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	777.16	0.158	0.243476
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.14	0.136	0.000030	1.22	0.126	0.000254	2,188.56	0.081	0.456255
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	< 0.01	0.899	0.000000	0.09	0.330	0.000011	1,372.74	0.080	0.168275
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	19.28	0.267	0.000708
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	28.29	0.269	0.028801
41	Scallop Dredge	AA	LIM	MA	all	0.03	0.954	0.000003	0.03	1.210	0.000003	432.79	0.185	0.039672
42	Scallop Dredge	AA	LIM	NE	all	4.13	0.481	0.000291	38.86	0.155	0.002738	3,967.43	0.088	0.279459
43	Scallop Dredge	OPEN	GEN	MA	all	0.40	0.489	0.000091	4.37	0.248	0.000996	2,453.90	0.115	0.558914
44	Scallop Dredge	OPEN	GEN	NE	all	2.00	0.592	0.000566	8.42	0.150	0.002384	822.93	0.114	0.232975
45	Scallop Dredge	OPEN	LIM	MA	all	5.45	0.153	0.000093	57.16	0.142	0.000974	23,228.84	0.054	0.395740
46	Scallop Dredge	OPEN	LIM	NE	all	14.80	0.337	0.000504	46.03	0.234	0.001569	5,414.40	0.129	0.184613
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	54.87	0.287	0.009025
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	455.82	0.840	0.008390
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	215.84	0.444	0.935997
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	37.18	0.330	0.429298
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	149.98	0.968	0.151364
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	193.19	0.177	0.576737
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	321.48	0.403	0.392822
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.04	0.907	0.000003	13,216.71	0.178	0.942161
					TOTAL	108.53	0.157		216.21	0.078		101,356.08	0.036	

See text for fleet abbreviations.

Table 4B. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						ACADIAN REDFISH (*Sebastes fasciatus*)			AFRICAN POMPANO (*Alectis ciliaris*)			ALEWIFE (*Alosa pseudoharengus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.02	0.650	0.000019	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.24	0.750	0.000016	< 0.01	1.072	0.000000	36.24	0.395	0.002404
9	Otter Trawl	OPEN	all	MA	lg	0.28	0.888	0.000041	0.00		0.000000	0.22	0.491	0.000032
10	Otter Trawl	OPEN	all	NE	sm	14.14	0.729	0.000596	0.00		0.000000	44.67	0.426	0.001882
11	Otter Trawl	OPEN	all	NE	lg	94.65	0.192	0.004008	0.00		0.000000	1.54	0.197	0.000065
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	1.05	0.482	0.001154
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.01	0.429	0.000087
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	9.62	0.493	0.003476	0.00		0.000000	0.12	0.442	0.000042
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	2.16	0.208	0.000680	0.00		0.000000	< 0.01	0.714	0.000002
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	1.130	0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	< 0.01	1.025	0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.858	0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.01	0.935	0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.02	0.306	0.000021	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.03	1.102	0.000001
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.07	0.646	0.000077	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.86	0.881	0.000065	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	122.07	0.176		< 0.01	1.072		83.89	0.284	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						AMBERJACK, UNC (*Seriola*)			AMERICAN EEL (*Anguilla rostrata*)			AMERICAN LOBSTER (*Homarus americanus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.02	1.411	0.000037
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.01	0.584	0.000001	0.00		0.000000	10.03	0.683	0.000666
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	3.56	0.273	0.000529
10	Otter Trawl	OPEN	all	NE	sm	0.01	1.302	0.000001	0.00		0.000000	38.24	0.224	0.001611
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	462.42	0.078	0.019584
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	< 0.01	0.919	0.000001	0.22	0.724	0.000247
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.10	1.015	0.000695
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	29.69	0.266	0.010723
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.04	0.439	0.000020	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.11	0.458	0.000049
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	1.68	0.353	0.000571
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	98.38	0.116	0.030984
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	81.09	0.138	0.010213
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.07	1.042	0.000016
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.37	0.504	0.000006
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.09	0.325	0.000072
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.11	0.472	0.000035
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	4.08	0.248	0.001518
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.71	0.271	0.000041
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	12.50	0.213	0.000302
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.03	1.045	0.000154	0.00		0.000000	1.06	0.566	0.006375
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.30	0.754	0.002710
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	< 0.01	0.791	0.000005	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.15	0.635	0.000400
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	282.99	0.926	0.324156
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	6,360.66	0.171	0.478287
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	2.20	0.950	0.000016
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	3.37	0.698	0.000055
					TOTAL	0.09	0.409		0.01	0.671		7,394.23	0.151	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						AMERICAN PLAICE (*Hippoglossoides platessoides*)			AMERICAN SHAD (*Alosa sapidissima*)			ATLANTIC ANGEL SHARK (*Squatina dumeril*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.02	0.665	0.000001	15.96	0.399	0.001059	5.78	0.512	0.000383
9	Otter Trawl	OPEN	all	MA	lg	1.07	0.537	0.000159	1.38	0.521	0.000205	9.26	0.392	0.001376
10	Otter Trawl	OPEN	all	NE	sm	6.53	0.232	0.000275	21.64	0.202	0.000912	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	68.20	0.084	0.002888	6.00	0.159	0.000254	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.35	0.300	0.000384	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.01	0.846	0.000087	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	4.93	0.278	0.001782	0.79	0.376	0.000285	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	< 0.01	0.620	0.000001	0.14	0.693	0.000074	2.27	0.858	0.001234
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.05	0.620	0.000022	1.68	0.698	0.000742
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	3.66	0.383	0.001242
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1.20	0.204	0.000378	2.12	0.134	0.000668	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.25	0.813	0.000031	0.15	0.412	0.000019	0.08	1.158	0.000010
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.17	0.467	0.000003
42	Scallop Dredge	AA	LIM	NE	all	0.92	0.536	0.000756	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.05	0.701	0.000017	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.48	0.385	0.000179	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.01	0.680	0.000001	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	10.68	0.288	0.000258	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.01	0.621	0.000001	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	2.41	0.963	0.000017
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.03	1.276	0.000001	0.00		0.000000	0.00		0.000000
					TOTAL	94.40	0.073		48.58	0.161		25.30	0.232	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						ATLANTIC BONITO (*Sarda sarda*)			ATLANTIC COD (*Gadus morhua*)			ATLANTIC CROAKER (*Micropogonias undulatus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	10.91	0.652	0.009385	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.03	1.071	0.000002	4.69	1.313	0.000311	21.69	1.046	0.001439
9	Otter Trawl	OPEN	all	MA	lg	0.05	1.315	0.000008	0.46	0.559	0.000069	8.13	0.663	0.001208
10	Otter Trawl	OPEN	all	NE	sm	0.10	0.831	0.000004	4.03	0.339	0.000170	0.42	0.641	0.000018
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	31.47	0.175	0.001333	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	< 0.01	0.919	0.000005	0.20	0.932	0.000216
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	1.46	0.403	0.009996	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	6.98	0.197	0.002523	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	2.95	0.691	0.001604
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.36	0.496	0.000157	< 0.01	0.863	0.000002
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.10	0.919	0.000033	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	11.96	0.230	0.003765	< 0.01	0.938	0.000001
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.07	0.925	0.000009	3.91	0.300	0.000492	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	1.023	0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.08	0.674	0.000064	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.01	0.853	0.000003	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.10	0.481	0.000036	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.11	0.445	0.000006	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	2.84	0.272	0.000069	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	2.84	0.619	0.017077	0.02	0.555	0.000095
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.88	0.594	0.001009	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	36.08	0.282	0.002713	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.25	0.519		119.25	0.130		33.41	0.701	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						ATLANTIC HAGFISH (*Myxine glutinosa*)			ATLANTIC HALIBUT (*Hippoglossus hippoglossus*)			ATLANTIC HERRING (*Clupea harengus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.12	2.160	0.000102
8	Otter Trawl	OPEN	all	MA	sm	0.60	0.620	0.000040	0.00		0.000000	30.15	0.599	0.002000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.66	0.416	0.000099
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	1.40	0.351	0.000059	95.41	0.340	0.004019
11	Otter Trawl	OPEN	all	NE	lg	0.04	0.577	0.000002	17.09	0.112	0.000724	5.54	0.158	0.000235
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.959	0.000002
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.05	0.698	0.000365
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.82	0.450	0.000296	1.08	0.288	0.000390
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.10	0.318	0.000030	2.29	0.198	0.000721	0.44	0.396	0.000139
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.01	0.455	0.000002	22.49	0.295	0.002832	< 0.01	0.955	0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	1.19	1.179	0.000052
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	0.313	0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	< 0.01	1.196	0.000002	0.05	0.857	0.000019	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.858	0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.01	0.661	0.000000	0.79	0.829	0.000019	0.02	0.457	0.000001
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.07	0.300	0.000089
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	1.56	0.688	0.000031
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.02	0.881	0.000001	0.01	0.628	0.000001
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.77	0.489		44.94	0.155		136.31	0.273	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						ATLANTIC MACKEREL (*Scomber scombrus*)			ATLANTIC MOONFISH (*Selene setapinnis*)			ATLANTIC SHARPNOSE SHARK (*Rhizoprionodon terraenovae*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.86	0.314	0.000057	2.87	1.058	0.000190	17.12	1.063	0.001136
9	Otter Trawl	OPEN	all	MA	lg	0.04	1.152	0.000006	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	8.35	0.467	0.000352	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	2.45	0.371	0.000104	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.75	0.663	0.000827	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	1.05	0.846	0.007165	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.31	0.391	0.000113	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.18	0.620	0.000095	0.09	0.465	0.000047	3.24	0.509	0.001762
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.01	0.788	0.000004	0.00		0.000000	0.01	0.604	0.000003
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1.18	0.226	0.000372	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.19	0.527	0.000024	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.01	0.704	0.000001	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	< 0.01	0.960	0.000003	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.03	0.932	0.000009	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.02	0.447	0.000001	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.04	0.545	0.000001	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.01	0.881	0.000001	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	15.49	0.268		2.95	1.027		20.37	0.897	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						ATLANTIC SHEEPSHEAD (*Archosargus probatocephalus*)			ATLANTIC STURGEON (*Acipenser oxyrinchus*)			ATLANTIC WOLFFISH (*Anarhichas lupus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.01	1.076	0.000001	2.95	0.691	0.000196	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	1.53	0.403	0.000228	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	1.01	0.349	0.000042
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.09	0.814	0.000004	13.49	0.135	0.000571
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.919	0.000003
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.28	0.385	0.000101
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	< 0.01	0.762	0.000002	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	8.30	0.339	0.003657	0.02	0.872	0.000007
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	8.79	0.361	0.002986	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.39	0.567	0.000122	1.90	0.140	0.000597
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	1.30	0.676	0.000163	0.14	0.639	0.000018
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.22	0.550	0.000005
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	2.02	0.988	0.000152
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.01	0.811		23.34	0.207		19.08	0.144	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						BASKING SHARK (*Cetorhinus maximus*)			BENTHIC SPECIES, OTHER			BIGEYE SCAD (*Selar crumenophthalmus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.05	1.171	0.000034	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.06	0.545	0.000049	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	46.40	0.484	0.003078	29.19	0.417	0.001937	0.13	0.988	0.000009
9	Otter Trawl	OPEN	all	MA	lg	3.93	1.315	0.000583	134.04	0.262	0.019914	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	17.44	0.508	0.000735	15.40	0.301	0.000649	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	25.88	0.470	0.001096	94.21	0.140	0.003990	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	9.44	0.335	0.026828	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	7.59	0.719	0.085178	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	14.80	0.982	0.016222	22.40	0.886	0.024561	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	76.01	0.846	0.521065	0.10	0.814	0.000660	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	1.12	0.350	0.000406	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	2.23	0.405	0.001213	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.20	0.359	0.000087	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	4.94	0.405	0.001679	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	48.00	0.433	0.015117	1.53	0.139	0.000482	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	155.47	0.580	0.019581	11.57	0.464	0.001457	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	387.67	0.306	0.084148	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	2,012.96	0.153	0.033326	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	120.81	0.246	0.099107	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	1,064.61	0.315	0.346044	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	542.12	0.177	0.201675	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	7,856.06	0.197	0.459011	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	2,335.11	0.220	0.056408	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	4.06	0.306	0.005226	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.20	0.551	0.001180	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.55	0.463	0.000614	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	2.70	0.507	0.000203	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	10.79	0.556	0.000077	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	155.50	0.801	0.002545	0.00		0.000000
					TOTAL	391.97	0.298		14,823.15	0.115		0.13	0.988	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						BIGEYE THRESHER SHARK (*Alopias superciliosus*)			BIGEYE TUNA (*Thunnus obesus*)			BIGNOSE SHARK (*Carcharhinus altimus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	4.10	0.344	0.000272	0.85	1.065	0.000057	0.31	1.041	0.000021
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	4.10	0.344		0.85	1.065		0.31	1.041	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						BIVALVES, OTHER (CLASS: Bivalvia)			BLACK DRUM (*Pogonias cromis*)			BLACK SEA BASS (*Centropristis striata*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.04	0.660	0.000039
8	Otter Trawl	OPEN	all	MA	sm	8.04	0.337	0.000533	0.17	1.057	0.000011	142.90	0.323	0.009480
9	Otter Trawl	OPEN	all	MA	lg	21.39	0.395	0.003178	0.00		0.000000	110.77	0.296	0.016457
10	Otter Trawl	OPEN	all	NE	sm	6.25	0.922	0.000263	0.11	1.193	0.000005	118.96	0.230	0.005011
11	Otter Trawl	OPEN	all	NE	lg	3.21	0.321	0.000136	0.00		0.000000	17.07	0.147	0.000723
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.01	1.096	0.000026
14	Scallop Trawl	OPEN	GEN	MA	all	0.91	0.732	0.010212	0.00		0.000000	0.02	0.732	0.000279
17+	Twin Trawl	OPEN	all	MA	all	0.11	1.319	0.000126	0.00		0.000000	1.30	0.861	0.001429
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.01	0.720	0.000003
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.04	2.227	0.000019	3.33	0.471	0.001811	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.04	0.423	0.000018	0.23	0.575	0.000102	0.03	0.705	0.000012
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.07	0.752	0.000023	1.16	0.635	0.000393	0.05	0.778	0.000016
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.07	0.412	0.000021	0.00		0.000000	0.14	0.466	0.000044
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.14	0.342	0.000017	0.00		0.000000	0.02	1.158	0.000002
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.13	0.818	0.000027	0.00		0.000000	0.01	1.039	0.000001
41	Scallop Dredge	AA	LIM	MA	all	8.06	0.517	0.000133	0.00		0.000000	0.81	0.225	0.000013
42	Scallop Dredge	AA	LIM	NE	all	0.36	0.889	0.000291	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.31	0.427	0.000100	0.00		0.000000	0.34	0.391	0.000111
44	Scallop Dredge	OPEN	GEN	NE	all	3.47	0.548	0.001292	0.00		0.000000	0.12	0.666	0.000045
45	Scallop Dredge	OPEN	LIM	MA	all	7.95	0.399	0.000465	0.00		0.000000	1.86	0.386	0.000108
46	Scallop Dredge	OPEN	LIM	NE	all	18.30	0.289	0.000442	0.00		0.000000	0.11	0.461	0.000003
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	33.07	0.385	0.198797
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	34.75	0.251	0.313185
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.78	2.521	0.000878
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.13	0.561	0.000356
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	12.52	0.489	0.014339
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	18.47	0.617	0.001389
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	2.29	0.791	0.000016	0.00		0.000000	1.00	0.584	0.000007
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	67.47	0.657	0.001104	0.00		0.000000	0.07	1.399	0.000001
					TOTAL	148.59	0.311		5.01	0.350		495.37	0.133	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						BLACKNOSE SHARK (*Carcharhinus acronotus*)			BLACKTIP SHARK (*Carcharhinus limbatus*)			BLUE RUNNER (*Caranx crysos*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.05	0.847	0.000004
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.04	1.046	0.000002
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.01	0.611	0.000012
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.29	0.538	0.000160	2.19	1.469	0.001188	< 0.01	0.620	0.000002
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.05	0.861	0.000024	0.31	0.861	0.000138	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.35	0.474		2.50	1.289		0.11	0.573	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						BLUE SHARK (*Prionace glauca*)			BLUEBACK HERRING (*Alosa aestivalis*)			BLUEFIN TUNA (*Thunnus thynnus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	17.91	0.604	0.015409	0.00		0.000000	17.91	0.660	0.015409
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	1.23	0.632	0.000081	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.16	1.078	0.000024	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	2.17	0.753	0.000091	3.73	0.654	0.000157	0.40	0.495	0.000017
11	Otter Trawl	OPEN	all	NE	lg	2.65	0.460	0.000112	0.04	0.384	0.000002	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	< 0.01	0.919	0.000003	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.06	0.610	0.000434	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.08	0.756	0.000028	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2.98	0.508	0.001014	0.00		0.000000	1.13	0.636	0.000383
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1.09	0.408	0.000344	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	4.44	0.372	0.000559	0.00		0.000000	1.31	0.751	0.000165
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.01	0.929	0.000003	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.05	0.306	0.000070
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.01	1.417	0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	31.25	0.360		5.32	0.482		20.80	0.572	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						BLUEFISH (*Pomatomus saltatrix*)			BLUELINE TILEFISH (*Caulolatilus microps*)			BONNETHEAD SHARK (*Sphyrna tiburo*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	1.89	0.394	0.000125	0.33	0.603	0.000022	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.95	1.273	0.000141	0.01	1.307	0.000001	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	1.15	0.692	0.000049	0.09	0.829	0.000004	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	1.30	0.393	0.000055	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.07	0.472	0.000078	0.12	0.723	0.000134	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1.85	0.684	0.001003	0.00		0.000000	0.33	1.115	0.000180
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	6.71	0.587	0.002954	0.00		0.000000	0.05	0.604	0.000021
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2.96	0.342	0.001007	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.55	0.355	0.000175	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	3.92	0.194	0.000494	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.14	0.646	0.000161	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.03	0.871	0.000003	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	21.35	0.218		0.72	0.345		0.38	0.976	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						BONY FISHES, OTHER			BUTTERFISH (*Peprilus triacanthus*)			CARCHARHINID SHARK, UNC (*Carcharhinus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	22.79	0.376	0.001512	388.41	0.263	0.025766	2.97	0.594	0.000197
9	Otter Trawl	OPEN	all	MA	lg	0.01	0.566	0.000001	14.53	0.398	0.002159	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	51.64	0.710	0.002175	566.20	0.244	0.023848	3.26	1.292	0.000137
11	Otter Trawl	OPEN	all	NE	lg	226.70	0.527	0.009601	10.47	0.401	0.000444	3.27	0.776	0.000138
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.06	1.510	0.000699	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.17	0.459	0.000185	40.21	0.486	0.044092	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.01	0.407	0.000002	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.03	1.224	0.000019	0.18	1.366	0.000096	0.71	0.943	0.000384
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.04	0.675	0.000017	0.02	0.605	0.000010	0.02	0.861	0.000010
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.12	0.993	0.000040	0.00		0.000000	2.37	0.657	0.000804
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1.58	0.707	0.000497	0.02	0.268	0.000007	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1.80	0.784	0.000227	< 0.01	0.923	0.000000	0.72	0.926	0.000091
38	Purse Seine	OPEN	all	NE	all	13.16	0.340	0.000572	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.20	0.893	0.000003	0.05	0.572	0.000001	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	< 0.01	0.854	0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.05	0.623	0.000019	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.02	0.907	0.000001	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.15	0.952	0.000004	0.01	0.580	0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.35	0.287	0.000452	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	3.41	0.605	0.000068	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.01	1.045	0.000039	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.03	0.564	0.000032	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.03	1.479	0.000003	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	322.28	0.389		1,020.20	0.170		13.32	0.415	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						CHAIN DOGFISH (*Scyliorhinus retifer*)			COBIA (*Rachycentron canadum*)			CREVALLE JACK (*Caranx hippos*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.44	0.467	0.001022	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	2.53	0.036	0.001644	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	11.65	0.396	0.000773	0.39	1.071	0.000026	0.01	0.893	0.000001
9	Otter Trawl	OPEN	all	MA	lg	9.49	0.460	0.001410	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	4.91	0.297	0.000207	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.23	0.295	0.000010	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.60	0.487	0.000659	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	1.69	0.911	0.000919	< 0.01	0.619	0.000002
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.52	0.634	0.000230	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.03	0.739	0.000007	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.40	0.343	0.000007	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.01	1.076	0.000001	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.06	1.032	0.000001	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.04	0.525	0.000003	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	30.40	0.215		2.61	0.626		0.01	0.638	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						CROAKERS AND DRUMS, OTHER (FAMILY: Sciaenidae)			CUNNER (*Tautogolabrus adspersus*)			CUSK (*Brosme brosme*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	1.54	0.558	0.000102	0.01	0.620	0.000001	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	2.18	0.747	0.000323	0.36	0.843	0.000054	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.51	0.615	0.000022	0.03	0.868	0.000001	0.07	0.750	0.000003
11	Otter Trawl	OPEN	all	NE	lg	< 0.01	0.788	0.000000	2.06	0.571	0.000087	0.47	0.485	0.000020
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.07	0.901	0.000075	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.13	0.459	0.000046	0.03	1.604	0.000012
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.90	0.613	0.000489	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.01	0.861	0.000005	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.19	0.152	0.000060	0.19	0.633	0.000059
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.06	0.824	0.000008
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.01	0.621	0.000002	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.09	0.419	0.000002	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.05	1.009	0.000490	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.01	0.792	0.000009	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.60	0.657	0.000688	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	3.11	0.271	0.000234	22.42	0.826	0.001686
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	5.21	0.373		6.66	0.230		23.25	0.797	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						DECAPOD CRABS (ORDER: Decapoda)			DECAPOD SHRIMPS (ORDER: Decapoda)			DEMERSAL SPECIES, OTHER		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	27.55	0.360	0.001828	0.01	1.075	0.000001	4.82	0.348	0.000320
9	Otter Trawl	OPEN	all	MA	lg	41.85	0.244	0.006218	0.00		0.000000	8.34	0.396	0.001240
10	Otter Trawl	OPEN	all	NE	sm	93.77	0.404	0.003950	1.12	1.285	0.000047	10.76	0.261	0.000453
11	Otter Trawl	OPEN	all	NE	lg	188.20	0.144	0.007971	0.02	0.551	0.000001	30.41	0.151	0.001288
12	Scallop Trawl	AA	GEN	MA	all	1.63	0.133	0.004627	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	1.41	1.449	0.015804	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.33	0.615	0.000357	< 0.01	0.919	0.000000	0.74	0.360	0.000806
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.39	0.857	0.000141	< 0.01	0.666	0.000000	0.14	0.997	0.000052
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1.73	0.326	0.000938	< 0.01	0.620	0.000002	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	3.59	0.321	0.001584	0.00		0.000000	0.30	0.509	0.000134
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.84	0.326	0.000285	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	8.47	0.125	0.002667	0.00		0.000000	< 0.01	0.931	0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	4.84	0.218	0.000610	0.00		0.000000	1.42	0.483	0.000179
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	6.04	0.313	0.001311	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	76.12	0.117	0.001260	< 0.01	1.020	0.000000	1.82	0.662	0.000030
42	Scallop Dredge	AA	LIM	NE	all	0.16	0.887	0.000131	0.00		0.000000	0.02	0.313	0.000019
43	Scallop Dredge	OPEN	GEN	MA	all	1.03	0.491	0.000334	0.00		0.000000	0.65	0.747	0.000210
44	Scallop Dredge	OPEN	GEN	NE	all	12.50	0.165	0.004649	< 0.01	0.597	0.000001	0.60	0.711	0.000224
45	Scallop Dredge	OPEN	LIM	MA	all	37.66	0.263	0.002200	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	67.70	0.238	0.001635	< 0.01	0.661	0.000000	3.71	0.394	0.000090
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	5.54	1.054	0.033292	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	12.42	0.350	0.111919	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	46.28	1.421	0.052015	0.00		0.000000	0.34	0.432	0.000387
54	Pots and Traps, Conch	OPEN	all	NE	all	109.16	0.273	0.299417	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	18.72	2.642	0.021445	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	1,085.66	0.337	0.081636	0.00		0.000000	0.06	0.854	0.000004
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.90	1.205	0.000006	0.00		0.000000	10.45	0.835	0.000074
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	26.72	0.614	0.000437	0.00		0.000000	7.43	1.399	0.000122
					TOTAL	1,881.19	0.202		1.15	1.248		82.03	0.186	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						DORIES, OTHER (ORDER: Zeiformes)			DUSKY SHARK (*Carcharhinus obscurus*)			FINETOOTH SHARK (*Carcharhinus isodon*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	37.48	0.208	0.002486	0.93	1.070	0.000062	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.23	1.077	0.000034	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	9.08	0.347	0.000382	4.53	0.919	0.000191	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.36	0.292	0.000015	1.82	0.576	0.000077	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	4.43	0.799	0.004862	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.06	0.671	0.000022	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.68	0.619	0.000369
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.24	0.544	0.000104	0.30	0.604	0.000131
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1.69	0.414	0.000213	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	< 0.01	1.125	0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	< 0.01	0.892	0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	< 0.01	0.874	0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	53.34	0.172		7.52	0.586		0.98	0.468	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						FLATFISHES, OTHER (ORDER: Pleuronectiformes)			FLORIDA POMPANO (*Trachinotus carolinus*)			SUMMER FLOUNDER (*Paralichthys dentatus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	73.95	0.281	0.004906	< 0.01	0.620	0.000000	92.14	0.252	0.006112
9	Otter Trawl	OPEN	all	MA	lg	86.41	0.228	0.012838	0.00		0.000000	266.14	0.138	0.039538
10	Otter Trawl	OPEN	all	NE	sm	177.82	0.219	0.007490	0.00		0.000000	77.69	0.285	0.003272
11	Otter Trawl	OPEN	all	NE	lg	68.36	0.125	0.002895	0.00		0.000000	224.56	0.182	0.009510
12	Scallop Trawl	AA	GEN	MA	all	0.23	0.341	0.000651	0.00		0.000000	0.03	0.888	0.000089
14	Scallop Trawl	OPEN	GEN	MA	all	1.89	0.778	0.021231	0.00		0.000000	2.28	0.732	0.025622
17+	Twin Trawl	OPEN	all	MA	all	0.73	0.350	0.000799	0.00		0.000000	3.61	0.237	0.003963
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.65	0.262	0.000235	0.00		0.000000	0.42	0.744	0.000153
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.02	1.177	0.000013	0.08	0.414	0.000046	0.16	0.412	0.000088
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.01	0.531	0.000003	0.00		0.000000	0.26	0.288	0.000116
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.01	1.209	0.000002	0.00		0.000000	12.83	0.470	0.004358
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.40	0.189	0.000127	0.00		0.000000	0.11	0.273	0.000035
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.08	0.431	0.000010	0.00		0.000000	27.08	0.178	0.003410
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	1.48	0.264	0.000321	0.00		0.000000	0.90	0.355	0.000194
41	Scallop Dredge	AA	LIM	MA	all	25.74	0.101	0.000426	0.00		0.000000	33.44	0.188	0.000554
42	Scallop Dredge	AA	LIM	NE	all	0.55	0.332	0.000455	0.00		0.000000	0.10	0.639	0.000079
43	Scallop Dredge	OPEN	GEN	MA	all	4.40	0.153	0.001431	0.00		0.000000	20.65	0.189	0.006711
44	Scallop Dredge	OPEN	GEN	NE	all	0.86	0.272	0.000320	0.00		0.000000	6.89	0.359	0.002563
45	Scallop Dredge	OPEN	LIM	MA	all	26.44	0.159	0.001545	0.00		0.000000	59.00	0.247	0.003447
46	Scallop Dredge	OPEN	LIM	NE	all	74.69	0.176	0.001804	0.00		0.000000	73.96	0.225	0.001787
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.41	1.159	0.002466	0.00		0.000000	0.61	0.295	0.003663
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.01	0.826	0.000122
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.38	0.513	0.000029
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.50	0.490	0.000004	0.00		0.000000	4.92	0.564	0.000035
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.10	0.986	0.000002	0.00		0.000000	0.96	1.382	0.000016
					TOTAL	545.75	0.094		0.09	0.401		909.12	0.075	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						GADIFORMES, OTHER (ORDER: Gadiformes)			GASTROPOD SNAILS, OTHER (CLASS: Gastropoda)			TILEFISH (*Lopholatilus chamaeleonticeps*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.91	0.511	0.002099	0.00		0.000000	0.03	1.411	0.000069
2	Longline	OPEN	all	NE	all	1.37	1.074	0.000887	0.00		0.000000	5.17	0.900	0.003355
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	269.65	0.334	0.017888	0.57	0.387	0.000038	2.62	0.684	0.000174
9	Otter Trawl	OPEN	all	MA	lg	28.98	0.283	0.004306	0.51	0.463	0.000076	0.24	0.966	0.000036
10	Otter Trawl	OPEN	all	NE	sm	73.68	0.248	0.003104	0.14	0.869	0.000006	0.57	1.027	0.000024
11	Otter Trawl	OPEN	all	NE	lg	4.78	0.243	0.000203	5.87	0.390	0.000249	0.02	0.711	0.000001
12	Scallop Trawl	AA	GEN	MA	all	0.23	0.574	0.000664	0.13	0.906	0.000383	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.28	0.732	0.003151	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	60.43	0.360	0.066252	0.09	1.159	0.000100	0.04	0.486	0.000040
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.04	0.707	0.000013	0.01	0.862	0.000004	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	< 0.01	0.603	0.000001	0.06	0.600	0.000028	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.05	0.561	0.000016	0.02	0.552	0.000005	0.03	0.673	0.000010
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.08	0.824	0.000010	< 0.01	0.955	0.000000	0.37	0.492	0.000046
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.96	0.296	0.000209	0.88	0.852	0.000191	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	7.90	0.192	0.000131	9.63	0.232	0.000160	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.19	0.811	0.000154	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.24	0.395	0.000079	0.39	0.558	0.000128	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.02	0.602	0.000008	1.32	0.225	0.000491	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.71	0.334	0.000041	4.06	0.643	0.000237	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.07	0.690	0.000002	28.35	0.237	0.000685	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.05	0.555	0.000313	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	2.11	0.890	0.005785	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.15	0.646	0.000174	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.88	0.420	0.000066	25.90	0.613	0.001947	0.13	0.621	0.000010
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.37	0.598	0.000003	41.98	0.727	0.000299	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	71.51	0.418	0.001170	0.00		0.000000
					TOTAL	451.57	0.210		194.02	0.239		9.22	0.545	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						GROUPERS, UNC (Serranidae)			HADDOCK (*Melanogrammus aeglefinus*)			HAMMERHEAD SHARK, UNC (Sphyrnidae)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	1.84	0.592	0.001579	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	< 0.01	1.075	0.000000	0.05	1.125	0.000003	0.43	0.617	0.000029
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	718.07	0.293	0.030245	1.91	1.041	0.000080
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	431.98	0.113	0.018295	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	6.54	0.075	0.044855	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	297.79	0.137	0.107565	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	5.58	0.089	0.001759	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.32	0.362	0.000040	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.17	0.661	0.000139	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.20	0.482	0.000074	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.02	1.062	0.000001	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	12.89	0.205	0.000311	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.03	0.476	0.000044	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.01	1.045	0.000051	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	2.33	0.410	0.000175	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	1.53	0.517	0.000025	0.00		0.000000
					TOTAL	0.01	0.930		1,479.35	0.149		2.34	0.856	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						HERRINGS, OTHER (ORDER: Clupeiformes)			HICKORY SHAD (*Alosa mediocris*)			HORSESHOE CRAB (*Limulus polyphemus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	41.16	0.739	0.002731	0.01	0.556	0.000001	331.27	0.273	0.021976
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	352.42	0.339	0.052357
10	Otter Trawl	OPEN	all	NE	sm	4.52	0.687	0.000190	0.00		0.000000	4.06	0.490	0.000171
11	Otter Trawl	OPEN	all	NE	lg	1.21	0.899	0.000051	0.00		0.000000	7.04	0.276	0.000298
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.02	0.732	0.000273
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.12	0.959	0.000135	0.12	0.733	0.000137
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.01	1.014	0.000003	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.07	0.798	0.000037	0.10	0.690	0.000053	1.07	0.692	0.000581
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.16	0.707	0.000072	0.00		0.000000	2.42	0.285	0.001065
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	50.33	0.254	0.017099
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	< 0.01	0.876	0.000001	0.00		0.000000	0.12	0.425	0.000037
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.33	0.376	0.000041
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	1.49	0.507	0.000324
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	34.97	0.249	0.000579
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	1.21	0.438	0.000392
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.02	0.586	0.000008
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	2.56	0.250	0.000150
46	Scallop Dredge	OPEN	LIM	NE	all	< 0.01	0.941	0.000000	0.00		0.000000	0.23	0.552	0.000006
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.12	0.306	0.000152	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	91.41	0.750	0.000650
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	47.25	0.648		0.23	0.579		881.10	0.188	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						JACK, UNC (Carangidae)			JONAH CRAB (*Cancer borealis*)			KING MACKEREL (*Scomberomorus cavalla*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.10	0.671	0.000234	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	2.36	0.238	0.001534	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	1.59	0.520	0.000106	16.22	0.334	0.001076	0.21	1.071	0.000014
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	57.93	0.254	0.008606	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.10	0.763	0.000004	8.41	0.386	0.000354	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	1,195.66	0.087	0.050637	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.05	0.732	0.000545	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.93	0.536	0.001022	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	38.01	0.939	0.013731	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.01	0.533	0.000007	0.04	0.948	0.000019
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.12	0.430	0.000054	0.11	0.678	0.000049
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	1.43	0.342	0.000486	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	26.79	0.161	0.008435	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	16.58	0.142	0.002088	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.26	0.547	0.000057	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	7.65	0.222	0.000127	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.01	0.861	0.000011	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.77	0.401	0.000249	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	15.75	0.291	0.005860	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	17.59	0.498	0.001028	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	63.37	0.233	0.001531	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	24.54	0.824	0.147476	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.23	0.708	0.002098	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	3.58	0.538	0.004020	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.01	1.194	0.000036	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	208.42	0.195	0.238738	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	1,888.78	0.230	0.142026	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	22.53	0.670	0.000160	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	133.65	0.787	0.002187	0.00		0.000000
					TOTAL	1.70	0.490		3,751.75	0.124		0.36	0.670	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						LITTLE TUNA (TUNNY) (*Euthynnus alletteratus*)			LONGFIN INSHORE SQUID (*Doryteuthis [Amerigo] pealeii*)			LOOKDOWN (*Selene vomer*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.02	1.071	0.000001	58.00	0.364	0.003848	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	8.82	0.510	0.001310	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	54.52	0.517	0.002296	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	3.68	0.247	0.000156	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.02	0.421	0.000170	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	15.70	0.786	0.017217	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.05	0.846	0.000347	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.14	0.352	0.000051	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.07	0.950	0.000038	0.00		0.000000	< 0.01	0.620	0.000001
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.12	0.551	0.000051	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1.61	0.877	0.000203	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.02	0.616	0.000004	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	1.43	0.346	0.000024	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	< 0.01	0.871	0.000001	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.25	0.318	0.000081	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.05	0.462	0.000017	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.32	0.483	0.000019	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.46	0.216	0.000011	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.17	0.835	0.000001	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	1.82	0.779		143.63	0.262		< 0.01	0.620	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						MACKERELS, OTHER (FAMILY: Scombridae)			MENHADEN, UNC (*Brevoortia*)			MONKFISH (GOOSEFISH) (*Lophius americanus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.14	0.487	0.000325
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.37	0.506	0.000242
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	41.48	0.383	0.002752	18.20	0.392	0.001208	63.87	0.288	0.004237
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.65	0.630	0.000096	100.64	0.233	0.014951
10	Otter Trawl	OPEN	all	NE	sm	0.03	1.255	0.000001	0.24	0.668	0.000010	152.01	1.019	0.006403
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.04	0.716	0.000002	453.23	0.086	0.019195
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.37	0.571	0.001053
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	1.51	0.962	0.016965
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.29	0.832	0.000315	4.94	0.269	0.005416
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.01	0.846	0.000087
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.01	0.912	0.000005	4.38	0.435	0.001581
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	138.48	0.602	0.075226	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.01	0.557	0.000004	10.19	0.353	0.004492	0.05	0.868	0.000023
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.75	0.576	0.000255	22.35	0.186	0.007594
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	5.70	0.121	0.001795
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	92.78	0.144	0.011685
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	18.29	0.181	0.003970
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	< 0.01	0.910	0.000000	219.56	0.079	0.003635
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.91	0.268	0.000744
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	22.84	0.177	0.007422
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	39.50	0.221	0.014695
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	283.39	0.128	0.016558
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	< 0.01	0.945	0.000000	520.21	0.143	0.012566
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.30	0.331	0.000343
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.42	0.366	0.000032
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	79.86	0.345	0.000568
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	19.39	0.369	0.000317
					TOTAL	41.52	0.383		168.87	0.496		2,107.02	0.088	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						NIGHT SHARK (*Carcharhinus signatus*)			NORTHERN SHORTFIN SQUID (*Illex illecebrosus*)			OCEAN POUT (*Zoarces americanus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.27	0.696	0.000621	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	1.14	1.070	0.000076	133.95	0.252	0.008886	7.65	0.737	0.000507
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.37	0.594	0.000054	26.97	0.382	0.004007
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	216.86	0.455	0.009134	2.08	0.325	0.000088
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	6.94	0.154	0.000294	37.28	0.179	0.001579
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	< 0.01	1.153	0.000041	0.15	0.492	0.001692
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	84.40	0.209	0.092536	0.03	0.486	0.000030
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.07	0.309	0.000025	1.17	0.436	0.000423
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.04	0.301	0.000013
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.01	0.683	0.000001
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.13	0.479	0.000002	< 0.01	1.019	0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.01	0.945	0.000002	0.18	0.480	0.000059
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.01	1.068	0.000003	0.08	0.680	0.000031
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.02	1.062	0.000001	0.16	0.443	0.000009
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.15	0.867	0.000004	1.30	0.229	0.000031
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	7.73	0.628	0.008849
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	8.28	0.320	0.000623
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.29	0.746	0.000005
					TOTAL	1.41	0.876		442.90	0.239		93.40	0.157	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						OCEAN QUAHOG (*Arctica islandica*)			OFFSHORE HAKE (*Merluccius albidus*)			PANDALID SHRIMP (NORTHERN) (*Pandalus borealis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.12	1.411	0.000286	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	2.75	0.707	0.000182	0.42	0.662	0.000028	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.18	0.586	0.000026	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.68	1.039	0.000029	2.78	1.300	0.000117	0.10	0.896	0.000004
11	Otter Trawl	OPEN	all	NE	lg	0.40	0.849	0.000017	0.09	0.526	0.000004	< 0.01	0.691	0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.33	1.314	0.000365	0.02	0.919	0.000026	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.01	0.925	0.000001	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.65	0.736	0.000011	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.11	0.850	0.000003	0.19	1.029	0.000005	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	1,727.81	1.118	0.012291	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	1,732.91	1.115		3.62	1.003		0.10	0.870	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						PELAGIC SHARKS, UNC (Lamniformes)			PELAGIC SPECIES, OTHER			PENAEID SHRIMP (SOUTHERN), UNC (*Penaeus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	0.14	0.719	0.000009	< 0.01	1.076	0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.56	0.495	0.000083	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	1.70	0.296	0.000072	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	1.52	0.532	0.000064	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	8.09	1.993	0.004393	< 0.01	2.234	0.000001
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.16	0.496	0.000071	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.08	0.762	0.000026	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.16	0.937	0.000050	0.41	0.363	0.000128	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.55	0.369	0.000069	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.02	1.017	0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.48	0.963	0.000003	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.16	0.937		13.71	1.179		< 0.01	1.934	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						PERCIFORMES, OTHER (DEMERSAL) (ORDER: Perciformes)			PERCIFORMES, OTHER (PELAGIC) (ORDER: Perciformes)			PIGFISH (*Orthopristis chrysoptera*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.38	0.788	0.000025	0.11	0.282	0.000007	0.33	1.071	0.000022
9	Otter Trawl	OPEN	all	MA	lg	0.20	0.405	0.000029	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	1.13	0.431	0.000048	0.01	1.292	0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.84	0.409	0.000035	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	< 0.01	0.429	0.000017	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.21	0.792	0.000077	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.08	1.601	0.000046	0.14	0.676	0.000074	0.02	0.657	0.000011
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.50	0.283	0.000220	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	2.84	0.482	0.000965	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.01	0.935	0.000003	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.04	0.617	0.000001	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.32	0.494	0.000105	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.07	0.964	0.000026	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.42	0.451	0.000025	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.14	0.513	0.000003	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.08	1.152	0.000488	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	< 0.01	0.879	0.000005	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.79	0.649	0.000060	0.09	0.402	0.000006	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	1.04	0.779	0.000007	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.05	1.477	0.000001	0.00		0.000000	0.00		0.000000
					TOTAL	9.16	0.201		0.34	0.306		0.35	1.011	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						PILOTFISH (*Naucrates ductor*)			PINFISH (*Lagodon rhomboides*)			PIPEFISHES (DEMERSAL) (ORDER: Gasterosteiformes)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	< 0.01	0.515	0.000000	0.00		0.000000	0.23	0.577	0.000015
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.01	1.292	0.000001	< 0.01	1.203	0.000000	1.30	0.880	0.000055
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.01	0.573	0.000007
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.01	0.947	0.000003	0.11	0.507	0.000062	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.02	0.833		0.12	0.499		1.54	0.749	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						PIPEFISHES (PELAGIC) (ORDER: Gasterosteiformes)			POLLOCK (*Pollachius virens*)			PORBEAGLE SHARK (*Lamna nasus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	12.59	0.479	0.010831	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.06	0.592	0.000004	0.00		0.000000	0.06	1.565	0.000004
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	5.31	0.903	0.000224	17.04	0.423	0.000718
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	57.06	0.247	0.002417	38.46	0.247	0.001629
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	1.52	0.846	0.010421
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	3.60	0.444	0.001300	6.02	0.707	0.002174
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	< 0.01	0.674	0.000003	0.02	0.619	0.000012	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	< 0.01	0.527	0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	43.88	0.127	0.013818	20.44	0.205	0.006437
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	4.31	0.227	0.000542	16.92	0.343	0.002131
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	< 0.01	0.661	0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	< 0.01	1.245	0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	< 0.01	0.945	0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.16	0.503	0.000209	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	6.30	1.735	0.000126
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.19	0.753	0.000014	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.07	0.518		127.12	0.134		106.76	0.171	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						PORGY, UNC (Sparidae)			QUAHOG (HARD SHELL CLAM) (*Mercenaria mercenaria*)			RAY-FINNED FISHES, OTHER (DEMERSAL) (CLASS: Actinopterygii)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.35	0.639	0.000801
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.06	1.074	0.000042
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	25.69	0.247	0.001704
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.56	0.663	0.000084
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	< 0.01	1.050	0.000000	5.61	0.614	0.000236
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.06	0.814	0.000003	0.17	0.819	0.000007
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.01	1.153	0.000074
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	2.02	0.622	0.002216
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	< 0.01	0.660	0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	< 0.01	0.461	0.000002	0.00		0.000000	0.01	0.700	0.000007
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.60	0.823	0.000265
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.01	0.875	0.000003
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	< 0.01	0.928	0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.02	0.395	0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.912	0.000002
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.01	0.832	0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.02	0.424	0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.55	0.980	0.003329
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.02	2.716	0.000027
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	5.05	1.656	0.005780
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	12.10	0.282	0.000910
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.11	0.719	0.000001
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	< 0.01	0.461		0.07	0.764		52.98	0.220	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						RAY-FINNED FISHES, OTHER (PELAGIC) (CLASS: Actinopterygii)			RAYS, OTHER (DEMERSAL) (ORDER: Myliobatiformes)			RAYS, OTHER (PELAGIC) (ORDER: Myliobatiformes)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.03	0.452	0.000002	33.52	0.280	0.002224	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.01	0.684	0.000002	75.66	0.399	0.011240	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	< 0.01	1.296	0.000000	0.02	1.298	0.000001	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	< 0.01	0.469	0.000000	0.99	0.789	0.000042	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.66	0.358	0.000361	21.00	1.227	0.011408	1.05	0.496	0.000568
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	5.98	0.321	0.002637	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.05	0.956	0.000006	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	< 0.01	1.017	0.000000	0.24	1.018	0.000004	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	< 0.01	0.792	0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.71	0.335		137.46	0.297		1.05	0.496	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						RED DEEPSEA CRAB (*Chaceon quinquedens*)			RED DRUM (*Sciaenops ocellatus*)			RED HAKE (*Urophycis chuss*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.14	1.389	0.000329
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	< 0.01	1.569	0.000000	0.45	0.497	0.000030	113.06	0.402	0.007500
9	Otter Trawl	OPEN	all	MA	lg	0.07	1.306	0.000010	0.00		0.000000	3.98	0.517	0.000592
10	Otter Trawl	OPEN	all	NE	sm	2.54	1.302	0.000107	0.00		0.000000	1,117.83	0.293	0.047082
11	Otter Trawl	OPEN	all	NE	lg	33.10	0.558	0.001402	0.00		0.000000	116.35	0.174	0.004928
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.01	1.153	0.000082
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	4.46	0.482	0.004886
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.26	0.701	0.001780
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	< 0.01	1.003	0.000001	0.00		0.000000	18.45	0.384	0.006663
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	1.45	0.866	0.000790	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.04	0.260	0.000014	0.00		0.000000	1.60	0.121	0.000503
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.01	0.677	0.000001
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.13	0.736	0.000028
41	Scallop Dredge	AA	LIM	MA	all	0.09	0.938	0.000001	0.00		0.000000	2.63	0.206	0.000044
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.04	0.502	0.000034
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.31	0.325	0.000099
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	2.41	0.404	0.000896
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	3.43	0.457	0.000200
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	67.76	0.174	0.001637
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.19	0.429	0.000222	0.00		0.000000	10.58	0.280	0.012121
57	Pots and Traps, Lobster	OPEN	all	NE	all	17.90	0.500	0.001346	0.00		0.000000	40.49	0.338	0.003045
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.20	0.711	0.000003
					TOTAL	53.93	0.385		1.90	0.673		1,504.12	0.221	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						ROUGH SCAD (*Trachurus lathami*)			SAND TIGER SHARK (*Carcharias taurus*)			SANDBAR SHARK (*Carcharhinus plumbeus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.57	0.441	0.000038	1.27	0.570	0.000084	9.98	0.351	0.000662
9	Otter Trawl	OPEN	all	MA	lg	0.09	0.876	0.000013	2.52	0.663	0.000374	1.49	0.452	0.000221
10	Otter Trawl	OPEN	all	NE	sm	0.97	1.051	0.000041	0.00		0.000000	2.05	0.568	0.000087
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.50	0.789	0.000021	0.40	0.788	0.000017
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.06	0.673	0.000069	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	6.76	1.339	0.003673	3.46	0.420	0.001878
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	2.40	0.623	0.001060	3.29	0.408	0.001451
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	7.96	0.551	0.002706
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.05	0.938	0.000016	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.19	0.956	0.000024	9.96	0.421	0.001254
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	1.69	0.623		13.69	0.684		38.59	0.192	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SCALLOPED HAMMERHEAD SHARK (*Sphyrna lewini*)			SCORPIONFISHES, OTHER (ORDER: Scorpaeniformes)			SCUP (*Stenotomus chrysops*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	< 0.01	1.411	0.000011	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.02	1.074	0.000012	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.09	0.661	0.000077	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	6.90	0.391	0.000458	329.13	0.287	0.021834	399.01	0.225	0.026469
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	558.88	0.314	0.083029	212.73	0.272	0.031603
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	249.68	0.252	0.010517	391.95	0.288	0.016509
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	372.94	0.104	0.015794	27.20	0.246	0.001152
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.01	1.096	0.000026	< 0.01	0.969	0.000006
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.63	0.535	0.007103	0.25	0.732	0.002788
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	18.87	0.718	0.020688	1.70	0.618	0.001867
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.16	0.396	0.001077	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	9.66	0.156	0.003488	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1.59	1.272	0.000864	0.82	0.374	0.000447	0.04	0.446	0.000020
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	1.40	0.257	0.000615	< 0.01	0.857	0.000002
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.05	0.650	0.000016	0.03	1.177	0.000009
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	7.64	0.116	0.002407	0.03	0.417	0.000010
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	2.97	0.161	0.000374	0.02	0.929	0.000003
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	1.13	0.428	0.000245	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	39.62	0.299	0.000656	0.32	0.488	0.000005
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.37	0.237	0.000306	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	3.16	0.265	0.001029	0.10	0.748	0.000032
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	4.15	0.157	0.001542	0.02	1.071	0.000009
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	12.45	0.284	0.000727	0.20	0.696	0.000011
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	35.37	0.171	0.000854	< 0.01	0.798	0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.28	0.823	0.001677	0.56	0.608	0.003393
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.02	1.037	0.000192	4.55	0.357	0.040967
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.92	1.206	0.002529
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	1.01	0.433	0.001161	0.37	0.565	0.000427
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	8.40	0.248	0.000632	2.17	0.528	0.000163
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	6.28	0.502	0.000045	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	3.82	0.781	0.000063	0.00		0.000000
					TOTAL	8.49	0.397		1,669.02	0.128		1,042.17	0.149	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SEA BASS, UNC (*Centropristis*)			SEA SCALLOP (*Placopecten magellanicus*)			SHARPNOSE SEVENGILL SHARK (*Heptranchias perlo*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.10	1.038	0.000006	64.55	0.333	0.004282	0.02	1.127	0.000002
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	113.00	0.389	0.016787	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.07	1.294	0.000003	2.18	0.575	0.000092	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	15.14	0.360	0.000641	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	111.13	0.662	0.315824	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	10.17	0.781	0.114087	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	2.03	0.558	0.002231	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.04	0.496	0.000013	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.61	0.606	0.000207	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.03	0.446	0.000011	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.22	0.718	0.000028	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	641.56	0.280	0.139257	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	3,042.72	0.143	0.050375	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	5.60	0.447	0.004596	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	96.93	0.368	0.031505	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	63.52	0.397	0.023632	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	946.38	0.232	0.055295	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	1,598.04	0.184	0.038603	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	162.56	0.504	0.001156	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	4.89	1.287	0.000080	0.00		0.000000
					TOTAL	0.17	0.813		6,881.27	0.089		0.02	1.127	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SHARK, UNC (Chondrichthyes)			SHORTFIN MAKO SHARK (*Isurus oxyrinchus*)			SILVER HAKE (*Merluccius bilinearis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.23	0.696	0.000533	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.30	0.617	0.000020	0.68	1.071	0.000045	33.80	0.338	0.002242
9	Otter Trawl	OPEN	all	MA	lg	0.73	0.687	0.000108	0.00		0.000000	20.02	0.451	0.002974
10	Otter Trawl	OPEN	all	NE	sm	7.11	1.086	0.000300	0.28	1.252	0.000012	323.12	0.195	0.013610
11	Otter Trawl	OPEN	all	NE	lg	3.97	0.821	0.000168	0.00		0.000000	261.55	0.120	0.011077
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.44	0.736	0.004901
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	4.86	0.321	0.005324
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	1.88	0.552	0.012862
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	23.21	0.215	0.008385
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.39	0.483	0.000212	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.28	0.869	0.000125	0.00		0.000000	0.01	0.862	0.000002
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	1.04	0.674	0.000354	0.60	0.882	0.000204	0.05	0.615	0.000018
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	3.37	0.501	0.001063	0.11	0.928	0.000033	10.33	0.169	0.003253
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	3.64	0.452	0.000459	0.22	0.921	0.000027	2.31	0.203	0.000291
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.07	0.396	0.000015
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	1.02	0.211	0.000017
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.10	0.290	0.000085
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.14	0.355	0.000045
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.85	0.424	0.000317
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	1.18	0.269	0.000069
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	12.72	0.226	0.000307
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	6.92	0.923	0.000138	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.03	0.976	0.000002
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	28.00	0.387		1.89	0.527		697.67	0.104	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SKATE COMPLEX (FAMILY: Rajidae)			SMALLTOOTH SAND SHARK (*Odontaspis ferox*)			SMOOTH DOGFISH (*Mustelus canis*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	12.55	0.345	0.028985	0.00		0.000000	28.80	0.683	0.066502
2	Longline	OPEN	all	NE	all	286.94	0.356	0.186149	0.00		0.000000	72.86	0.650	0.047265
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	2,288.65	0.235	0.151823	2.16	0.539	0.000143	123.74	0.256	0.008209
9	Otter Trawl	OPEN	all	MA	lg	7,985.85	0.118	1.186405	0.00		0.000000	77.21	0.262	0.011471
10	Otter Trawl	OPEN	all	NE	sm	1,001.13	0.296	0.042167	0.00		0.000000	49.17	0.305	0.002071
11	Otter Trawl	OPEN	all	NE	lg	14,386.52	0.104	0.609281	0.00		0.000000	22.49	0.182	0.000952
12	Scallop Trawl	AA	GEN	MA	all	12.37	0.686	0.035143	0.00		0.000000	0.02	0.969	0.000057
14	Scallop Trawl	OPEN	GEN	MA	all	130.50	0.403	1.464552	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	182.88	0.647	0.200511	0.00		0.000000	25.18	0.674	0.027607
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	7.81	0.562	0.053566	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	490.34	0.222	0.177119	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	1.78	0.452	0.000966	0.00		0.000000	5.15	0.371	0.002798
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	43.06	1.524	0.018970	0.00		0.000000	4.09	0.350	0.001801
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	305.11	0.132	0.103658	0.00		0.000000	2.60	0.246	0.000882
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	52.66	0.080	0.016585	0.00		0.000000	3.78	0.369	0.001191
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	783.91	0.089	0.098729	0.00		0.000000	0.34	0.420	0.000043
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	54.24	0.167	0.011774	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	865.08	0.085	0.014322	0.00		0.000000	0.57	0.533	0.000009
42	Scallop Dredge	AA	LIM	NE	all	208.30	0.179	0.170874	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	698.50	0.106	0.227043	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	296.66	0.200	0.110364	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	2,967.00	0.094	0.173355	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	4,322.68	0.146	0.104421	0.00		0.000000	0.22	0.702	0.000005
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	1.06	0.621	0.001210	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.52	0.690	0.000039	0.00		0.000000	0.32	1.012	0.000024
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	449.33	0.378	0.003196	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	364.73	0.167	0.005968	0.00		0.000000	0.70	1.287	0.000012
					TOTAL	38,200.16	0.053		2.16	0.539		417.24	0.162	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SMOOTH HAMMERHEAD SHARK (*Sphyrna zygaena*)			SNOWY GROUPER (*Epinephelus niveatus*)			SOFT CORAL, UNC (Alcyonacea)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	< 0.01	1.070	0.000000	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	< 0.01	1.297	0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.06	0.753	0.000003
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.01	2.237	0.000004	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.01	1.045	0.000064	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	< 0.01	1.038	0.000008	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	< 0.01	0.765	0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.01	2.237		0.02	0.740		0.07	0.699	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SPADEFISHES, UNC (Ephippidae)			SPANISH MACKEREL (*Scomberomorus maculatus*)			SPINNER SHARK (*Carcharhinus brevipinna*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.04	1.071	0.000002	< 0.01	1.071	0.000000	1.39	0.495	0.000092
9	Otter Trawl	OPEN	all	MA	lg	0.02	1.302	0.000003	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.26	0.763	0.000143	0.48	0.446	0.000260	3.31	0.723	0.001798
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.90	0.861	0.000395
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.01	1.045	0.000039	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.33	0.633		0.48	0.444		5.60	0.466	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SPINY DOGFISH (*Squalus acanthias*)			SPOT (*Leiostomus xanthurus*)			SPOTTED SEATROUT (*Cynoscion nebulosus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	14.68	1.120	0.033908	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	3.22	0.506	0.002086	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.42	2.225	0.000365	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	866.10	0.296	0.057455	1.22	0.794	0.000081	0.00		0.000000
9	Otter Trawl	OPEN	all	MA	lg	698.04	0.180	0.103703	0.00		0.000000	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	1,111.01	0.210	0.046795	0.00		0.000000	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	1,588.14	0.099	0.067259	< 0.01	0.813	0.000000	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.91	0.732	0.010236	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	18.63	0.390	0.020429	0.00		0.000000	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.61	0.846	0.004169	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	153.45	0.469	0.055428	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	202.38	0.894	0.109936	0.14	0.735	0.000077	0.03	0.592	0.000018
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	72.59	0.468	0.031981	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	26.64	0.178	0.009052	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	892.09	0.186	0.280942	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	42.72	0.116	0.005380	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.45	0.566	0.000098	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	2.12	0.389	0.000035	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.09	0.736	0.000074	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	7.43	0.265	0.002415	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	1.56	0.489	0.000579	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	9.53	0.269	0.000557	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	13.60	0.280	0.000329	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	1.52	0.901	0.001736	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	1.39	0.375	0.000105	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	17.97	0.815	0.000128	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	27.45	0.478	0.000449	0.00		0.000000	0.00		0.000000
					TOTAL	5,774.75	0.083		1.36	0.715		0.03	0.592	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SQUIDS, UNC (Loliginidae)			STINGRAYS, OTHER (DEMERSAL) (FAMILY: Dasyatidae)			STINGRAYS, OTHER (PELAGIC) (FAMILY: Dasyatidae)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	5.49	1.016	0.000364	24.74	0.311	0.001641	0.03	0.617	0.000002
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	16.13	0.280	0.002396	0.07	1.304	0.000010
10	Otter Trawl	OPEN	all	NE	sm	1.24	0.896	0.000052	3.00	0.776	0.000126	0.04	1.042	0.000002
11	Otter Trawl	OPEN	all	NE	lg	0.08	0.783	0.000003	3.38	0.617	0.000143	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	< 0.01	0.486	0.000003	0.37	0.674	0.000408	0.05	0.982	0.000057
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	< 0.01	0.666	0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	4.30	1.873	0.002337	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.01	0.861	0.000004	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.77	0.658	0.000097	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	< 0.01	0.946	0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	1.58	0.554	0.000026	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	< 0.01	1.174	0.000001	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.02	1.031	0.000001	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	6.83	0.832		54.28	0.230		0.18	0.594	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						STONY CORAL (Scleractinia)			STRIPED BASS (*Morone saxatilis*)			ATLANTIC SURFCLAM (*Spisula solidissima*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	4.00	0.700	0.000265	0.02	1.075	0.000001
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	14.23	0.708	0.002114	0.05	0.507	0.000007
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	2.14	0.341	0.000090	0.04	1.050	0.000002
11	Otter Trawl	OPEN	all	NE	lg	0.12	0.789	0.000005	3.06	0.351	0.000130	0.81	0.659	0.000035
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	< 0.01	0.959	0.000001
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.70	0.429	0.000379	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	6.82	0.344	0.003003	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.06	1.226	0.000020	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.23	0.490	0.000071	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.01	0.911	0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.03	0.553	0.000010
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.17	0.650	0.000004
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.12	0.901	0.001049	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.06	3.456	0.000005	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	83.67	0.930	0.000595
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	6.18	0.529	0.000101
					TOTAL	0.13	0.723		31.41	0.344		90.96	0.856	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						SWORDFISH (*Xiphias gladius*)			TAUTOG (*Tautoga onitis*)			TETRAODONTIFORMES, OTHER (DEMERSAL) (ORDER: Tetraodontiformes)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	5.72	0.583	0.000379	0.58	0.590	0.000038	1.33	0.542	0.000088
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.03	0.610	0.000005	0.21	0.555	0.000032
10	Otter Trawl	OPEN	all	NE	sm	3.12	1.042	0.000131	2.24	0.387	0.000095	0.10	0.650	0.000004
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.16	0.407	0.000007	< 0.01	1.079	0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.48	0.533	0.000526	0.00		0.000000	0.02	0.806	0.000018
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.03	0.510	0.000017
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.09	0.482	0.000038	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.29	0.506	0.000093	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.08	0.584	0.000010	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	2.02	0.727	0.012165	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	5.41	0.240	0.048765	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.02	0.987	0.000042	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.16	3.283	0.000185	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.23	3.454	0.000017	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.08	0.963	0.000001
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	9.32	0.500		11.31	0.210		1.77	0.417	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						TETRAODONTIFORMES, OTHER (PELAGIC) (ORDER: Tetraodontiformes)			THRESHER SHARK (*Alopias vulpinus*)			TIGER SHARK (*Galeocerdo cuvier*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	22.31	0.285	0.001480	3.58	0.368	0.000237	0.60	1.014	0.000040
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.36	0.676	0.000054	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	10.36	0.451	0.000437	9.13	0.342	0.000385	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.51	0.812	0.000021	0.68	0.813	0.000029	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.68	0.919	0.000748	0.00		0.000000	3.98	0.825	0.004361
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	2.11	0.546	0.001144	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	2.47	0.499	0.001086	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.34	0.844	0.000114	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.20	0.938	0.000063	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	1.99	0.923	0.000251	5.07	0.929	0.000639
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.54	0.306	0.000697	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	4.57	1.735	0.000091	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	33.86	0.234		25.97	0.347		9.65	0.598	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						TILEFISH, UNC (Malacanthidae)			TRIGGERFISHES, UNC (Balistidae)			TUNA, UNC (*Thunnus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.05	0.933	0.000003	0.34	0.380	0.000022	< 0.01	1.074	0.000000
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.02	0.562	0.000003	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	0.00		0.000000	0.07	0.884	0.000003	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	< 0.01	0.812	0.000000	0.17	0.787	0.000007
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	< 0.01	0.850	0.000003	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.01	0.835	0.000007	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.58	0.925	0.000073
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.01	0.587	0.000000	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	< 0.01	1.177	0.000001	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.05	0.306	0.000070
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.61	0.525	0.003683	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.40	5.929	0.000454	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.02	0.760	0.000023	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.06	0.519	0.000005	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.05	0.933		1.56	1.549		0.80	0.687	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						WAHOO (*Acanthocybium solandri*)			WEAKFISH (*Cynoscion regalis*)			WHELKS, OTHER (FAMILY: Melongenidae)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	0.00		0.000000	10.15	0.609	0.000673	0.49	0.341	0.000033
9	Otter Trawl	OPEN	all	MA	lg	0.00		0.000000	0.74	0.535	0.000110	1.51	0.381	0.000224
10	Otter Trawl	OPEN	all	NE	sm	0.17	1.252	0.000007	3.22	0.573	0.000136	0.55	1.005	0.000023
11	Otter Trawl	OPEN	all	NE	lg	0.00		0.000000	0.15	0.694	0.000006	3.77	0.192	0.000159
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.65	1.306	0.000710
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.48	0.361	0.000262	0.04	0.518	0.000020
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	0.02	0.569	0.000007	0.02	0.560	0.000009
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.00		0.000000	0.07	0.591	0.000024
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.01	0.538	0.000003
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.00		0.000000	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.00		0.000000	0.00		0.000000	3.06	0.460	0.000051
42	Scallop Dredge	AA	LIM	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.01	1.188	0.000002
44	Scallop Dredge	OPEN	GEN	NE	all	0.00		0.000000	0.00		0.000000	0.21	0.405	0.000080
45	Scallop Dredge	OPEN	LIM	MA	all	0.00		0.000000	0.00		0.000000	2.70	0.722	0.000158
46	Scallop Dredge	OPEN	LIM	NE	all	0.00		0.000000	0.00		0.000000	17.12	0.751	0.000414
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.06	0.925	0.000371
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	161.99	0.382	0.182062
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	390.46	0.129	1.071018
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	22.98	0.614	0.001728
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	1.20	0.681	0.000009
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
					TOTAL	0.17	1.252		14.76	0.438		606.89	0.135	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						WHITE HAKE (*Urophycis tenuis*)			WHITE SHARK (*Carcharodon carcharias*)			WINDOWPANE (*Scophthalmus aquosus*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.02	0.846	0.000054	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.10	1.074	0.000064	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	2.35	0.491	0.000156	0.54	0.460	0.000036	46.55	0.243	0.003088
9	Otter Trawl	OPEN	all	MA	lg	0.56	0.625	0.000083	0.00		0.000000	255.16	0.155	0.037908
10	Otter Trawl	OPEN	all	NE	sm	1.46	0.648	0.000061	0.00		0.000000	19.87	0.319	0.000837
11	Otter Trawl	OPEN	all	NE	lg	7.21	0.352	0.000305	0.00		0.000000	141.15	0.102	0.005978
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.04	0.600	0.000128
14	Scallop Trawl	OPEN	GEN	MA	all	0.00		0.000000	0.00		0.000000	1.43	0.800	0.016031
17+	Twin Trawl	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	3.12	0.613	0.003425
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.00		0.000000	0.10	0.752	0.000660
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.08	0.550	0.000030	0.00		0.000000	4.32	0.313	0.001560
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	2.12	0.950	0.001152	0.09	0.324	0.000049
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.00		0.000000	4.49	0.856	0.001977	0.29	0.267	0.000128
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.11	0.876	0.000038	0.00		0.000000	0.06	0.506	0.000021
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	7.64	0.195	0.002405	0.00		0.000000	0.42	0.155	0.000134
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.19	0.382	0.000024	0.38	0.956	0.000047	0.10	0.559	0.000012
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.38	0.461	0.000083
41	Scallop Dredge	AA	LIM	MA	all	0.07	0.569	0.000001	0.00		0.000000	6.38	0.239	0.000106
42	Scallop Dredge	AA	LIM	NE	all	0.01	0.313	0.000010	0.00		0.000000	14.26	0.287	0.011702
43	Scallop Dredge	OPEN	GEN	MA	all	0.02	0.619	0.000005	0.00		0.000000	11.49	0.153	0.003734
44	Scallop Dredge	OPEN	GEN	NE	all	0.08	0.903	0.000031	0.00		0.000000	9.56	0.189	0.003556
45	Scallop Dredge	OPEN	LIM	MA	all	0.01	0.725	0.000001	0.00		0.000000	43.68	0.255	0.002552
46	Scallop Dredge	OPEN	LIM	NE	all	0.59	0.273	0.000014	0.00		0.000000	193.87	0.266	0.004683
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.02	0.856	0.000121
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	1.10	0.564	0.001258	0.00		0.000000	0.01	1.865	0.000009
57	Pots and Traps, Lobster	OPEN	all	NE	all	27.46	0.753	0.002065	0.00		0.000000	0.16	0.411	0.000012
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.07	0.835	0.000001
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.36	0.899	0.000006
					TOTAL	49.06	0.427		7.53	0.580		752.96	0.091	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						WINTER FLOUNDER (*Pseudopleuronectes americanus*)			WITCH FLOUNDER (*Glyptocephalus cynoglossus*)			YELLOWFIN TUNA (*Thunnus albacares*)		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
2	Longline	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
8	Otter Trawl	OPEN	all	MA	sm	20.03	0.275	0.001329	12.43	0.516	0.000825	0.06	0.988	0.000004
9	Otter Trawl	OPEN	all	MA	lg	20.99	0.211	0.003118	3.62	0.293	0.000537	0.00		0.000000
10	Otter Trawl	OPEN	all	NE	sm	35.98	0.314	0.001515	10.54	0.299	0.000444	0.00		0.000000
11	Otter Trawl	OPEN	all	NE	lg	16.42	0.119	0.000695	36.60	0.110	0.001550	0.00		0.000000
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
14	Scallop Trawl	OPEN	GEN	MA	all	0.33	0.853	0.003699	0.07	1.153	0.000755	0.00		0.000000
17+	Twin Trawl	OPEN	all	MA	all	0.24	0.641	0.000264	0.20	0.850	0.000216	0.00		0.000000
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.00		0.000000	0.01	1.015	0.000087	0.00		0.000000
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	0.06	0.450	0.000021	1.86	0.284	0.000671	0.00		0.000000
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	0.00		0.000000	0.00		0.000000
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.01	0.635	0.000006	0.06	0.595	0.000028	0.00		0.000000
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.00		0.000000	0.02	0.716	0.000006	0.00		0.000000
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.34	0.189	0.000106	0.09	0.201	0.000028	0.00		0.000000
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.06	0.488	0.000008	0.00		0.000000	0.00		0.000000
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
41	Scallop Dredge	AA	LIM	MA	all	0.01	0.912	0.000000	1.27	0.224	0.000021	0.00		0.000000
42	Scallop Dredge	AA	LIM	NE	all	0.73	0.253	0.000601	0.14	0.304	0.000116	0.00		0.000000
43	Scallop Dredge	OPEN	GEN	MA	all	0.66	0.218	0.000214	0.21	0.290	0.000070	0.00		0.000000
44	Scallop Dredge	OPEN	GEN	NE	all	7.09	0.197	0.002636	1.64	0.977	0.000611	0.00		0.000000
45	Scallop Dredge	OPEN	LIM	MA	all	3.64	0.303	0.000212	1.92	0.181	0.000112	0.00		0.000000
46	Scallop Dredge	OPEN	LIM	NE	all	103.40	0.163	0.002498	20.15	0.219	0.000487	0.00		0.000000
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	0.00		0.000000	0.00		0.000000
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.02	0.810	0.000020	0.00		0.000000	0.00		0.000000
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.28	0.387	0.000021	0.03	0.911	0.000002	0.00		0.000000
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.22	0.835	0.000002	0.00		0.000000	0.00		0.000000
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	1.37	0.346	0.000022	0.00		0.000000	0.00		0.000000
					TOTAL	211.85	0.102		90.86	0.105		0.06	0.988	

See text for fleet abbreviations.

Table 4B, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) and combined discard-to-kept (d/k) ratio, by fleet and species or group in 2015.

						YELLOWTAIL FLOUNDER (*Limanda ferruginea*)			All Species Combined		
Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV	d/k ratio	discards	CV	d/k ratio
1	Longline	OPEN	all	MA	all	0.00		0.000000	58.81	0.338	0.135816
2	Longline	OPEN	all	NE	all	0.00		0.000000	375.06	0.135	0.243315
4	Hand Line	OPEN	all	NE	all	0.00		0.000000	61.91	0.365	0.053263
8	Otter Trawl	OPEN	all	MA	sm	1.32	0.459	0.000087	6,507.19	0.183	0.431671
9	Otter Trawl	OPEN	all	MA	lg	8.81	0.493	0.001309	11,379.25	0.102	1.690539
10	Otter Trawl	OPEN	all	NE	sm	13.46	0.349	0.000567	7,051.85	0.137	0.297021
11	Otter Trawl	OPEN	all	NE	lg	20.83	0.119	0.000882	20,915.07	0.081	0.885770
12	Scallop Trawl	AA	GEN	MA	all	0.00		0.000000	135.65	0.628	0.385503
14	Scallop Trawl	OPEN	GEN	MA	all	0.44	0.531	0.004961	161.39	0.352	1.811130
17+	Twin Trawl	OPEN	all	MA	all	0.05	0.847	0.000054	530.29	0.320	0.581416
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	0.06	0.846	0.000434	97.87	0.732	0.670915
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1.85	0.711	0.000667	1,112.43	0.150	0.401828
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	0.00		0.000000	434.35	0.461	0.235943
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	0.03	0.732	0.000012	186.30	0.443	0.082080
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	0.01	0.881	0.000005	466.81	0.105	0.158597
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	0.60	0.203	0.000190	1,269.25	0.141	0.399718
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	0.03	0.673	0.000004	1,313.90	0.097	0.165480
38	Purse Seine	OPEN	all	NE	all	0.00		0.000000	14.37	0.332	0.000624
39	Scallop Dredge	AA	GEN	MA	all	0.00		0.000000	1,116.19	0.204	0.242281
41	Scallop Dredge	AA	LIM	MA	all	0.02	0.609	0.000000	6,408.96	0.089	0.106105
42	Scallop Dredge	AA	LIM	NE	all	3.28	0.229	0.002693	357.32	0.114	0.293119
43	Scallop Dredge	OPEN	GEN	MA	all	2.23	0.172	0.000724	1,939.59	0.183	0.630450
44	Scallop Dredge	OPEN	GEN	NE	all	11.77	0.221	0.004380	1,027.91	0.123	0.382399
45	Scallop Dredge	OPEN	LIM	MA	all	13.55	0.259	0.000791	12,304.76	0.133	0.718938
46	Scallop Dredge	OPEN	LIM	NE	all	56.57	0.169	0.001367	9,670.75	0.088	0.233611
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.00		0.000000	5.46	0.290	0.007030
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	0.00		0.000000	22.84	1.099	0.000455
51	Pots and Traps, Fish	OPEN	all	MA	all	0.00		0.000000	72.59	0.444	0.436310
52	Pots and Traps, Fish	OPEN	all	NE	all	0.00		0.000000	57.87	0.158	0.521497
53	Pots and Traps, Conch	OPEN	all	MA	all	0.00		0.000000	213.97	0.564	0.240471
54	Pots and Traps, Conch	OPEN	all	NE	all	0.00		0.000000	502.96	0.136	1.379597
56	Pots and Traps, Lobster	OPEN	all	MA	all	0.00		0.000000	553.63	0.486	0.634163
57	Pots and Traps, Lobster	OPEN	all	NE	all	0.00		0.000000	9,594.97	0.156	0.721489
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	0.00		0.000000	2,722.60	0.707	0.019368
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	0.00		0.000000	897.75	0.189	0.014691
					TOTAL	134.92	0.094		99,541.87	0.041	

See text for fleet abbreviations.

Table 5. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 165 individual species and groups considered in the National Bycatch Report First Edition Update 3 in calendar years 2014 (34 fleets) and 2015 (35 fleets). See Tables 4A-4B for the list of fleets that compose the totals for each year. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States.

	2014		2015	
SPECIES/GROUP	Discarded	CV	Discarded	CV
ACADIAN REDFISH (*Sebastes fasciatus*)	452.84	0.259	122.07	0.176
AFRICAN POMPANO (*Alectis ciliaris*)	0.00		< 0.01	1.072
ALEWIFE (*Alosa pseudoharengus*)	59.67	0.167	83.89	0.284
AMBERJACK, UNC (*Seriola*)	0.04	0.387	0.09	0.409
AMERICAN EEL (*Anguilla rostrata*)	0.06	2.067	0.01	0.671
AMERICAN LOBSTER (*Homarus americanus*)	10,885.98	0.148	7,394.23	0.151
AMERICAN PLAICE (*Hippoglossoides platessoides*)	94.99	0.074	94.40	0.073
AMERICAN SHAD (*Alosa sapidissima*)	51.37	0.217	48.58	0.161
ATLANTIC ANGEL SHARK (*Squatina dumeril*)	28.46	2.271	25.30	0.232
ATLANTIC BONITO (*Sarda sarda*)	0.33	0.571	0.25	0.519
ATLANTIC COD (*Gadus morhua*)	98.26	0.258	119.25	0.130
ATLANTIC CROAKER (*Micropogonias undulatus*)	97.96	1.374	33.41	0.701
ATLANTIC HAGFISH (*Myxine glutinosa*)	0.12	0.588	0.77	0.489
ATLANTIC HALIBUT (*Hippoglossus hippoglossus*)	32.48	0.071	44.94	0.155
ATLANTIC HERRING (*Clupea harengus*)	86.34	0.509	136.31	0.273
ATLANTIC MACKEREL (*Scomber scombrus*)	49.26	0.385	15.49	0.268
ATLANTIC MOONFISH (*Selene setapinnis*)	0.63	0.411	2.95	1.027
ATLANTIC SALMON (*Salmo salar*)	0.00		0.00	
ATLANTIC SHARPNOSE SHARK (*Rhizoprionodon terraenovae*)	1.39	0.656	20.37	0.897
ATLANTIC SHEEPSHEAD (*Archosargus probatocephalus*)	0.12	1.228	0.01	0.811
ATLANTIC STURGEON (*Acipenser oxyrinchus*)	30.84	0.326	23.34	0.207
ATLANTIC WOLFFISH (*Anarhichas lupus*)	16.32	0.130	19.08	0.144
BASKING SHARK (*Cetorhinus maximus*)	500.01	0.245	391.97	0.298
BENTHIC SPECIES, OTHER	18,183.80	0.063	14,823.15	0.115
BIGEYE SCAD (*Selar crumenophthalmus*)	< 0.01	0.840	0.13	0.988
BIGEYE THRESHER SHARK (*Alopias superciliosus*)	2.94	0.795	4.10	0.344
BIGEYE TUNA (*Thunnus obesus*)	0.00		0.85	1.065
BIGNOSE SHARK (*Carcharhinus altimus*)	3.00	0.676	0.31	1.041

Table 5, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 165 individual species and groups considered in the National Bycatch Report First Edition Update 3 in calendar years 2014 (34 fleets) and 2015 (35 fleets). See Tables 4A-4B for the list of fleets that compose the totals for each year. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States.

	2014		2015	
SPECIES/GROUP	Discarded	CV	Discarded	CV
BIVALVES, OTHER (CLASS: Bivalvia)	55.71	0.239	148.59	0.311
BLACK DRUM (*Pogonias cromis*)	3.30	0.954	5.01	0.350
BLACK SEA BASS (*Centropristis striata*)	482.51	0.160	495.37	0.133
BLACKFIN TUNA (*Thunnus atlanticus*)	0.00		0.00	
BLACKNOSE SHARK (*Carcharhinus acronotus*)	0.00		0.35	0.474
BLACKTIP SHARK (*Carcharhinus limbatus*)	0.00		2.50	1.289
BLUE RUNNER (*Caranx crysos*)	0.27	0.821	0.11	0.573
BLUE SHARK (*Prionace glauca*)	26.74	0.445	31.25	0.360
BLUEBACK HERRING (*Alosa aestivalis*)	18.55	0.332	5.32	0.482
BLUEFIN TUNA (*Thunnus thynnus*)	1.07	0.544	20.80	0.572
BLUEFISH (*Pomatomus saltatrix*)	38.88	0.225	21.35	0.218
BLUELINE TILEFISH (*Caulolatilus microps*)	0.51	0.382	0.72	0.345
BONNETHEAD SHARK (*Sphyrna tiburo*)	0.40	0.569	0.38	0.976
BONY FISHES, OTHER	428.59	0.891	322.28	0.389
BUTTERFISH (*Peprilus triacanthus*)	1,176.17	0.170	1,020.20	0.170
CARCHARHINID SHARK, UNC (*Carcharhinus*)	47.25	0.340	13.32	0.415
CHAIN DOGFISH (*Scyliorhinus retifer*)	44.79	0.236	30.40	0.215
COBIA (*Rachycentron canadum*)	1.27	0.569	2.61	0.626
CREVALLE JACK (*Caranx hippos*)	< 0.01	0.659	0.01	0.638
CROAKERS AND DRUMS, OTHER (FAMILY: Sciaenidae)	2.43	0.253	5.21	0.373
CUNNER (*Tautogolabrus adspersus*)	10.69	0.640	6.66	0.230
CUSK (*Brosme brosme*)	18.53	1.567	23.25	0.797
DECAPOD CRABS (ORDER: Decapoda)	1,960.96	0.426	1,881.19	0.202
DECAPOD SHRIMPS (ORDER: Decapoda)	4.10	0.719	1.15	1.248
DEMERSAL SPECIES, OTHER	94.09	0.098	82.03	0.186
DOLPHINFISH, UNC (*Coryphaena*)	0.41	0.381	0.00	
DORIES, OTHER (ORDER: Zeiformes)	78.63	0.150	53.34	0.172
DUSKY SHARK (*Carcharhinus obscurus*)	1.53	1.333	7.52	0.586

Table 5, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 165 individual species and groups considered in the National Bycatch Report First Edition Update 3 in calendar years 2014 (34 fleets) and 2015 (35 fleets). See Tables 4A-4B for the list of fleets that compose the totals for each year. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States.

	2014		2015	
SPECIES/GROUP	Discarded	CV	Discarded	CV
FINETOOTH SHARK (*Carcharhinus isodon*)	0.00		0.98	0.468
FLATFISHES, OTHER (ORDER: Pleuronectiformes)	610.96	0.087	545.75	0.094
FLORIDA POMPANO (*Trachinotus carolinus*)	0.00		0.09	0.401
SUMMER FLOUNDER (*Paralichthys dentatus*)	935.23	0.069	909.12	0.075
GADIFORMES, OTHER (ORDER: Gadiformes)	575.42	0.195	451.57	0.210
GASTROPOD SNAILS, OTHER (CLASS: Gastropoda)	182.72	0.594	194.02	0.239
TILEFISH (*Lopholatilus chamaeleonticeps*)	6.88	0.387	9.22	0.545
GREAT HAMMERHEAD SHARK (*Sphyrna mokarran*)	0.00		0.00	
GREENLAND SHARK (*Somniosus microcephalus*)	0.00		0.00	
GROUPERS, UNC (Serranidae)	0.04	1.336	0.01	0.930
HADDOCK (*Melanogrammus aeglefinus*)	1,297.16	0.192	1,479.35	0.149
HAMMERHEAD SHARK, UNC (Sphyrnidae)	9.78	0.385	2.34	0.856
HERRINGS, OTHER (ORDER: Clupeiformes)	56.21	0.339	47.25	0.648
HICKORY SHAD (*Alosa mediocris*)	0.53	0.442	0.23	0.579
HOGFISH (*Lachnolaimus maximus*)	0.00		0.00	
HORSESHOE CRAB (*Limulus polyphemus*)	338.48	0.164	881.10	0.188
JACK, UNC (Carangidae)	0.17	0.421	1.70	0.490
JONAH CRAB (*Cancer borealis*)	2,849.76	0.264	3,751.75	0.124
KING MACKEREL (*Scomberomorus cavalla*)	0.00		0.36	0.670
LITTLE TUNA (TUNNY) (*Euthynnus alletteratus*)	0.79	0.494	1.82	0.779
LONGFIN INSHORE SQUID (*Doryteuthis [Amerigo] pealeii*)	287.06	0.415	143.63	0.262
LOOKDOWN (*Selene vomer*)	0.00		< 0.01	0.620
MACKEREL SCAD (*Decapterus macarellus*)	< 0.01	0.839	0.00	
MACKERELS, OTHER (FAMILY: Scombridae)	36.74	0.226	41.52	0.383
MARLIN, UNC (Istiophoridae)	0.00		0.00	
MENHADEN, UNC (*Brevoortia*)	72.37	1.529	168.87	0.496
MONKFISH (GOOSEFISH) (*Lophius americanus*)	2,436.83	0.072	2,107.02	0.088

Table 5, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 165 individual species and groups considered in the National Bycatch Report First Edition Update 3 in calendar years 2014 (34 fleets) and 2015 (35 fleets). See Tables 4A-4B for the list of fleets that compose the totals for each year. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States.

	2014		2015	
SPECIES/GROUP	**Discarded**	**CV**	**Discarded**	**CV**
NIGHT SHARK (*Carcharhinus signatus*)	5.05	0.648	1.41	0.876
NORTHERN SHORTFIN SQUID (*Illex illecebrosus*)	413.42	0.655	442.90	0.239
OCEAN POUT (*Zoarces americanus*)	66.25	0.277	93.40	0.157
OCEAN QUAHOG (*Arctica islandica*)	2.65	0.508	1,732.91	1.115
OFFSHORE HAKE (*Merluccius albidus*)	4.11	0.608	3.62	1.003
PANDALID SHRIMP (NORTHERN) (*Pandalus borealis*)	0.05	0.675	0.10	0.870
PELAGIC SHARKS, UNC (Lamniformes)	0.46	0.865	0.16	0.937
PELAGIC SPECIES, OTHER	16.31	0.269	13.71	1.179
PENAEID SHRIMP (SOUTHERN), UNC (*Penaeus*)	0.01	0.582	< 0.01	1.934
PERCIFORMES, OTHER (DEMERSAL) (ORDER: Perciformes)	7.21	0.450	9.16	0.201
PERCIFORMES, OTHER (PELAGIC) (ORDER: Perciformes)	0.97	0.494	0.34	0.306
PIGFISH (*Orthopristis chrysoptera*)	0.06	0.655	0.35	1.011
PILOTFISH (*Naucrates ductor*)	0.01	0.546	0.02	0.833
PINFISH (*Lagodon rhomboides*)	0.02	0.877	0.12	0.499
PIPEFISHES (DEMERSAL) (ORDER: Gasterosteiformes)	0.32	0.400	1.54	0.749
PIPEFISHES (PELAGIC) (ORDER: Gasterosteiformes)	0.02	0.391	0.07	0.518
POLLOCK (*Pollachius virens*)	102.40	0.088	127.12	0.134
PORBEAGLE SHARK (*Lamna nasus*)	107.72	0.229	106.76	0.171
PORGY, UNC (Sparidae)	< 0.01	0.661	< 0.01	0.461
QUAHOG (HARD SHELL CLAM) (*Mercenaria mercenaria*)	0.41	0.619	0.07	0.764
RAY-FINNED FISHES, OTHER (DEMERSAL) (CLASS: Actinopterygii)	32.24	0.178	52.98	0.220
RAY-FINNED FISHES, OTHER (PELAGIC) (CLASS: Actinopterygii)	0.03	0.639	0.71	0.335
RAYS, OTHER (DEMERSAL) (ORDER: Myliobatiformes)	49.94	0.221	137.46	0.297
RAYS, OTHER (PELAGIC) (ORDER: Myliobatiformes)	0.00		1.05	0.496
RED DEEPSEA CRAB (*Chaceon quinquedens*)	21.73	0.351	53.93	0.385
RED DRUM (*Sciaenops ocellatus*)	0.04	0.836	1.90	0.673
RED HAKE (*Urophycis chuss*)	845.00	0.160	1,504.12	0.221

Table 5, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 165 individual species and groups considered in the National Bycatch Report First Edition Update 3 in calendar years 2014 (34 fleets) and 2015 (35 fleets). See Tables 4A-4B for the list of fleets that compose the totals for each year. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States.

	2014		2015	
SPECIES/GROUP	**Discarded**	**CV**	**Discarded**	**CV**
RED SNAPPER (*Lutjanus campechanus*)	0.00		0.00	
ROUGH SCAD (*Trachurus lathami*)	3.33	0.400	1.69	0.623
SAND PERCH (*Diplectrum formosum*)	0.00		0.00	
SAND TIGER SHARK (*Carcharias taurus*)	5.52	1.557	13.69	0.684
SANDBAR SHARK (*Carcharhinus plumbeus*)	164.02	0.440	38.59	0.192
SCALLOPED HAMMERHEAD SHARK (*Sphyrna lewini*)	38.23	0.446	8.49	0.397
SCORPIONFISHES, OTHER (ORDER: Scorpaeniformes)	1,961.11	0.179	1,669.02	0.128
SCUP (*Stenotomus chrysops*)	549.50	0.193	1,042.17	0.149
SEA BASS, UNC (*Centropristis*)	0.22	0.448	0.17	0.813
SEA SCALLOP (*Placopecten magellanicus*)	2,566.28	0.108	6,881.27	0.089
SHARPNOSE SEVENGILL SHARK (*Heptranchias perlo*)	0.00		0.02	1.127
SHARK, UNC (Chondrichthyes)	386.45	1.019	28.00	0.387
SHORTFIN MAKO SHARK (*Isurus oxyrinchus*)	0.86	0.487	1.89	0.527
SILKY SHARK (*Carcharhinus falciformis*)	0.58	0.621	0.00	
SILVER HAKE (*Merluccius bilinearis*)	1,327.35	0.155	697.67	0.104
SKATE COMPLEX (FAMILY: Rajidae)	37,279.68	0.041	38,200.16	0.053
SKIPJACK TUNA (*Katsuwonus pelamis*)	0.25	0.451	0.00	
SMALLTOOTH SAND SHARK (*Odontaspis ferox*)	0.00		2.16	0.539
SMOOTH DOGFISH (*Mustelus canis*)	478.77	1.710	417.24	0.162
SMOOTH HAMMERHEAD SHARK (*Sphyrna zygaena*)	5.72	0.653	0.01	2.237
SNAPPER, UNC (Lutjanidae)	0.00		0.00	
SNOWY GROUPER (*Epinephelus niveatus*)	< 0.01	1.229	0.02	0.740
SOFT CORAL, UNC (Alcyonacea)	0.03	0.603	0.07	0.699
SPADEFISHES, UNC (Ephippidae)	0.06	0.676	0.33	0.633
SPANISH MACKEREL (*Scomberomorus maculatus*)	0.11	0.474	0.48	0.444
SPINNER SHARK (*Carcharhinus brevipinna*)	5.75	5.348	5.60	0.466
SPINY DOGFISH (*Squalus acanthias*)	8,128.09	0.077	5,774.75	0.083

Table 5, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 165 individual species and groups considered in the National Bycatch Report First Edition Update 3 in calendar years 2014 (34 fleets) and 2015 (35 fleets). See Tables 4A-4B for the list of fleets that compose the totals for each year. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States.

	2014		2015	
SPECIES/GROUP	**Discarded**	**CV**	**Discarded**	**CV**
SPOT (*Leiostomus xanthurus*)	12.95	0.881	1.36	0.715
SPOTTED SEATROUT (*Cynoscion nebulosus*)	0.00		0.03	0.592
SQUIDS, UNC (Loliginidae)	3.37	0.812	6.83	0.832
STINGRAYS, OTHER (DEMERSAL) (FAMILY: Dasyatidae)	80.56	0.217	54.28	0.230
STINGRAYS, OTHER (PELAGIC) (FAMILY: Dasyatidae)	0.04	0.795	0.18	0.594
STONY CORAL (Scleractinia)	0.00		0.13	0.723
STRIPED BASS (*Morone saxatilis*)	75.90	0.263	31.41	0.344
ATLANTIC SURFCLAM (*Spisula solidissima*)	3.11	0.272	90.96	0.856
SWORDFISH (*Xiphias gladius*)	5.45	0.261	9.32	0.500
TAUTOG (*Tautoga onitis*)	22.96	0.421	11.31	0.210
TETRAODONTIFORMES, OTHER (DEMERSAL) (ORDER: Tetraodontiformes)	1.76	0.392	1.77	0.417
TETRAODONTIFORMES, OTHER (PELAGIC) (ORDER: Tetraodontiformes)	20.40	0.327	33.86	0.234
THRESHER SHARK (*Alopias vulpinus*)	11.60	0.315	25.97	0.347
TIGER SHARK (*Galeocerdo cuvier*)	91.18	0.457	9.65	0.598
TILEFISH, UNC (Malacanthidae)	< 0.01	2.332	0.05	0.933
TRIGGERFISHES, UNC (Balistidae)	3.28	0.466	1.56	1.549
TUNA, UNC (*Thunnus*)	5.28	0.582	0.80	0.687
WAHOO (*Acanthocybium solandri*)	0.00		0.17	1.252
WEAKFISH (*Cynoscion regalis*)	12.62	0.658	14.76	0.438
WHELKS, OTHER (FAMILY: Melongenidae)	276.97	0.159	606.89	0.135
WHITE HAKE (*Urophycis tenuis*)	71.39	0.483	49.06	0.427
WHITE MARLIN (*Tetrapturus albidus*)	0.00		0.00	
WHITE SHARK (*Carcharodon carcharias*)	2.67	0.725	7.53	0.580
WINDOWPANE (*Scophthalmus aquosus*)	671.10	0.057	752.96	0.091
WINTER FLOUNDER (*Pseudopleuronectes americanus*)	208.65	0.088	211.85	0.102
WITCH FLOUNDER (*Glyptocephalus cynoglossus*)	108.53	0.157	90.86	0.105

Table 5, continued. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 165 individual species and groups considered in the National Bycatch Report First Edition Update 3 in calendar years 2014 (34 fleets) and 2015 (35 fleets). See Tables 4A-4B for the list of fleets that compose the totals for each year. Light gray shading indicates the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States.

	2014		2015	
SPECIES/GROUP	Discarded	CV	Discarded	CV
YELLOWFIN TUNA (*Thunnus albacares*)	0.00		0.06	0.988
YELLOWTAIL FLOUNDER (*Limanda ferruginea*)	216.21	0.078	134.92	0.094
TOTAL	101,356.08	0.036	99,541.87	0.041

Table 6A. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States, by fleet in 2014.

Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV
1	Longline	OPEN	all	MA	all	2.91	0.566
2	Longline	OPEN	all	NE	all	22.97	0.804
3	Hand Line	OPEN	all	MA	all	0.86	0.993
4	Hand Line	OPEN	all	NE	all	27.98	0.459
8	Otter Trawl	OPEN	all	MA	sm	4,265.62	0.111
9	Otter Trawl	OPEN	all	MA	lg	10,011.72	0.087
10	Otter Trawl	OPEN	all	NE	sm	5,193.42	0.090
11	Otter Trawl	OPEN	all	NE	lg	16,898.95	0.062
14	Scallop Trawl	OPEN	GEN	MA	all	366.25	0.216
17+	Twin Trawl	OPEN	all	MA	all	563.37	0.778
21+	Otter Trawl, Ruhle	OPEN	all	NE	sm	100.51	0.151
23+	Otter Trawl, Haddock Separator	OPEN	all	NE	sm	39.90	0.059
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	575.17	0.145
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	4.90	3.755
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	104.76	0.337
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	480.37	0.118
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1,721.19	0.076
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	1,230.98	0.083
38	Purse Seine	OPEN	all	NE	all	4.64	0.448
39	Scallop Dredge	AA	GEN	MA	all	13.85	0.576
41	Scallop Dredge	AA	LIM	MA	all	274.62	0.241
42	Scallop Dredge	AA	LIM	NE	all	2,955.05	0.094
43	Scallop Dredge	OPEN	GEN	MA	all	976.69	0.108
44	Scallop Dredge	OPEN	GEN	NE	all	426.08	0.128
45	Scallop Dredge	OPEN	LIM	MA	all	9,349.48	0.055
46	Scallop Dredge	OPEN	LIM	NE	all	4,095.51	0.122
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.51	0.294
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	139.71	0.730
51	Pots and Traps, Fish	OPEN	all	MA	all	65.04	0.515
52	Pots and Traps, Fish	OPEN	all	NE	all	32.29	0.327
53	Pots and Traps, Conch	OPEN	all	MA	all	0.31	0.926
54	Pots and Traps, Conch	OPEN	all	NE	all	1.10	0.377
56	Pots and Traps, Lobster	OPEN	all	MA	all	10.13	0.432
57	Pots and Traps, Lobster	OPEN	all	NE	all	119.81	0.369
					TOTAL	60,076.66	0.030

Table 6B. Estimated discards (live weight, metric tons) with associated coefficient of variation (CV) for the 34 fish and invertebrate species managed under the 13 New England Fishery Management Council (NEFMC) and Mid-Atlantic Fishery Management Council (MAFMC) developed fishery management plans implemented in the waters off the northeastern United States, by fleet in 2015.

Row	Gear Type	Access Area	Trip Category	Area Fished	Mesh Group	discards	CV
1	Longline	OPEN	all	MA	all	27.69	0.614
2	Longline	OPEN	all	NE	all	295.80	0.346
4	Hand Line	OPEN	all	NE	all	25.94	0.364
8	Otter Trawl	OPEN	all	MA	sm	4,778.47	0.129
9	Otter Trawl	OPEN	all	MA	lg	9,854.98	0.097
10	Otter Trawl	OPEN	all	NE	sm	6,078.88	0.100
11	Otter Trawl	OPEN	all	NE	lg	18,127.99	0.083
12	Scallop Trawl	AA	GEN	MA	all	123.95	0.598
14	Scallop Trawl	OPEN	GEN	MA	all	148.59	0.358
17+	Twin Trawl	OPEN	all	MA	all	369.60	0.330
22	Otter Trawl, Ruhle	OPEN	all	NE	lg	19.91	0.236
24	Otter Trawl, Haddock Separator	OPEN	all	NE	lg	1,025.27	0.134
31	Sink, Anchor, Drift Gillnet	OPEN	all	MA	sm	206.67	0.876
32	Sink, Anchor, Drift Gillnet	OPEN	all	MA	lg	123.51	0.599
33	Sink, Anchor, Drift Gillnet	OPEN	all	MA	xlg	370.93	0.111
35	Sink, Anchor, Drift Gillnet	OPEN	all	NE	lg	1,043.07	0.160
36	Sink, Anchor, Drift Gillnet	OPEN	all	NE	xlg	985.34	0.073
38	Purse Seine	OPEN	all	NE	all	1.20	1.166
39	Scallop Dredge	AA	GEN	MA	all	716.04	0.251
41	Scallop Dredge	AA	LIM	MA	all	4,177.80	0.106
42	Scallop Dredge	AA	LIM	NE	all	234.75	0.160
43	Scallop Dredge	OPEN	GEN	MA	all	862.36	0.096
44	Scallop Dredge	OPEN	GEN	NE	all	442.68	0.147
45	Scallop Dredge	OPEN	LIM	MA	all	4,335.41	0.082
46	Scallop Dredge	OPEN	LIM	NE	all	7,013.50	0.100
48+	Mid-water Paried & Single Trawl	AA	all	NE	all	0.28	0.305
50	Mid-water Paired & Single Trawl	OPEN	all	NE	all	1.60	0.670
51	Pots and Traps, Fish	OPEN	all	MA	all	37.11	0.346
52	Pots and Traps, Fish	OPEN	all	NE	all	39.31	0.226
53	Pots and Traps, Conch	OPEN	all	MA	all	0.78	2.521
54	Pots and Traps, Conch	OPEN	all	NE	all	1.05	1.059
56	Pots and Traps, Lobster	OPEN	all	MA	all	36.33	0.235
57	Pots and Traps, Lobster	OPEN	all	NE	all	159.66	0.192
68	Ocean Quahog/Surfclam Dredge	OPEN	all	MA	all	2,527.58	0.769
69	Ocean Quahog/Surfclam Dredge	OPEN	all	NE	all	427.43	0.148
					TOTAL	64,621.46	0.046

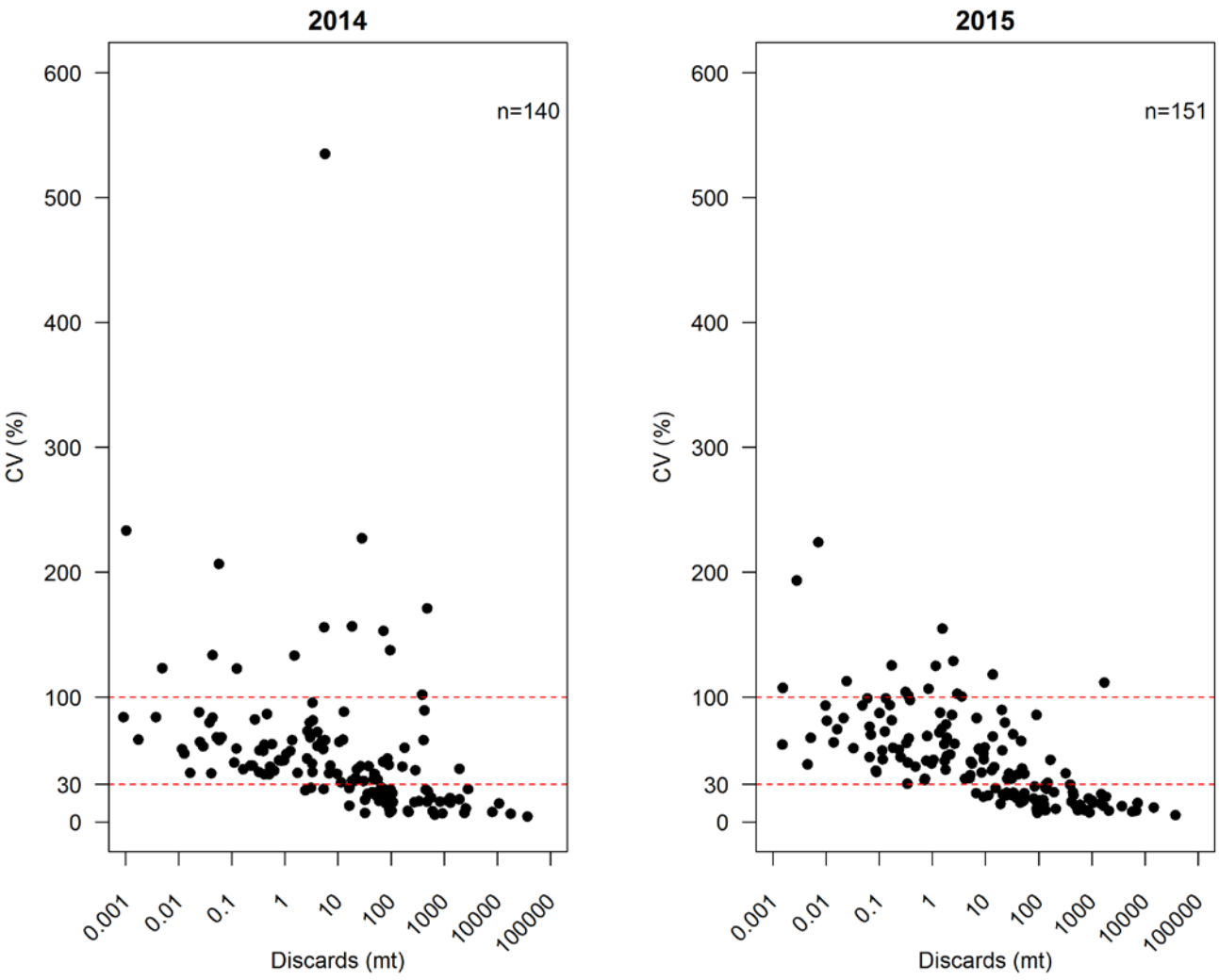


Figure 1. Estimated discards versus coefficient of variation (CV), with reference lines at 30% and 100%, by species or group, for calendar years 2014 (left) and 2015 (right).

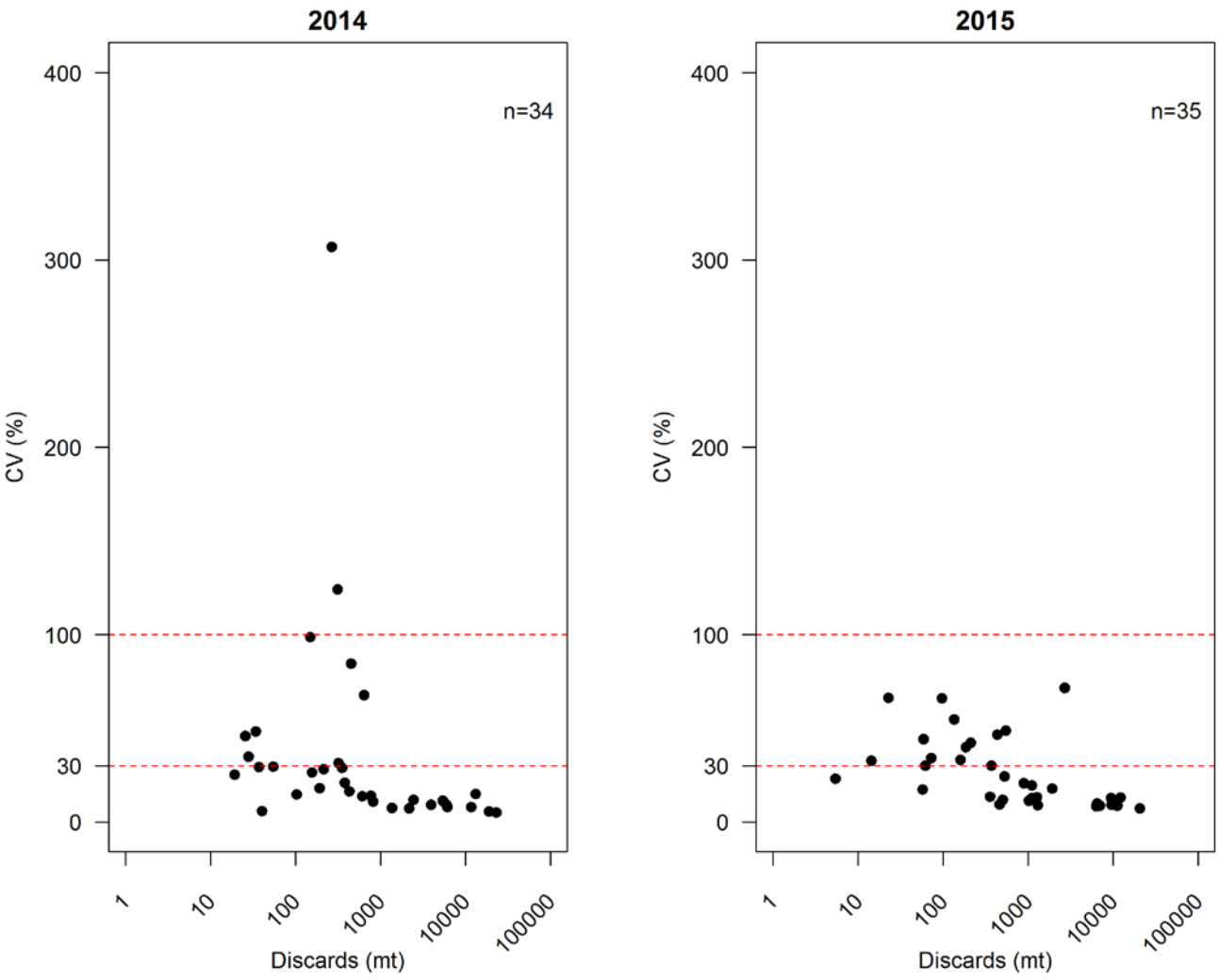


Figure 2. Estimated discards versus coefficient of variation (CV), with reference lines at 30% and 100%, by fleet, for calendar years 2014 (left) and 2015 (right).

Appendix: Overview of the 2014 and 2015 VTR-AMS-OBS analytical datasets

Murali Mood and Michael Palmer, NEFSC Population Dynamics

Rationale and Process

Access to data in the Vessel Monitoring System (VMS), which includes a vessel's activity declaration code, is restricted. However, the VMS declaration code is also recorded in the Allocation Management System (AMS), which is more readily available to staff at the Northeast Fisheries Science Center (NEFSC). This initiative reflects an attempt to construct limited (i.e., not including VMS data) analytical data sets for 2014 and 2015 that contain as accurate information as is available in the following core data sources: AMS, Vessel Trip Report (VTR) and Northeast Fisheries Observer Program and At Sea Monitor Database (OBDBS).

Since a unique trip identifier to link across the datasets does not exist, the stored Oracle[9] package TRIP_OBS_VTR_NOVMS matches information with one procedure obs_vtr_trip (p_year). This procedure is called by a stand-alone procedure RUN_LOAD_YEARLY_TRIP_AMS_VTR (P_YEAR), which in turn is called by the shell script load_trp_vtr_obs_single_year.tcsh; this shell script is scheduled to run on a weekly basis.

The process stored in the procedure is a series of *select* and *insert* statements. Data are selected based on the given parameter and inserted into temporary tables. The final data are selected from these temporary tables and inserted into a subsequent table, which serves as a base table on top of which some views are built for the given year. This approach is efficient when dealing with large amounts of data (~100,000 trip records), as exist in the VTR/AMS data tables. Once the final data have been inserted, the temporary tables are dropped.

Table/view summary

T_TRIP_OBS_VTR_yyyy (table): Base table that contains the full matched set of AMS activity declarations, VTR trips, and observer trips.

Matching procedures (see Appendix Figure 1):

1. VTR data (from VESLOG series) matched by using outer join on permit number or hull identifier and trip midpoint. The VESLOG trip midpoint is matched between the OBDBS sail and landing dates. **note VESLOG.TRIPID has been recoded as DOCID.*
    - Outer join condition: ((obtrp.hullnum1 = veslog.hullnum) OR (obtrp.permit1 = veslog.permit)) AND (veslog.datesail + (veslog.datelnd1 - veslog.datesail) / 2) BETWEEN obtrp.datesail AND obtrp.dateland

2. The VTR/Observer data product was matched to AMS data by using an outer join on permit number **or** hull identifier and the trip midpoint. The VESLOG trip midpoint is matched between AMS sail and landing dates.
    - Outer join condition: ams.permit_nbr = veslog.permit AND (veslog.date_sail + (veslog.date_land - veslog.date_sail) / 2) BETWEEN ams.date_sail AND ams.date_land

[9] Oracle Corporation, Redwood City, CA

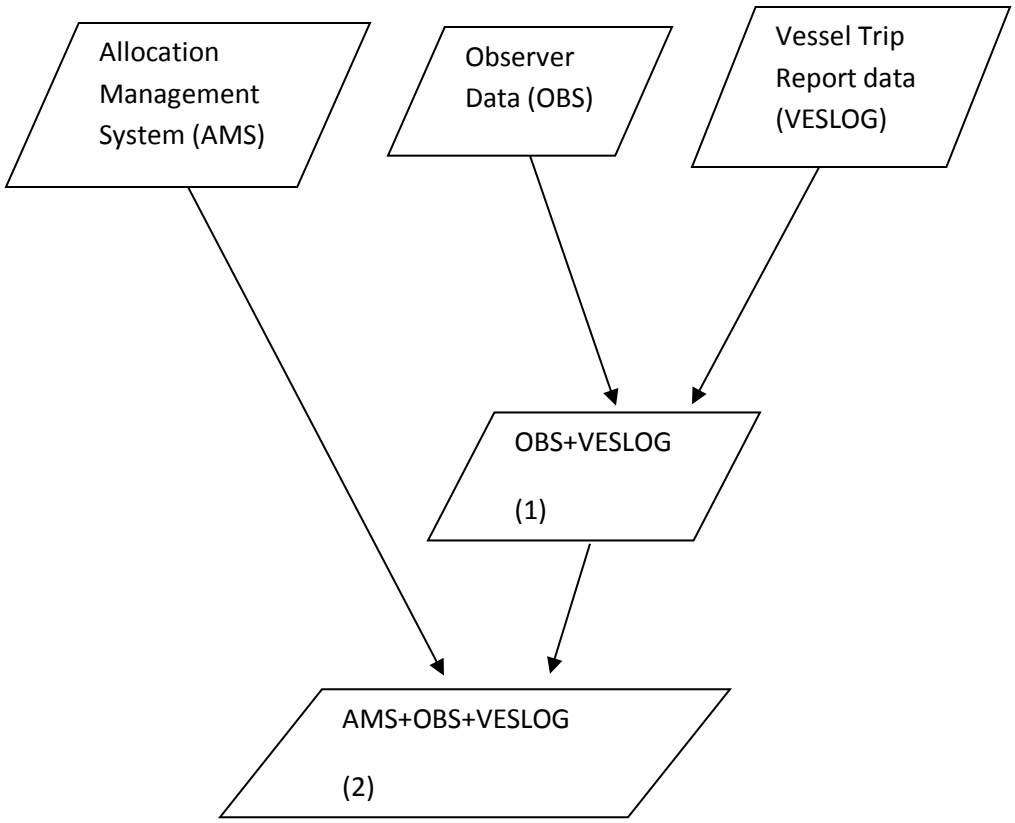
- Join to the observer data uses the permit number preferentially, if available, then hull identifier.

Duplicate matches

Data quality reviews on the 2014 and 2015 data revealed the presence of 42 and 17 trips, respectively, where multiple matches existed across databases. For example, single AMS trips would match to multiple VTR trips if an AMS trip had prolonged sail dates because the midpoint of the VTR trips would be within the sail and land dates recorded in the AMS database. The duplicate/multiple matched trips were investigated on an individual basis, and the appropriate record was retained in the data sets.

Appendix Table 1. Description of the fields contained in the base analytical tables, T_TRIP_OBS_VTR_yyyy.

Field	Data Type	Description	Source
DAS_ID	Number	The unique identifier of the SOLE.AMS.TRIP table.	SOLE.AMS.TRIP.DAS_ID
TRIP_ID	Number	Electronic Vessel Trip Report Trip ID or paper Vessel Trip Report serial number	SOLE.AMS.TRIP.TRIP_ID
ACTIVITY_CODE	Varchar2 (20)	Activity declaration code declared by the vessel	SOLE.AMS.TRIP.ACTIVITY_CODE
PERMIT	Number	Vessel's federal permit number	SOLE.AMS.TRIP.PERMIT_NBR or SOLE.VESLOGyyyyT.PERMIT
DATE_SAIL	Date	The date (and time) the trip sailed by Allocation Management System (AMS) definition (typically the date the vessel crosses the Vessel Monitoring System (VMS) demarcation line).	SOLE.AMS.TRIP.DATE_SAIL
DATE_LAND	Date	The date (and time) the trip ended by AMS definition (typically the date the vessel crosses the VMS demarcation line).	SOLE.AMS.TRIP.DATE_LAND
DOCID	Number	The primary key in the VTR. VESLOGyyyyT tables.	SOLE.VESLOGyyyyT.TRIPID
HULLNUM	Varchar2 (10)	Hull identifier from matched VTR or observed trips. When the trip can be matched to both VTR and observer data, the hull identifier is taken preferentially from the VTR data.	SOLE.VTR.VESLOGyyyyT.HULLNUM or NOVA.OBDBS.OBTRP.HULLNUM1
VESSEL_HULL_ID	Varchar2 (4000)	Official vessel registration number painted on the hull. US Coast Guard, state or tribal registration number. Unknown = blank/null.	Derived from the SOLE.PERMIT database based on the permit, date_sail and activity code from the trip table.
OB_HULLNUM	Varchar2 (10)	Hull identifier from observed trips.	NOVA.OBDBS.OBTRP.HULLNUM1
LINK1	Varchar2 (15)	The primary key in the OBTRP table.	NOVA.OBDBS.OBTRP.LINK1



Appendix Figure 1. Schematic diagram of the dataset joins used to generate the final T_TRIP_OBS_VTR_yyyy product.

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