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Current Resource Conditions in Georges Bank and Mid-Atlantic Sea Scallop Populations

Results of the 1994 NEFSC Sea Scallop Research Vessel Survey

by

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ABSTRACT

The 1994 Northeast Fisheries Science Center sea scallop survey was conducted from 22 June to 18 July using the ***R/V ALBATROSS IV*** to monitor and assess trends in abundance, population composition, and recruitment patterns of the sea scallop resources in the Mid-Atlantic and Georges Bank regions in depths between 28-110 meters [15 to 60 fm]. A total of 464 sampling tows was conducted during the NEFSC sea scallop survey.

Survey indices of relative abundance and biomass were calculated in terms of mean number and mean meat weight per tow for each sampling stratum included in the Mid-Atlantic and USA Georges Bank strata sets, and in terms of stratified mean catch per tow (numbers and weight) for the principal scallop areas within the Mid-Atlantic and USA Georges Bank regions. Survey indices were derived for: 1) pre-recruit [<70 mm shell height; >80 meat count]; 2) recruit or harvestable-sized scallops [≥ 70 mm shell height; ≤ 80 meat count]; and 3) total scallops [all sizes] per tow. Survey catch per tow data were further analyzed in terms of catch distributions among various meat count intervals (meat count refers to the number of scallop meats per pound). For each stratum, area, and region, percentage distributions of the number of scallops within five meat count intervals (>80 meat count; 80-40 meat count; 40-35 meat count; 35-30 meat count; and <30 meat count) were calculated.

Results of the 1994 NEFSC sea scallop research vessel survey indicate that resource abundance in the Mid-Atlantic region has continued to increase and is currently at high levels, while the USA Georges Bank resource remains at near-record low levels since the partitioning of Georges Bank. The total abundance (in numbers) of sea scallops in the Mid-Atlantic region is more than 4 times greater than total abundance level in the USA Georges Bank region. For small scallops (pre-recruit size), the Mid-Atlantic resource is five times more abundant than the USA Georges Bank resource.

Throughout the Mid-Atlantic region, the pattern of recruitment has fluctuated over the survey time series: the 1994 survey indicates there are two dominant cohorts in the Mid-Atlantic scallop population. The 1990 and 1991 year classes appear to be above average in strength with the 1990 cohort the strongest since the 1986 year class. The Mid-Atlantic scallop resource is dominated by small scallops (58% of the number of scallops caught in the Mid-Atlantic region were >80 count).

Unlike the Mid-Atlantic region, the USA portion of Georges Bank scallop resource is dominated by harvestable-size scallops; 55% of the number of scallops caught in the USA Georges Bank region were <80 count. No strong recruitment has been observed in the two most recent surveys of this region.

INTRODUCTION

Sea scallop research vessel surveys have been conducted by the Northeast Fisheries Science Center [NEFSC] of the National Marine Fisheries Service in 1975 and annually from 1977 onward to monitor and assess trends in abundance, population composition, and recruitment patterns of USA offshore (3-200 n mi from the USA coastline) sea scallop resources. Together with commercial fisheries data, the survey results have been used to evaluate stock and fishery status and to forecast future resource conditions (Serchuk and Wigley 1988, Serchuk and Wigley 1989a, 1989b, 1991, Wigley and Serchuk 1991).

This document presents the results of the 1994 NEFSC sea scallop research vessel survey, and provides an evaluation of current resource conditions, recruitment prospects, and abundance levels in the Mid-Atlantic and USA Georges Bank sea scallop populations.

METHODS

The 1994 NEFSC sea scallop survey was conducted from 22 June to 18 July using the ***R/V ALBATROSS IV***. Areas sampled included the Mid-Atlantic and Georges Bank regions in depths between 28-110 meters [15 to 60 fm] (Figure 1). Revised strata sets developed in 1989 (see Serchuk and Wigley 1989a) for assessing and summarizing resource conditions were continued for 1994 analyses. These strata sets are as follows:

Region	Strata Set
Virginia - No. Carolina:	Strata 6-7.
Delmarva:	Strata 10-11; 14-15; 18-19.
New York Bight:	Strata 22-31; 33-35.
South Channel:	Strata 46-47; 49-55.
Southeast Part:	Strata 58-60.
USA No. Edge & Peak:	Strata 61,621,631,651,661,71,72,74.
CAN No. Edge & Peak:	Strata 622,632,64,652,662.

Survey sampling procedures in 1994 were identical to those in previous USA surveys since 1979. Sampling was performed using a 2.44 m [8 ft] wide commercial sea scallop dredge equipped with a 5.1 cm [2 in] ring bag and a 3.8 cm [1.5 in] polypropylene mesh liner to retain small scallops. Detailed specifications of this gear, used in the NEFSC sea scallop surveys since 1979, are provided in Serchuk and Smolowitz (1980). Details of the surveys and gear used prior to 1979 are given in Serchuk et al. (1979, 1982). Survey data prior to 1979 have been standardized to the current gear specifications.

As in the past, a stratified sampling design was used in the 1994 survey. Offshore regions were stratified into geographical zones [strata] based on water depth and latitude (Figure 1), and sampling stations allocated to strata in proportion to stratum area and assigned randomly within strata. For selected strata in which either commercial fishing activity or sea scallop concentrations were known to occur, additional randomly-selected stations were added prior to the survey to increase precision of the resultant survey abundance indices. Sampling stations occupied in the 1994 survey are depicted in Appendix Figure 1. Individual station (tow) catch and LORAN-C location data are provided in the 1994 NEFSC Sea Scallop Fishermen's Report (NEFSC 1994).

At each station, the survey dredge was towed for 15 minutes at 3.5 knots with a 3:1 wire scope. After each tow, the catch was sorted into biological and trash components. All live scallops were counted and shell height measurements taken, by 5-mm interval, on all individuals. Occasionally, subsampling was necessary when large quantities of scallops were caught. By-catch of finfish and other invertebrates was also enumerated and measured. Trash components were measured by volume, and substrate type and composition noted. Hydrographic and navigational data were recorded for each station including distance towed over bottom from a Doppler speed log. The survey dredge and liner were routinely inspected for damage, and repaired or replaced as appropriate.

RESULTS

Sampling Intensity and Overall Catch

A total of 464 sampling tows was conducted during the NEFSC sea scallop survey. Results presented below are based upon 227 tows in the Mid-Atlantic region, 190 tows on the USA portion of Georges Bank, and 47 tows on the Canadian portion of Georges Bank (Tables 1-3, Appendix Tables 1 and 2). Sampling intensity (tows per sq n mi) for the strata sets averaged 1:37 in the Mid-Atlantic, 1:39 on USA Georges Bank, and 1:36 on Canadian Georges Bank (Appendix Tables 1 and 2). Individual stratum sampling intensity varied from one tow per six sq n mi (Stratum 652 on Georges Bank) to one tow in 183 sq n mi (Stratum 29 in the Mid-Atlantic region).

Geographical distributions of number of sea scallops per tow are presented in Figures 2-4. Sea scallop catches ranged from 0 (50 tows) to 2,204 scallops per tow (in Stratum 23 in the New York Bight). A total of 64,413 scallops were taken over the entire region: 40,766 in the Mid-Atlantic and 23,647 on Georges Bank (9,328 scallops on USA Georges Bank and 14,319 on Canadian Georges Bank). In 12 tows, scallop catches exceeded 1,000 individuals per haul (2 tows in Delmarva; 7 tows in the New York Bight; and 3 tows on the Canadian Northern Edge and Peak). Together, these 12 tows yielded 18,057 scallops (28% of the total number of scallops caught in the 1994 survey.

Relative Abundance Indices

Survey indices of relative abundance and biomass were calculated in terms of mean number and mean meat weight per tow[1] for each sampling stratum included in the Mid-Atlantic and USA Georges Bank strata sets (Table 1), and in terms of stratified mean catch per tow (numbers and weight) for the principal scallop regions within the Mid-Atlantic and USA Georges Bank areas (Tables 1-3; Figures 5 and 6). Associated statistics for the stratified mean catch per tow in numbers for the principal scallop regions are presented in Table 4. Survey indices were derived for:

a. pre-recruit [<70 mm shell height; >80 meat count],

b. recruit or harvestable-sized scallops [≥ 70 mm shell height; ≤ 80 meat count], and

c. total scallops [all sizes] per tow.

Size-related parameters [mean shell height and average meat count] were also calculated for each stratum and region (Table 1). Survey catch per tow data were further analyzed in terms of catch distributions among various meat count intervals (meat count refers to the number of scallop meats per pound). For each stratum, area, and region, percentage distributions of the number of scallops within five meat count intervals (>80 meat count; 80-40 meat count; 40-35 meat count; 35-30 meat count; and <30 meat count) were calculated (Table 1). Meat count distributions of harvestable-sized scallops were derived, by geographic area and region, in terms of both biomass and numbers (Tables 5-13; Figures 7-9).

MID-ATLANTIC REGION

In the Mid-Atlantic region, the 1994 survey results indicate that the sea scallop population has increased from the 1993 survey and is presently at a high level (Table 2; Figure 5). The 1994 standardized index of total scallops per tow (165.4) was the third highest value in the 19 year time series. Total weight per tow (0.80 kg meats per tow) rose 38% over the 1993 value. Indices of abundance and biomass of pre-recruit (<70 mm shell height) scallops declined slightly, however the number of pre-recruit scallops per tow (95.8) remains among the highest in the time series. Sharp increases in abundance and biomass of harvestable-size (≥ 70 mm shell height) scallops were evident in this region. Abundance and biomass of harvestable-size scallops more than doubled (69.9 scallops/tow and 0.67 kg/tow, respectively) over 1993 values.

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[1] Meat weight per tow values were derived by applying region-specific NEFSC sea scallop survey shell height-meat weight equations to the survey shell height frequency distributions. See footnote 2 in Tables 2 and 3 for region-specific equations.

The pattern of recruitment throughout this region has fluctuated over the survey time series: the 1994 survey indicates there are two dominant cohorts in the Mid-Atlantic scallop population. The 1990 and 1991 year classes appear to be above average in strength with the 1990 cohort the strongest since the 1986 year class (Figure 10).

Overall, the Mid-Atlantic scallop resource is dominated by small scallops [58% of the number of scallops caught in the Mid-Atlantic region were >80 count (Table 1). Of the harvestable biomass (scallops <80 count), 70% of the Mid-Atlantic resource is comprised of scallops between 80-40 count (and 86% by number), this is the highest proportion observed in the survey time series. The biomass of large scallops (<30 meat count) account for 20% of the harvestable biomass (and 7% by numbers); this is the lowest proportion observed in the time series for this meat count category (Tables 5,6,7,8 and 13, Figure 7).

Abundance patterns and resource conditions within the three principal scallops areas in the Mid-Atlantic [New York Bight; Delmarva; Virginia-North Carolina] are described below.

New York Bight (Strata 22-31; 33-35) - The 1994 sea scallop abundance and biomass levels have continued to increase from the low 1992 levels observed in this area. Resources conditions in the New York Bight are presently at a high level; the 1994 total number per tow (147.9 scallops) has more than doubled from the 1993 value and the weight per tow (0.61 kg/tow) has increased by 49% from 1993 (Table 2 and Figure 5). The population increase observed in this area is due to large increases in both pre-recruit and harvestable-size scallops; pre-recruit relative abundance (102.1 scallops per tow) more than doubled from 1993, and relative abundance of harvestable-size scallops (45.8) nearly doubled the 1993 value. Harvestable biomass increased 58% (0.49 kg) from 1993 (Table 2).

Record high catches occurred in two of the 13 strata comprising the New York Bight area. The number of pre-recruits and the total number of scallops caught in Stratum 24 and 28 were a record high in 1994 (Table 1, Appendix Tables 3 and 4). Survey size frequency data reveal the New York Bight resource is currently dominated by the strong 1991 cohort, the strongest since the 1986 year class (Figure 11).

The New York Bight area is dominated (69%) by small (>80 count) scallops, with only 3% of the resource comprised of large (<30 count) scallops (Table 1). The biomass of harvestable-size scallops [<80 count] constitutes 80% of the total biomass in the area (Table 5), and 59% of the harvestable biomass is accounted for by scallops between 80-40 count (Table 6), the second highest proportion for this category in the time series. The proportion of <30 count scallops decreased to 27% of the harvestable biomass in 1994 (Tables 5, 6 and 13; Figure 7). In terms of numbers, 79% of the harvestable biomass is accounted for by scallops between 80-40 count and 10% by scallops <30 count (Tables 7 and 8).

In recent years as the overall abundance level has increased in the New York Bight area, the proportion of 80-40 count scallops has increased while the proportion of <30 count scallops has

declined, suggesting that the fishery primarily harvests small scallops associated with incoming year classes.

Delmarva (Strata 10-11; 14-15; 18-19) - Although the 1994 abundance levels declined sharply (from 404.1 in 1993 to 244.4 in 1994), the Delmarva resource remains at a high level, the second highest in the survey time series (Table 2). The scallop population in this area is mostly (76%) harvestable-sized scallops, with record high abundance of recruit scallops (171.0) observed in 1994 (Tables 1, 2,and 7). The strong 1990 year class dominates the population in this resource area (Figure 12) as indicated by the record high biomass indices for recruit and total scallops (1.45 and 1.57 kg/tow, respectively) (Table 2).

In three of the six sampling strata in Delmarva, the 1994 survey captured historic high numbers of harvestable-size scallops (stratum 10, 11, and 15; Table 1 and Appendix Table 5). A record weight per tow was observed in Stratum 11.

Of the harvestable biomass, 87% of the biomass (and 95% of numbers) were 80-40 count scallops (Tables 5,6,7,8 and 13). The 1994 survey reveals a marked shift in the distribution of meat count categories in this area: during 1991-1993, less than a third of the harvestable biomass was 80-40 count, however in 1994, 87% is 80-40 count (Tables 5 and 6).

Survey size frequency data (Figure 12) indicate that the resource in the Delmarva area is now dominated by the 1990 cohort, which appeared in the 1993 survey as an exceptionally strong year class, and continues to dominate in 1994. The 1991 year class appears to be of moderate to above-average strength. The Delmarva resource is currently dominated by harvestable-size (<80 count) scallops; small scallops (>80 count scallops) represent 30% of the number of scallops caught during the 1994 survey while 67% of scallops were 80-40 count. The harvestable-size biomass is dominated (87%) by small (80-40 count) scallops and large scallops (<30 count) account for a mere 10% (Tables 5, 6 and 13, Figure 7).

This size frequency data suggests that the strong 1990 year class has been substantially reduced by fishing operations during 1993-1994. If fishing on small scallops continue, the above-average 1991 cohort will not reach its full yield potential.

Virginia - North Carolina (Strata 6-7) - The Virginia-North Carolina area is at the southernmost extremity of the distribution range of sea scallops and abundance of scallops in this area is generally transient and recruitment erratic. Survey coverage of this 108 sq. n. mi area during 1994 consisted of ten tows, and results indicate high levels of abundance and biomass (Tables 1 and 2; Figure 5). Record-high levels of abundance and biomass of harvestable-size scallops (145.5 and 1.30 kg per tow) of scallops were observed (Table 1, 2 and Appendix Table 5). Stratum 6 had a record high number of harvestable-size scallops in the 1994 survey (Table 1 and Appendix Table 5). The marked shift in pre-recruit and recruit abundance from 1993

indicates that the 1990 year class has recruited to the fishery (Table 2, Figures 5 and 13).

The 1994 survey indicates that 96% of the biomass (and 91% of numbers) in this area is of harvestable-size (<80 count; Table 5). The harvestable biomass is dominated (82% by weight; Tables 5, 6, and 13 and Figure 7) by the strong 1990 cohort (80-40 count).

Survey size frequency data (Figure 13) support the interpretation above that the recruitment of the exceptional 1990 year class has occurred; furthermore, it appears that the 1991 cohort is below-average in strength. With little incoming recruitment to support fishing in years ahead, decreased levels of abundance should occur this area over the next few year, as increased fishing is expected to occur on the strong 1990 year class.

USA GEORGES BANK REGION

In the **USA portion of Georges Bank**, the 1994 survey catch per tow indices were among the lowest since the Georges Bank region was partitioned in USA and Canadian portions in 1984 (Table 3, Figure 6). Although the 1994 standardized index of total scallops and weight per tow (38.6 and 0.35 kg, respectively) increased over 1993 values, the population remains at a low level (Table 3).

Harvestable-size scallops increased to 21.1 scallops per tow, but remain among the lowest value observed in this region. The pre-recruit index of weight (0.04 kg) is the lowest observed since 1985.

Unlike the Mid-Atlantic region, the USA Georges Bank scallop resource is dominated by harvestable-size scallops; 55% of the number of scallops (and 91% of the biomass) caught in the USA Georges Bank region were <80 count (Tables 1, 3, 9, 11). Of the harvestable biomass in the USA sector, 35% was accounted for by scallops between 80-40 count while just less than half (49%) of the harvestable biomass was <30 count (Table 9, 10, and 13, Figure 8).

Based on survey height frequency data, recruitment of the 1990 and 1991 year classes has been poor throughout the region, with the exception of the Southeast Part where recruitment of the 1991 year class appears to be above-average (Figure 14). The exceptional 1988 year class that appeared strong throughout the USA Georges Bank region (Figures 14-17) remains in the population. No strong recruitment has been observed in the two most recent surveys.

Abundance patterns and resource conditions within the three principal scallops areas in the USA Georges Bank region [South Channel, Southeast Part and USA Northern Edge and Peak] are described below.

South Channel (Strata 46-47; 49-55) - In the South Channel area of Georges Bank, all indices of abundance and biomass remained relatively unchanged over near-record low 1993 values. The recovery which took place in 1990-1992, where record high abundance levels were observed (due to exceptionally strong 1987-1989 cohorts) ended abruptly in 1993.

The total number (56.3) of scallops per tow in 1994 was a mere 2% higher than in 1993; total weight per tow indices increased from 0.39 kg in 1993 to 0.48 kg in 1994 (Table 3). The index of abundance for harvestable-size scallops (37.6 scallops per tow) was among the lowest level observed in the 20 year time series, while the number of pre-recruits per tow (18.7) was the lowest since 1984 (Table 3 and Figure 3). The 1994 abundance and biomass of pre-recruit scallops declined by 39% and 53%, respectively, from 1993 values (Table 3).

Survey size frequency data show the recent lack of strong incoming year classes into the South Channel scallop population (Figure 15). The 1987-89 cohorts were the strongest ever produced in the area during the survey time series, with the 1989 cohort currently dominating the population; however, these cohorts have been heavily fished down during 1992-1993.

Given the low abundance of the 1990 and 1991 year classes in the South Channel area (Figure 15) scallops <70 mm shell height [>80 count] comprised 33% of the 1994 survey catch, while scallops 80-40 count (72-87 mm in height) accounted for 48%, and only 7% of the catch was scallops <30 count (Table 1).

In the South Channel, 92% of the biomass was <80 count (harvestable size; Tables 3 and 9). The harvestable stock was dominated by scallops from the 1989 year class (80-40 count animals) which comprised 54% of the harvestable biomass and by scallops <30 count, which accounted for 25% of the exploitable biomass (Tables 9, 10, and 13, Figure 8).

Resource abundance levels in the South Channel will continue to be depressed until future recruitment improves. Catches from this area will have decreasing meat counts as the 1987-1989 cohorts are fished down during the next few years.

Southeast Part (Strata 58-60) - The 1994 survey indicates that the sea scallop resource in the Southeast Part of Georges Bank is at an average level. Indices of total sea scallop abundance and biomass from this area are average for the time series, with a strong presence of pre-recruit scallops (Table 3, Figure 6). Pre-recruit indices of abundance increased more than 7-fold over 1993 level, from 2.4 scallops per tow to 19.6 (Table 3). The index of abundance of harvestable-sized scallops decreased slightly (-6%) by number and was among the lowest values in the time series (Table 3, Figure 6).

The 1994 survey size frequency data indicate the current population is dominated by the moderately strong 1991 year class (Figure 16). Scallops from the poor 1990 cohort are absent, while scallops from the 1988 and 1989 cohorts sustain the harvestable population in this area.

Small scallops (>80 count) dominate the Southeast Part resource, where they comprise 69% on the scallops caught (Table 1). Of the harvestable size scallops, survey meat count distributions indicate 87% of the harvestable biomass in the region was accounted for by large scallops (<30 meat count) (Tables 9, 10, and 13, Figure 8). Scallop catches are expected to increase in the next few years as the 1991 cohort recruits to the fishery.

USA Northern Edge & Peak (Strata 61,621,631,651,661,71,72,74) - Total sea scallop abundance and biomass in this area remained relatively unchanged from the record-low levels in 1993. The abundance and biomass indices for harvestable-sized in the USA Northern Edge and Peak area of Georges Bank fell to record-low levels (Table 3, Figure 6, Appendix Table 9). Examination of the 1994 survey results by sampling stratum revealed that three of the eight strata sampled recorded the lowest number of harvestable-sized scallops in the time series for this area, and six of the eight strata observed the lowest number of pre-recruit scallops per tow (Table 1, Appendix Table 8 and 9). Pre-recruit scallops comprise 59% by number of the USA Northern Edge and Peak resource (Table 3).

As an entity, the USA Northern Edge and Peak region is now dominated by the poor 1991 cohort (Figure 17). Of the harvestable biomass, scallops <30 meat count (i.e., the year classes prior to 1991, particularly the strong 1986 and 1987 cohorts) account for 77% of the resource (Tables 9, 10 and 13, Figures 8 and 17). Catches from this area will remain low for the next few years until recruitment improves substantially.

SUMMARY

Results of the 1994 NEFSC sea scallop research vessel survey indicate that resource abundance in the Mid-Atlantic region has continued to increase and is currently at high levels, while the USA Georges Bank resource remains at near-record low levels since the partitioning of Georges Bank.

The total abundance (in numbers) of sea scallops in the Mid-Atlantic region is more than 4 times greater than total abundance level in the USA Georges Bank region. For small scallops (pre-recruit size), the Mid-Atlantic resource is five times more abundant than the USA Georges Bank resource.

The Mid-Atlantic scallop resource is dominated by small scallops: 58% of the number of scallops caught in the 1994 survey of the Mid-Atlantic region were >80 count (Table 1). Of the harvestable biomass (scallops <80 count), 70% of the Mid-Atlantic resource was comprised of scallops between 80-40 count, while larger-sized scallops (<30 meat count) accounted for 20% of the harvestable biomass (Table 13 and Figure 9).

Increases in harvestable-size scallop abundance and biomass were widespread throughout the

Mid-Atlantic region. In the New York Bight area, the abundance of harvestable-size scallops nearly doubled between 1993 and 1994, and was the highest since 1991. In both Delmarva and Virginia-North Carolina areas, survey abundance and biomass indices of harvestable-size scallops increased to near record high levels.

In the USA Georges Bank region, the 1994 survey results indicate that sea scallop abundance and biomass remain near the record-low 1993 levels. Although slight increases in total catch per tow values occurred in 1994, none of the 1994 survey indices for the total USA Georges Bank region differed markedly from those in 1993. Abundance of harvestable-size scallops fell to near record-low levels in the Southeast Part of Georges Bank and to record-low levels in the USA Northern Edge and Peak area. In the South Channel area, the abundance of harvestable-size scallops slightly increased. Abundance indices of pre-recruit scallops declined in the South Channel (to the lowest level since 1984), but increased in the Southeast Part and USA Northern Edge and Peak areas. The magnitude of these indices suggest that recruitment from the 1991 year class is poor on the South Channel area and on the Northern Edge and Peak, but above-average in the Southeast Part of the Bank.

Overall, the sea scallop resource in the USA sector of Georges Bank is at a very low level and is dominated (55%) by larger-sized scallops (<80 count). Of the harvestable biomass, 66% of the USA Georges Bank resource is comprised of scallops less than 40 count.

The combined Mid-Atlantic and USA Georges Bank sea scallop resources are dominated (56%) by small scallops (>80 count; Table 1). Percent distributions of harvestable biomass for combined regions are present in Table 13 and Figure 9.

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Table 1. Summary of 1994 NEFSC sea scallop research vessel survey data for sea scallops, by sampling stratum. Shell height data are in mm (25.4 mm = 1 inch); meat weight data are in grams (453.6 g = 1 pound); meat count refers to numbers of meats per pound, pre-recruit refers to scallops <70 mm in shell height, recruit refers to scallops ≥70 mm in shell height. Area mean number and mean weight per tow values represent stratified means weighted by stratum area.

Stratum Area	Depth Range	No. of Tows	Mean Number Per Tow			All Scallops		Average Meat Weight (g) Per Tow[1]	Percent Distribution of Catch in Numbers				
			Pre-recruit	Recruit	Total	Average Shell Height	Calcd Meat Count[1]		>80 Count	80-40 Count	40-35 Count	35-30 Count	<30 Count
1	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
2	25-30	N/S	-	-	-	-	-	-	-	-	-	-	-
3	30-40	N/S	-	-	-	-	-	-	-	-	-	-	-
4	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
5	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
6	25-30	5	12.6	148.8**	161.4	80.7	51.2	1430.3	7.8	78.5	9.2	2.4	2.1
7	30-40	5	14.2	141.0	155.2	78.5	57.0	1234.9	9.1	85.7	4.0	0.4	0.8
8	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
Virginia - No. Carolina (6-7)	30-60	10	13.3	145.5**	158.8	79.8	53.5	1347.1**	8.4	81.5	7.0	1.5	1.6
9	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
10	25-30	8	17.5	167.3**	184.8	77.5	58.0	1445.9	9.5	86.6	2.2	0.5	1.2
11	30-40	8	88.5	334.4**	422.9	72.9	68.0	2822.4**	20.9	77.9	0.4	0.1	0.7
12	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
13	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
14	25-30	12	9.3	43.8	53.0	78.4	49.3	487.7	17.5	67.9	7.1	1.7	5.8
15	30-40	12	163.8	258.5**	422.3	64.6	85.6	2237.6	38.8	60.3	0.4	0.1	0.4
16	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
17	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
18	25-30	10	13.2	26.2	39.4	78.2	37.3	479.3	33.5	36.0	0.3	1.0	29.2
19	30-40	12	67.7	144.3	212.0	71.0	64.2	1499.0	32.0	61.1	2.3	0.5	4.1
20	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
Delmarva (10-11; 14-15; 18-19)	25-40	62	73.4	171.0**	244.4	69.5	70.5	1571.9	30.0	66.6	1.1	0.3	2.0
21	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
22	25-30	8	20.6	32.8	53.4	73.4	44.5	544.6	38.6	29.5	11.0	4.7	16.2
23	30-40	16	238.8	97.6	336.4	55.2	119.7	1274.9	71.0	24.8	1.1	0.7	2.4
24	40-60	5	552.8**	30.2	583.0**	45.4	288.2	917.6	94.8	4.9	0.1	0.1	0.1
25	15-25	4	0.3	11.5	11.8	108.3	18.4	290.4	2.1	17.0	6.4	8.5	66.0
26	25-30	14	15.3	39.1	54.4	73.6	52.5	470.4	28.1	48.2	8.5	5.1	10.1
27	30-40	20	185.9	174.6	360.5	59.8	98.0	1668.6	51.6	44.2	2.0	1.0	1.2
28	40-60	10	244.2**	27.7	271.9**	44.2	246.0	501.5	89.8	8.7	0.4	0.3	0.8
29	15-25	6	6.3	7.5	13.8	69.8	45.5	137.8	45.8	24.1	9.6	2.4	18.1
30	25-30	15	17.9	50.0	67.9	74.0	51.6	596.8	26.4	49.6	10.5	5.6	7.9
31	30-40	23	93.0	74.8	167.8	61.0	87.6	869.1	55.4	36.0	3.2	2.0	3.4
32	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
33	15-25	10	33.0	6.6	39.6	51.8	84.9	211.6	83.3	3.0	1.0	0.8	11.9
34	25-30	14	35.7	15.3	51.0	55.2	73.2	316.2	70.0	6.3	2.0	3.5	18.2
35	30-40	10	10.6	4.0	14.6	56.1	66.5	99.6	72.6	7.5	1.4	2.7	15.8
36	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
New York Bight (22-31; 33-35)	15-60	155	102.1	45.8	147.9	55.6	109.1	614.8	69.1	24.3	2.1	1.2	3.3
Mid-Atlantic (6-35)	15-60	227	95.8	69.6	165.4	59.6	94.2	796.5	57.9	36.2	1.9	1.0	3.0

[1] Derived by applying NEFC survey shell height - meat weight equations to shell height frequency distributions.

* Lowest value in 1975-1994 survey time series.

** Highest value in 1975-1994 survey time series.

N/S = Not sampled in 1994 survey.

Table 1. (continued).

Stratum Area	Depth Range	No. of Tows	Mean Number Per Tow			All Scallops		Average Meat Weight (g) Per Tow	Percent Distribution of Catch in Numbers				
			Pre-recruit	Recruit	Total	Average Shell Height	Calcd Meat Count[1]		>80 Count	80-40 Count	40-35 Count	35-30 Count	<30 Count
45	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
46	25-30	6	23.0	19.0	42.0	67.0	72.3	263.7	54.8	32.5	8.3	2.0	2.4
47	30-40	12	7.3	6.2	13.4	75.4	36.0	169.1	54.0	3.7	8.1	6.8	27.4
48	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
49	15-25	7	45.1	19.9	65.0	55.2	85.3	345.6	69.5	11.9	3.5	4.8	10.3
50	25-30	15	54.0	57.3	111.3	65.6	68.6	736.3	48.5	36.3	4.9	4.0	6.3
51	30-40	12	14.8	53.8	68.5	79.8	45.9	676.9	21.5	47.4	11.6	9.2	10.3
52	40-60	12	49.3	150.8	200.1	76.5	56.1	1617.5	24.6	63.6	6.0	2.6	3.2
53	40-60	7	13.4	108.0	121.4	81.4	48.1	1144.4	11.1	70.7	12.8	4.0	1.4
54	30-40	7	3.0	8.7*	11.7	95.6	24.4	217.4	25.6	14.6	6.1	1.2	52.4
55	30-40	10	0.5	6.2	6.7	96.4	25.8	117.8	7.5	20.9	20.9	13.4	37.3
56	40-60	N/S	-	-	-	-	-	-	-	-	-	-	-
South Channel (46-47; 49-55)	15-60	88	18.7	37.6	56.3	74.2	53.4	478.2	33.2	47.9	7.8	3.9	7.2
57	30-40	N/S	-	-	-	-	-	-	-	-	-	-	-
58	40-60	8	1.5	0.4	1.9	59.0	42.9	19.8	80.0	6.7	0.0	0.0	13.3
59	30-40	12	25.2	12.5	37.7	70.4	44.6	383.0	66.8	5.5	3.8	6.2	17.7
60	40-60	12	22.7	9.6	32.3	64.4	47.6	307.3	70.3	1.8	1.0	1.0	25.9
So. East Part (58-60)	30-60	32	19.6	8.9	28.5	66.9	46.2	279.8	68.9	3.5	2.2	3.2	22.2
61	30-40	8	29.8	12.1	41.9	66.2	49.2	385.9	71.0	4.2	2.7	2.1	20.0
621	40-60	12	41.4	16.2*	57.6	60.6	68.1	383.7*	71.9	5.6	2.9	1.9	17.7
631	30-40	7	0.0*	1.1	1.1	100.1	25.9	20.0	0.0	0.0	25.0	37.5	37.5
651	30-40	11	2.1*	14.9*	17.0*	94.1	25.8	298.6*	12.3	31.0	7.0	5.3	44.4
661	40-60	12	1.7*	16.6*	18.3*	87.5	36.5	226.9*	9.1	46.1	11.0	10.0	23.8
71	25-30	6	5.7*	29.5	35.2	89.6	32.0	498.5	16.1	34.6	10.0	5.7	33.6
72	15-25	6	0.2*	8.5	8.7	99.6	23.5	167.4	1.9	46.2	3.8	3.8	44.3
73	15-25	N/S	-	-	-	-	-	-	-	-	-	-	-
74	25-30	8	0.0*	1.4	1.4	104.3	21.4	29.2	0.0	27.3	9.1	9.1	54.5
USA No. Edge & Peak (61-661, 71,74)	15-60	70	14.9	10.4*	25.3	69.4	47.7	240.8	58.9	11.8	3.9	2.9	22.5
USA Georges Bank	15-60	190	17.5	21.1	38.6	71.8	50.6	346.2	45.3	31.7	6.0	3.6	13.4
USA Georges Bank & Mid-Atlantic	15-60	417	59.0	46.8	105.8	65.3	73.7	585.1	55.7	35.5	2.6	1.4	4.8
622	40-60	6	86.5	52.8*	139.3*	63.3	50.2	1258.7*	62.1	6.2	2.3	3.1	26.3
632	30-40	8	40.5	78.9	119.4	86.1	30.5	1773.8	33.9	15.5	10.5	5.5	34.6
64	40-60	15	141.5	343.5	485.0	78.5	44.2	4981.1	29.2	36.9	10.2	6.6	17.1
652	30-40	10	202.2	176.2	378.4	71.8	47.6	3609.3	53.4	15.1	2.0	3.0	26.5
662	40-60	8	59.3	124.4	183.6*	86.1	31.0	2684.5	32.3	11.5	5.0	8.2	43.0
CAN No. Edge & Peak (622-662, 64)	30-60	47	110.6	237.2	347.8	78.5	42.3	3729.9	31.7	32.3	9.4	6.4	20.2

[1] Derived by applying survey shell height-meat weight equations to shell height frequency distributions.

* Lowest value in 1975-1994 survey time series. For USA No. Edge & Peak and USA Georges Bank, lowest value 1985-1994.

** Highest value in 1975-1994 survey time series. For USA No. Edge & Peak and USA Georges Bank, highest value 1985-1994.

Table 2. USA sea scallop research survey relative abundance indices (standardized stratified mean number and mean weight per tow), [meats only, kg], mean shell height (mm), mean meat weight (g) per scallop, and average meat count (number of scallop meats per pound) of sea scallops from NEFSC surveys in the Mid-Atlantic, 1975, 1977-1994. Data are presented by principal scallop areas in the Mid-Atlantic[1]. Survey indices are presented for pre-recruit (<70 mm shell height), recruit (≥70 mm shell height) and total scallops per tow.

Area	Year	No. of Tows	Standardized Stratified Mean Number Per Tow			Standardized Stratified Mean Weight (kg) Per Tow[2]			Mean Shell Height	Average Meat Count
			Pre-recruit	Recruit	Total	Pre-recruit	Recruit	Total		
Virginia-	1975	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
No. Carolina	1977	1	0.0	10.0	10.0	0.00	0.23	0.23	108.0	20.0
	1978	3	15.3	50.3	65.6	0.06	1.10	1.16	91.8	25.7
	1979	3	23.7	22.7	46.4	0.04	0.37	0.41	71.7	51.3
	1980	3	6.6	39.0	45.6	0.02	0.59	0.61	87.6	34.1
	1981	3	0.9	7.6	8.5	<0.01	0.20	0.20	107.7	18.8
	1982	7	0.4	3.7	4.1	<0.01	0.12	0.12	111.5	15.8
	1983	8	25.8	11.7	37.5	0.10	0.36	0.46	78.1	37.2
	1984	9	0.2	14.6	14.8	<0.01	0.27	0.27	98.7	25.3
	1985	10	1.7	7.3	9.0	<0.01	0.23	0.23	104.8	17.8
	1986	10	5.6	1.8	7.4	<0.02	0.04	0.06	69.1	55.9
	1987	10	0.1	2.1	2.2	<0.01	0.04	0.04	93.4	28.3
	1988	10	3.1	11.0	14.1	0.01	0.21	0.22	89.8	28.9
	1989	10	35.7	5.9	41.6	0.07	0.13	0.20	57.9	92.9
	1990	6	36.5	93.1	129.6	0.07	0.88	0.95	73.2	61.7
	1991	10	37.2	32.0	69.2	0.10	0.45	0.55	71.6	57.5
	1992	10	4.1	29.2	33.3	0.01	0.39	0.40	85.9	37.7
	1993	10	245.3	59.1	304.4	0.83	0.54	1.37	64.3	100.5
	1994	10	13.3	145.5	158.8	0.05	1.30	1.35	79.8	53.5
Delmarva	1975	15	36.2	24.0	60.2	0.11	0.44	0.55	75.2	49.3
	1977	10	10.7	47.5	58.2	0.03	0.91	0.94	92.2	28.1
	1978	45	27.3	75.8	103.2	0.09	1.58	1.67	91.6	28.0
	1979	43	25.4	64.6	90.0	0.04	0.95	0.99	78.8	41.2
	1980	43	81.1	35.9	117.0	0.13	0.68	0.81	63.3	65.7
	1981	41	4.7	14.3	19.0	0.01	0.32	0.33	90.3	26.2
	1982	44	10.0	18.6	28.6	0.04	0.43	0.47	89.8	27.8
	1983	49	25.7	16.5	42.2	0.09	0.37	0.46	77.0	41.7
	1984	52	19.8	19.3	39.1	0.03	0.38	0.41	69.8	43.7
	1985	54	70.4	35.8	106.2	0.15	0.43	0.58	58.9	82.5
	1986	62	123.5	83.5	207.0	0.37	0.93	1.30	68.5	72.3
	1987	61	52.9	59.5	112.4	0.16	0.74	0.90	74.1	56.7
	1988	62	75.9	39.1	115.0	0.15	0.62	0.77	64.6	67.9
	1989	62	113.1	97.2	210.3	0.24	1.09	1.33	67.5	71.6
	1990	62	27.7	80.9	108.6	0.06	0.87	0.93	76.9	53.0
	1991	61	53.5	29.3	82.8	0.16	0.47	0.63	71.3	59.4
	1992	62	20.9	18.8	39.8	0.04	0.33	0.37	71.9	49.0
	1993	58	384.1	20.1	404.1	1.00	0.28	1.28	57.3	143.0
	1994	62	73.4	171.0	244.4	0.12	1.45	1.57	69.5	70.5
New York Bight	1975	28	39.4	34.7	74.1	0.10	0.62	0.72	75.3	46.9
	1977	101	1.4	56.7	58.1	<0.01	1.03	1.03	98.6	25.6
	1978	116	3.3	52.7	56.0	0.01	1.15	1.16	102.8	21.9
	1979	120	5.3	17.6	22.9	0.01	0.43	0.44	93.6	23.7
	1980	121	15.4	15.2	30.6	0.02	0.36	0.38	75.5	35.7
	1981	117	18.8	19.0	37.8	0.03	0.29	0.32	67.7	53.5
	1982	134	10.9	20.9	31.8	0.02	0.33	0.35	78.4	41.2
	1983	136	11.5	14.0	25.5	0.03	0.29	0.32	80.3	36.6
	1984	142	17.4	18.4	35.8	0.03	0.29	0.32	69.2	51.0
	1985	137	47.4	30.9	78.3	0.10	0.43	0.53	65.6	67.1
	1986	152	53.2	49.3	102.5	0.13	0.65	0.78	69.6	59.9
	1987	154	94.5	46.0	140.5	0.18	0.58	0.76	61.7	83.7
	1988	154	75.9	100.5	176.4	0.11	1.25	1.36	68.6	58.9
	1989	157	168.6	81.8	250.4	0.25	0.90	1.15	56.4	99.1
	1990	148	121.1	92.8	213.9	0.35	0.88	1.23	67.2	78.7
	1991	157	22.2	53.7	75.9	0.06	0.67	0.73	78.3	47.3
	1992	157	17.7	25.3	43.0	0.04	0.37	0.41	75.5	47.4
	1993	146	46.6	24.0	70.6	0.10	0.31	0.41	64.9	77.9
	1994	155	102.1	45.8	147.9	0.12	0.49	0.61	55.6	109.1
Mid-Atlantic	1975	43	38.8	32.6	71.4	0.10	0.59	0.69	75.3	47.2
(All Areas)	1977	112	2.8	55.1	57.9	0.01	1.00	1.01	97.7	25.9
	1978	164	7.8	56.8	64.6	0.02	1.23	1.25	99.4	23.4
	1979	166	9.1	26.2	35.3	0.02	0.52	0.54	86.5	29.8
	1980	167	27.1	19.2	46.3	0.04	0.42	0.46	70.1	45.8
	1981	161	16.1	18.0	34.1	0.02	0.30	0.32	70.1	48.2
	1982	185	10.6	20.3	30.9	0.03	0.34	0.37	80.4	38.1
	1983	193	14.3	14.4	28.7	0.04	0.30	0.34	79.4	37.8
	1984	203	17.6	18.5	36.1	0.02	0.31	0.33	69.5	49.2
	1985	201	51.0	31.5	82.5	0.11	0.43	0.54	64.1	69.8
	1986	224	65.2	54.8	120.0	0.17	0.69	0.86	69.3	63.3
	1987	225	85.7	47.9	133.6	0.17	0.61	0.78	63.6	78.0
	1988	226	74.9	88.3	163.2	0.12	1.12	1.24	68.1	59.9
	1989	229	156.9	83.6	240.5	0.24	0.93	1.17	58.1	93.5
	1990	216	103.2	90.6	193.8	0.29	0.88	1.17	68.2	74.9
	1991	228	28.0	49.0	77.0	0.08	0.63	0.71	76.8	49.4
	1992	229	18.1	24.2	42.3	0.03	0.37	0.40	75.0	47.5
	1993	214	109.9	23.8	133.6	0.28	0.30	0.58	60.7	104.5
	1994	227	95.8	69.6	165.4	0.11	0.67	0.80	59.6	94.2

[1] New York Bight: Strata 22-31, 33-35; Delmarva: Strata 10-11, 14-15, 18-19; VA-NC: Strata 6-7.

[2] Mean meat weight derived by applying the 1977-1982 USA Mid-Atlantic research survey sea scallop shell height meat weight equation, ln Meat Weight (g) = -12.1628 + 3.2539 ln Shell Height (mm) (n = 11943, r = 0.98) to the to the survey shell height frequency distributions.

Table 3. USA sea scallop research survey relative abundance indices (standardized stratified mean number and mean weight per tow), (meats only, kg), mean shell height (mm), mean meat weight (g) per scallop, and average meat count (number of scallop meats per pound) of sea scallops from NEFSC surveys on Georges Bank, 1975, 1977-1994. Data are presented by principal scallop areas for Georges Bank[1]. Survey indices are presented for pre-recruit (<70 mm shell height), recruit (≥70 mm shell height), and total scallops per tow.

Area	Year	No. of Tows	Standardized Stratified Mean Number Per Tow			Standardized Stratified Mean Weight (kg) Per Tow[2]			Mean Shell Height	Average Meat Count
			Pre-recruit	Recruit	Total	Pre-recruit	Recruit	Total		
South Channel	1975	58	45.1	29.9	75.0	0.11	0.81	0.92	76.4	37.0
	1977	30	6.3	89.1	95.4	0.02	1.94	1.96	101.3	22.1
	1978	46	7.7	49.7	57.4	0.02	1.15	1.17	101.2	22.2
	1979	47	6.8	88.2	95.0	0.01	1.53	1.54	93.2	28.0
	1980	40	79.7	30.2	109.9	0.12	0.55	0.67	58.2	74.6
	1981	56	15.5	36.5	52.0	0.03	0.65	0.68	80.5	34.8
	1982	61	213.8	53.0	266.8	0.49	0.67	1.16	58.6	103.9
	1983	69	19.0	55.8	74.8	0.06	0.77	0.83	81.4	41.0
	1984	69	13.6	17.7	31.3	0.03	0.36	0.39	77.3	36.7
	1985	77	40.3	47.3	87.6	0.11	0.76	0.87	75.0	45.7
	1986	68	115.3	37.0	152.3	0.24	0.58	0.82	59.5	84.2
	1987	86	84.6	56.1	140.7	0.17	0.72	0.89	63.6	71.6
	1988	91	32.5	36.0	68.5	0.08	0.46	0.54	70.6	57.7
	1989	88	21.7	15.1	36.8	0.06	0.27	0.33	72.0	50.5
	1990	76	258.8	49.9	308.7	0.54	0.60	1.14	55.9	122.5
	1991	86	432.1	64.2	496.3	0.80	0.71	1.51	52.8	149.5
	1992	85	222.8	171.8	394.6	0.78	1.38	2.16	67.5	82.8
	1993	77	30.6	24.5	55.1	0.11	0.28	0.39	71.7	63.3
	1994	88	18.7	37.6	56.3	0.04	0.44	0.48	74.2	53.4
Southeast Part	1975	21	1.8	38.4	40.2	<0.01	1.02	1.02	110.3	17.8
	1977	21	3.2	27.2	30.4	0.01	0.68	0.69	103.6	20.0
	1978	18	2.2	27.1	29.3	<0.01	0.93	0.93	117.2	14.2
	1979	20	7.7	21.2	28.9	0.01	0.71	0.72	99.4	18.2
	1980	20	21.5	41.7	63.2	0.03	0.71	0.74	78.2	38.8
	1981	19	1.4	19.4	20.8	<0.01	0.46	0.46	102.5	20.5
	1982	22	0.8	9.8	10.6	<0.01	0.32	0.32	113.5	15.2
	1983	20	11.3	9.2	20.5	0.02	0.25	0.27	78.1	34.0
	1984	20	4.6	12.9	17.5	0.01	0.23	0.24	85.7	33.0
	1985	28	9.1	11.8	20.9	0.02	0.22	0.24	75.3	39.9
	1986	32	28.9	20.6	49.5	0.05	0.41	0.46	66.2	48.5
	1987	32	23.1	39.6	62.7	0.06	0.60	0.66	79.0	42.8
	1988	32	1.4	16.1	17.5	<0.01	0.32	0.32	96.9	24.6
	1989	31	23.6	11.8	35.4	0.07	0.23	0.30	70.2	54.4
	1990	32	1.6	8.4	10.0	<0.01	0.15	0.15	88.7	30.3
	1991	32	18.5	14.1	32.6	0.04	0.21	0.25	65.2	60.2
	1992	32	10.3	20.5	30.8	0.03	0.34	0.37	83.3	37.7
	1993	32	2.4	9.5	11.8	0.01	0.23	0.24	97.5	22.8
	1994	32	19.6	8.9	28.5	0.03	0.25	0.28	66.9	46.2
USA Northern Edge and Peak	1985	67	21.8	26.6	48.4	0.06	0.39	0.45	72.2	48.9
	1986	70	45.6	28.6	74.2	0.13	0.48	0.61	70.4	55.2
	1987	71	62.0	54.6	116.6	0.12	0.73	0.85	67.1	62.1
	1988	71	65.8	60.9	126.7	0.15	0.77	0.92	66.4	62.6
	1989[3]	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1990[4]	65	66.9	196.8	263.7	0.22	1.83	2.05	75.8	58.3
	1991	71	118.7	66.9	185.6	0.31	0.85	1.16	66.1	72.4
	1992	69	26.1	45.0	71.1	0.08	0.60	0.68	77.6	47.3
	1993	67	2.7	15.6	18.3	0.01	0.25	0.26	88.6	32.4
	1994	70	14.9	10.4	25.3	0.02	0.22	0.24	69.4	47.7
USA Georges Bank	1985	172	26.5	31.8	58.3	0.07	0.50	0.57	74.2	46.4
	1986	170	61.3	28.9	90.2	0.14	0.49	0.63	64.4	64.9
	1987	189	62.6	51.9	114.5	0.12	0.70	0.82	66.8	63.0
	1988	194	38.0	40.8	78.8	0.09	0.54	0.63	69.4	56.6
	1989[5]	-	-	-	-	-	-	-	-	-
	1990[4]	173	135.2	87.8	223.0	0.31	0.89	1.20	63.9	84.1
	1991	189	224.1	51.4	278.2	0.45	0.65	1.10	56.4	114.8
	1992	186	102.7	91.2	193.9	0.36	0.86	1.22	69.4	72.3
	1993	176	14.0	17.8	31.8	0.05	0.26	0.31	77.5	46.9
	1994	190	17.5	21.1	38.6	0.04	0.31	0.35	71.8	50.6

[1] South Channel: Strata 46-47, 49-55; Southeast Part: Strata 58-60; USA No. Edge & Peak: Strata 61, 621, 631, 651, 662, 71, 72, and 74.

[2] Mean meat weight derived by applying the 1978-1982 USA Georges Bank research survey sea scallop shell height meat weight equation, ln Meat Weight (g) = -11.7656 + 3.1693 ln Shell Height (mm) (n = 5863, r = 0.98) to the to the survey shell height frequency distributions.

[3] Not sampled.

[4] Stratum 72 not sampled, excluded from analyses.

[5] Not calculated due to incomplete survey coverage.

Table 3. (continued).

Area	Year	No. of Tows	Standardized Stratified Mean Number Per Tow			Standardized Stratified Mean Weight (kg) Per Tow[2]			Mean Shell Height	Average Meat Count
			Pre-recruit	Recruit	Total	Pre-recruit	Recruit	Total		
Canada Northern Edge and Peak	1985	41	186.0	460.3	646.3	0.58	4.20	4.78	74.1	61.3
	1986	146	379.6	466.0	845.6	0.80	6.01	6.81	72.3	56.3
	1987	47	293.0	231.7	524.7	0.59	3.04	3.63	66.9	65.6
	1988	48	153.7	227.1	380.8	0.36	2.77	3.13	72.8	55.3
	1989[3]	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1990	41	431.7	287.9	719.6	0.68	3.80	4.48	61.9	72.9
	1991	14	206.4	98.3	304.7	0.53	1.62	2.15	66.7	64.3
	1992[3]	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1993	48	19.5	199.2	218.7	0.06	3.25	3.31	92.8	30.0
	1994	47	110.6	237.2	347.8	0.19	3.54	3.73	78.5	42.3
Total Georges Bank (All Areas)	1975	130	51.7	74.6	126.3	0.13	1.34	1.47	79.9	39.0
	1977	122	34.3	218.3	252.6	0.12	3.18	3.30	87.6	34.7
	1978	140	79.7	184.0	263.7	0.14	3.88	4.02	87.1	29.8
	1979	220	36.6	152.3	188.9	0.10	2.70	2.80	88.6	30.6
	1980	371	377.4	92.3	469.7	0.52	1.37	1.89	53.4	112.6
	1981	176	97.2	152.4	249.6	0.22	1.62	1.84	70.6	61.5
	1982	163	91.0	51.2	142.2	0.22	0.74	0.96	66.5	66.9
	1983	171	31.9	38.2	70.1	0.06	0.63	0.69	73.4	46.3
	1984	171	148.7	34.6	183.3	0.15	0.57	0.72	49.1	114.9
	1985	213	56.3	111.6	167.9	0.17	1.19	1.36	74.1	56.2
	1986	316	129.9	123.0	252.9	0.28	1.68	1.96	70.1	58.5
	1987	236	105.5	85.4	190.9	0.21	1.14	1.35	66.9	64.3
	1988	242	59.5	75.6	135.1	0.14	0.96	1.10	71.2	55.9
	1989[4]	-	-	-	-	-	-	-	-	-
	1990[5]	214	193.6	127.3	320.9	0.38	1.47	1.85	63.0	78.7
	1991	203	220.8	62.3	283.1	0.46	0.83	1.29	58.5	99.2
	1992[4]	-	-	-	-	-	-	-	-	-
	1993	224	15.0	51.6	66.6	0.05	0.82	0.87	86.8	34.9
	1994	117	51.4	97.0	148.4	0.08	1.48	1.56	77.6	42.8

[1] South Channel: Strata 46-47, 49-55; Southeast Part: Strata 58-60; No. Edge & Peak: Strata 61-662, 71-72, and 74.
[2] Mean meat weight derived by applying the 1978-1982 USA Georges Bank research survey sea scallop shell height meat weight equation, ln Meat Weight (g) = -11.7656 + 3.1693 ln Shell Height (mm) (n = 5863, r = 0.98) to the to the survey shell height frequency distributions.
[3] Not sampled.
[4] Not calculated due to incomplete survey coverage.
[5] Stratum 72 not sampled, excluded from analyses.

Table 4. Standardized mean catch (number) per tow of sea scallops from 1994 USA sea scallop research vessel survey in the Mid-Atlantic and Georges Bank regions. Standard deviation of the mean (S.E.), coefficient of variation [C.V.: 100*(S.E./Mean)], and 95% confidence limits are provided as indices of variability. Data are summarized by principal sea scallop areas in the Mid-Atlantic and Georges Bank regions.

Region	Mean	S.E.	C.V.	Confidence limits
Virginia-NC	158.8	39.1	24.6	82.2 - 235.3
Delmarva	244.4	41.8	17.1	162.6 - 326.3
New York Bight	147.9	24.7	16.7	99.4 - 196.3
Mid-Atlantic	**165.4**	**21.3**	**12.9**	**123.6 - 207.2**
South Channel	56.3	13.4	23.8	30.0 - 82.5
Southeast Part	28.5	8.6	30.3	11.6 - 45.4
USA Northern Edge and Peak	25.3	49.1	19.5	15.6 - 34.9
CAN Northern Edge and Peak	347.8	90.8	26.4	166.2 - 522.1
USA Georges Bank	**38.6**	**6.0**	**15.7**	**26.7 - 50.4**

Table 5. Distribution of standardized stratified mean weight (g, meat) per tow among various meat count intervals for sea scallops from NEFSC sea scallop research vessel surveys in the Mid- Atlantic, 1975, 1977-1994.

Area	Year	Total Biomass Per Tow (g)	Harvestable[2] Biomass Per Tow (g)	Meat Weight (g, meat) Per Tow [1] Meat Count Interval[3] 80 - 40	40 - 35	35 - 30	30 - 25	<25
Virginia-	1975	N/S	N/S	N/S	N/S	N/S	N/S	N/S
North Carolina	1977	227	227	11	13	15	18	170
	1978	1159	1097	177	7	15	18	880
	1979	411	372	111	49	46	26	140
	1980	608	592	174	35	24	55	304
	1981	204	201	4	4	9	15	169
	1982	119	118	1	4	4	3	106
	1983	458	361	26	7	3	4	321
	1984	265	265	35	49	48	28	105
	1985	231	228	1	-	5	18	204
	1986	60	44	4	-	1	3	36
	1987	35	35	10	2	3	3	17
	1988	222	215	16	12	26	30	131
	1989	203	134	10	11	7	10	96
	1990	952	880	591	123	82	23	61
	1991	546	452	149	42	26	28	207
	1992	401	390	127	52	72	47	92
	1993	1374	536	283	31	43	68	111
	1994	1347	1303	1066	143	37	17	40
Delmarva	1975	555	444	48	42	51	63	240
	1977	941	911	162	72	63	69	545
	1978	1672	1584	186	74	78	108	1138
	1979	991	951	327	62	50	53	459
	1980	808	678	104	17	33	73	451
	1981	329	320	47	8	6	10	249
	1982	467	431	38	12	19	25	337
	1983	459	371	42	18	14	11	286
	1984	406	374	61	38	42	28	205
	1985	584	430	176	19	18	27	190
	1986	1299	925	416	115	110	91	193
	1987	899	739	244	148	139	91	117
	1988	768	621	109	77	86	88	261
	1989	1332	1090	582	138	93	69	208
	1990	930	867	493	116	75	66	117
	1991	633	470	80	50	59	59	222
	1992	368	326	66	17	19	24	200
	1993	1282	276	98	14	14	7	143
	1994	1572	1451	1262	33	10	9	137
New York Bight	1975	717	622	94	53	63	65	347
	1977	1029	1025	165	68	95	142	555
	1978	1158	1151	58	45	92	142	814
	1979	439	430	28	7	15	22	358
	1980	378	356	33	12	16	15	280
	1981	321	292	86	16	14	13	163
	1982	350	327	93	24	22	24	164
	1983	317	289	34	18	20	24	193
	1984	318	294	89	30	18	13	144
	1985	530	427	140	40	40	41	166
	1986	776	651	268	60	51	43	229
	1987	761	582	239	85	59	46	153
	1988	1357	1249	568	137	89	84	371
	1989	1146	901	452	100	76	58	215
	1990	1232	882	553	80	55	36	158
	1991	727	671	300	63	47	44	217
	1992	411	373	105	40	40	33	154
	1993	411	305	118	28	28	19	112
	1994	615	491	289	40	27	22	113
Mid-Atlantic	1975	686	588	85	51	61	64	327
(All Areas)	1977	1012	1005	163	69	91	131	551
	1978	1251	1228	82	50	89	134	873
	1979	538	523	83	18	22	27	373
	1980	458	417	48	13	19	26	311
	1981	321	296	78	14	12	13	179
	1982	368	343	82	21	21	24	195
	1983	344	305	36	18	19	21	211
	1984	333	308	83	31	23	16	155
	1985	536	425	144	36	36	38	171
	1986	861	693	291	70	61	51	220
	1987	777	604	236	96	73	54	145
	1988	1237	1123	478	125	88	84	348
	1989	1167	925	470	105	79	59	212
	1990	1174	880	543	87	59	41	150
	1991	708	632	258	60	49	47	218
	1992	403	365	99	36	36	32	162
	1993	580	303	116	26	26	18	117
	1994	796	673	474	40	24	19	116

[1] Meat weight values derived from shell height values using 1977-1982 USA research survey equation, ln Meat Weight (g) = -12.1628 + 3.2539 ln Shell Height (mm) (n = 11943, r = 0.98).
[2] Stratified mean weight (g, meat) per tow for sea scallops ≥70 mm; ≤80 count.
[3] Meat count is expressed as number of meats per pound.

Table 6. Percentage distribution of harvestable biomass (meat weight) of sea scallops in the Mid-Atlantic region, within various meat count intervals. Harvestable biomass is defined as all sea scallops ≥70 mm shell height. Data derived from distribution of standardized stratified mean meat weight per tow in NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

		Percent of Harvestable Biomass Meat Count Interval[1]					
Area	Year	80 - 40	40 - 35	35 - 30	30 - 25	<30	<25
Virginia-North Carolina	1975	N/S	N/S	N/S	N/S	N/S	N/S
	1977	4.7	5.7	6.7	7.9	82.9	75.0
	1978	16.1	0.7	1.4	1.6	81.8	80.2
	1979	29.8	13.3	12.3	6.9	44.6	37.7
	1980	29.4	5.9	4.1	9.3	60.6	51.3
	1981	1.9	1.8	4.4	7.7	91.9	84.2
	1982	1.3	3.1	3.7	2.2	91.9	89.7
	1983	7.1	2.0	0.9	1.1	90.0	88.9
	1984	13.2	18.4	18.3	10.5	50.1	39.6
	1985	0.3	-	2.3	7.6	97.4	89.8
	1986	9.1	-	3.0	6.9	87.9	81.0
	1987	29.3	4.2	7.5	8.8	59.0	50.2
	1988	7.6	5.7	12.1	14.0	74.6	60.6
	1989	7.0	8.5	5.2	7.7	79.3	71.6
	1990	67.1	14.0	9.3	2.6	9.6	7.0
	1991	33.0	9.4	5.8	6.1	51.8	45.7
	1992	32.6	13.2	18.5	12.0	35.7	23.7
	1993	52.8	5.9	7.9	12.7	33.4	20.7
	1994	81.8	11.0	2.8	1.3	4.4	3.1
Delmarva	1975	10.8	9.4	11.6	14.1	68.2	54.1
	1977	17.8	8.0	6.9	7.5	67.3	59.8
	1978	11.8	4.7	4.9	6.8	78.6	71.8
	1979	34.4	6.5	5.2	5.7	53.9	48.2
	1980	15.4	2.5	4.8	10.8	77.3	66.5
	1981	14.8	2.7	1.8	3.0	80.7	77.7
	1982	8.7	2.7	4.6	5.8	84.0	78.2
	1983	11.4	5.0	3.8	2.8	79.8	77.0
	1984	16.2	10.1	11.4	7.5	62.3	54.8
	1985	40.8	4.6	4.1	6.3	50.5	44.2
	1986	45.0	12.4	11.9	9.8	30.7	20.9
	1987	33.0	20.0	18.8	12.3	28.2	15.9
	1988	17.6	12.5	13.9	14.1	56.0	41.9
	1989	53.4	12.6	8.6	6.3	25.4	19.1
	1990	56.8	13.4	8.7	7.6	21.1	13.5
	1991	17.0	10.6	12.6	12.6	59.8	47.2
	1992	20.2	5.0	5.8	7.5	69.0	61.5
	1993	35.5	5.1	5.0	2.7	54.4	51.7
	1994	86.9	2.3	0.7	0.6	10.1	9.5
New York Bight	1975	15.1	8.5	10.2	10.4	66.2	55.8
	1977	16.0	6.7	9.3	13.9	68.0	54.1
	1978	5.0	3.9	8.0	12.3	83.1	70.8
	1979	6.5	1.8	3.5	5.0	88.2	83.2
	1980	9.3	3.4	4.6	4.0	82.7	78.7
	1981	29.5	5.4	4.7	4.6	60.4	55.8
	1982	28.6	7.3	6.6	7.3	57.5	50.2
	1983	12.0	6.2	6.9	8.4	74.9	66.5
	1984	30.4	10.0	6.2	4.3	53.4	49.1
	1985	32.7	9.4	9.5	9.5	48.4	38.9
	1986	41.1	9.3	7.8	6.6	41.8	35.2
	1987	41.0	14.7	10.1	7.9	34.2	26.3
	1988	45.5	10.9	7.2	6.7	36.4	29.7
	1989	50.2	11.0	8.5	6.4	30.3	23.9
	1990	62.7	9.1	6.3	4.0	21.9	17.9
	1991	44.7	9.4	7.0	6.6	38.9	32.3
	1992	28.3	10.8	10.7	9.0	50.2	41.2
	1993	38.5	9.3	9.4	6.3	42.8	36.5
	1994	58.9	8.2	5.6	4.4	27.3	22.9
Mid-Atlantic (All Areas)	1975	15.1	8.5	10.2	10.4	66.2	55.8
	1977	16.3	6.8	9.0	13.0	67.9	54.9
	1978	6.7	4.1	7.2	10.9	82.0	71.1
	1979	15.9	3.4	4.1	5.3	76.6	71.3
	1980	11.4	3.2	4.6	6.1	80.8	74.7
	1981	26.4	4.9	4.1	4.3	64.6	60.3
	1982	24.0	6.2	6.2	6.9	63.6	56.7
	1983	11.8	5.9	6.1	7.0	76.2	69.2
	1984	27.1	10.2	7.4	5.1	55.3	50.2
	1985	34.0	8.4	8.5	8.9	49.1	40.2
	1986	42.0	10.0	8.8	7.4	39.2	31.8
	1987	39.2	15.8	12.0	8.9	33.0	24.1
	1988	42.6	11.1	7.8	7.5	38.5	31.0
	1989	50.8	11.3	8.5	6.4	29.4	23.0
	1990	61.7	9.9	6.7	4.7	21.7	17.0
	1991	40.9	9.5	7.7	7.4	41.9	34.5
	1992	27.1	9.9	10.0	8.8	53.0	44.2
	1993	38.4	8.5	8.6	5.8	44.5	38.7
	1994	70.4	5.9	3.6	2.9	20.1	17.2

[1] Meat count is expressed as number of meats per pound.

Table 7. Distribution of standardized mean number per tow among various meat count intervals for sea scallops from NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

		Stratified Mean Number of Scallops Per Tow						
				Meat Count Interval				
Area	Year	Total Number Per Tow	Harvestable Number Per Tow	80 - 40	40 - 35	35 - 30	30 - 25	<25
Virginia-	1975	N/S	N/S	N/S	N/S	N/S	N/S	N/S
North Carolina	1977	10.0	10.0	1.0	1.0	1.0	1.0	6.0
	1978	65.6	50.3	26.2	0.6	1.0	1.0	21.5
	1979	46.4	22.7	11.0	3.9	3.0	1.4	3.4
	1980	45.6	39.0	20.7	2.7	1.6	3.1	10.9
	1981	8.5	7.6	0.4	0.3	0.6	0.9	5.4
	1982	4.1	3.7	0.1	0.3	0.3	0.1	2.9
	1983	37.5	11.7	4.1	0.6	0.2	0.2	6.6
	1984	14.8	14.6	3.4	3.8	3.2	1.5	2.7
	1985	9.0	7.3	0.1	-	0.3	1.0	5.9
	1986	7.4	1.8	0.5	-	0.1	0.2	1.0
	1987	2.2	2.1	1.2	0.1	0.2	0.2	0.4
	1988	14.1	11.0	1.9	1.0	1.7	1.7	4.7
	1989	41.6	5.9	1.3	0.9	0.4	0.6	2.7
	1990	129.6	93.1	75.2	9.6	5.4	1.3	1.6
	1991	69.2	32.0	18.0	3.3	1.7	1.6	7.4
	1992	33.3	29.2	14.8	4.0	4.7	2.6	3.1
	1993	304.4	59.1	45.5	2.4	2.8	3.8	4.6
	1994	158.7	145.5	129.5	11.1	2.4	1.0	1.5
Delmarva	1975	60.2	24.0	5.7	3.2	3.4	3.5	8.2
	1977	58.2	47.5	17.7	5.7	4.1	3.8	16.2
	1978	103.2	75.8	22.0	5.8	5.1	6.0	36.9
	1979	90.0	64.6	38.9	4.8	3.3	3.0	14.6
	1980	117.0	35.9	12.8	1.3	2.2	4.1	15.5
	1981	19.0	14.3	5.4	0.7	0.4	0.5	7.3
	1982	28.6	18.6	5.3	0.9	1.3	1.4	9.7
	1983	42.2	16.5	6.3	1.4	0.9	0.6	7.3
	1984	39.1	19.3	6.7	2.9	2.8	1.6	5.3
	1985	106.2	35.8	25.9	1.5	1.2	1.5	5.7
	1986	207.0	83.5	55.9	8.9	7.2	5.1	6.4
	1987	112.4	59.5	29.1	11.5	9.2	5.1	4.6
	1988	115.0	39.1	12.8	6.0	5.7	4.9	9.7
	1989	210.3	97.2	69.1	10.7	6.1	3.9	7.4
	1990	108.6	80.9	58.7	9.1	5.0	3.7	4.4
	1991	82.8	29.3	10.1	3.9	3.9	3.3	8.1
	1992	39.8	18.8	7.8	1.3	1.2	1.4	7.1
	1993	404.1	20.1	13.0	1.1	0.9	0.4	4.7
	1994	244.4	171.0	162.9	2.6	0.6	0.5	4.4
New York Bight	1975	74.1	34.7	10.7	4.1	4.2	3.6	12.1
	1977	58.1	56.7	17.4	5.4	6.3	7.9	19.7
	1978	56.0	52.7	6.7	3.5	6.1	7.9	28.5
	1979	22.9	17.6	3.6	0.6	1.0	1.2	11.2
	1980	30.6	15.2	3.9	0.9	1.1	0.8	8.5
	1981	37.8	19.0	11.2	1.2	0.9	0.8	4.9
	1982	31.8	20.9	11.4	1.9	1.4	1.3	4.9
	1983	25.5	14.0	4.1	1.4	1.3	1.4	5.8
	1984	35.8	18.4	9.9	2.3	1.2	0.7	4.3
	1985	78.3	30.9	17.5	3.1	2.7	2.3	5.3
	1986	102.5	49.3	31.4	4.7	3.3	2.4	7.5
	1987	140.5	46.0	27.5	6.7	3.9	2.6	5.3
	1988	176.4	100.5	67.6	10.7	5.9	4.6	11.7
	1989	250.4	81.8	59.0	7.8	5.0	3.2	6.8
	1990	213.9	92.8	75.8	6.3	3.6	2.0	5.1
	1991	75.9	53.7	36.4	4.9	3.1	2.4	6.9
	1992	43.0	25.3	12.7	3.2	2.6	1.9	4.9
	1993	70.6	24.0	15.1	2.2	1.9	1.0	3.8
	1994	147.9	45.8	35.9	3.1	1.8	1.2	3.8
Mid-Atlantic	1975	71.4	32.6	9.7	4.0	4.0	3.6	11.3
(All Areas)	1977	57.9	55.1	17.3	5.4	5.9	7.3	19.2
	1978	64.6	56.8	9.7	3.9	5.8	7.5	29.9
	1979	35.3	26.2	10.1	1.4	1.4	1.5	11.8
	1980	46.3	19.2	5.7	1.0	1.3	1.4	9.8
	1981	34.1	18.0	10.1	1.1	0.8	0.7	5.3
	1982	30.9	20.3	10.1	1.7	1.4	1.3	5.8
	1983	28.7	14.4	4.5	1.4	1.2	1.2	6.1
	1984	36.1	18.5	9.2	2.4	1.5	0.9	4.5
	1985	82.5	31.5	18.8	2.8	2.4	2.1	5.4
	1986	120.0	54.8	35.4	5.4	4.0	2.8	7.2
	1987	133.6	47.9	27.5	7.4	4.8	3.0	5.2
	1988	163.2	88.3	56.9	9.7	5.8	4.7	11.2
	1989	240.5	83.6	60.1	8.2	5.2	3.3	6.8
	1990	193.8	90.6	72.7	6.8	3.9	2.3	4.9
	1991	77.0	49.0	31.4	4.7	3.2	2.6	7.1
	1992	42.3	24.2	11.9	2.8	2.4	1.8	5.3
	1993	133.6	23.8	15.1	2.1	1.7	1.0	3.9
	1994	165.4	69.6	60.0	3.1	1.6	1.1	3.8

Table 8. Percentage distribution of harvestable numbers of sea scallops in the Mid-Atlantic region, within various meat count intervals. Harvestable scallops are defined as all scallops ≥70 mm shell height. Data derived from distribution of standardized stratified mean number per tow of scallops in NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

		Percent of Harvestable Scallops By Meat Count Interval[1]					
Area	Year	80 - 40	40 - 35	35 - 30	30 - 25	<30	<25
Virginia-North Carolina	1975	N/S	N/S	N/S	N/S	N/S	N/S
	1977	10.0	10.0	10.0	10.0	70.0	60.0
	1978	52.2	1.1	2.0	2.0	44.7	42.7
	1979	48.4	17.0	13.2	6.3	21.4	15.1
	1980	53.1	7.0	4.0	7.9	35.9	28.0
	1981	5.6	3.8	7.6	11.3	83.0	71.7
	1982	3.9	7.7	7.7	3.8	80.7	76.9
	1983	34.8	4.9	1.8	1.8	58.5	56.7
	1984	23.2	26.1	21.8	10.6	28.9	18.3
	1985	1.2	-	4.6	13.2	94.2	81.0
	1986	29.6	-	4.9	9.8	65.5	55.7
	1987	56.7	5.5	8.1	8.1	29.7	21.6
	1988	17.4	8.7	15.5	15.3	58.4	43.1
	1989	21.3	15.0	7.8	9.7	55.9	46.2
	1990	80.7	10.4	5.8	1.4	3.1	1.7
	1991	56.3	10.4	5.4	4.8	27.9	23.1
	1992	50.6	13.8	16.2	8.9	19.4	10.5
	1993	77.0	4.2	4.7	6.4	14.1	7.7
	1994	89.0	7.7	1.7	0.6	1.6	1.0
Delmarva	1975	23.9	13.5	14.0	14.6	48.6	34.0
	1977	37.3	11.9	8.6	8.0	42.2	34.2
	1978	29.0	7.7	6.7	7.9	56.6	48.7
	1979	60.3	7.5	5.0	4.6	27.2	22.6
	1980	35.7	3.8	6.0	11.3	54.5	43.2
	1981	37.8	4.7	2.7	3.8	54.8	51.0
	1982	28.7	5.0	6.9	7.4	59.4	52.0
	1983	38.0	8.7	5.6	3.6	47.7	44.1
	1984	34.7	15.3	14.5	8.1	35.5	27.4
	1985	72.4	4.3	3.2	4.2	20.1	15.9
	1986	67.0	10.7	8.6	6.1	13.7	7.6
	1987	48.9	19.4	15.4	8.6	16.3	7.7
	1988	32.7	15.5	14.5	12.5	37.3	24.8
	1989	71.1	11.0	6.3	4.0	11.6	7.6
	1990	72.6	11.2	6.1	4.6	10.1	5.5
	1991	34.6	13.2	13.3	11.2	38.9	27.7
	1992	41.6	6.8	6.6	7.2	45.0	37.8
	1993	64.9	5.5	4.5	2.0	25.1	23.1
	1994	95.2	1.5	0.4	0.3	2.9	2.6
New York Bight	1975	30.8	11.9	12.0	10.4	45.3	34.9
	1977	30.7	9.4	11.1	14.0	48.8	34.8
	1978	12.8	6.7	11.5	15.0	69.0	54.0
	1979	20.4	3.3	5.6	6.8	70.7	63.9
	1980	25.8	6.2	7.0	5.3	61.0	55.7
	1981	59.1	6.5	4.7	4.0	29.7	25.7
	1982	54.3	8.9	6.8	6.3	30.0	23.7
	1983	29.5	9.9	9.4	9.7	51.2	41.5
	1984	53.6	12.5	6.5	3.9	27.4	23.5
	1985	56.7	10.1	8.6	7.3	24.6	17.3
	1986	63.6	9.5	6.8	4.9	20.1	15.2
	1987	59.8	14.5	8.4	5.6	17.3	11.7
	1988	67.3	10.6	5.8	4.7	16.3	11.6
	1989	72.2	9.5	6.1	3.9	12.2	8.3
	1990	81.7	6.8	3.9	2.1	7.6	5.5
	1991	67.7	9.2	5.7	4.6	17.4	12.8
	1992	50.4	12.5	10.3	7.4	26.8	19.4
	1993	62.9	9.2	7.8	4.5	20.1	15.6
	1994	78.5	6.8	3.9	2.6	10.8	8.2
Mid-Atlantic (All Areas)	1975	29.8	12.1	12.3	11.0	45.8	34.8
	1977	31.5	9.7	10.8	13.2	48.0	34.8
	1978	17.1	6.9	10.2	13.2	65.8	52.6
	1979	38.4	5.3	5.5	5.9	50.8	44.9
	1980	29.8	5.4	6.6	7.4	58.2	50.8
	1981	55.9	6.2	4.4	3.9	33.5	29.6
	1982	49.9	8.2	6.9	6.5	35.0	28.5
	1983	31.3	9.7	8.5	8.3	50.5	42.2
	1984	49.8	13.2	8.1	4.7	28.9	24.2
	1985	59.7	8.9	7.5	6.7	23.9	17.2
	1986	64.5	9.9	7.3	5.2	18.3	13.1
	1987	57.4	15.6	9.9	6.3	17.1	10.8
	1988	64.4	11.0	6.6	5.3	18.0	12.7
	1989	71.9	9.8	6.2	4.0	12.1	8.1
	1990	80.2	7.5	4.3	2.5	8.0	5.5
	1991	64.1	9.6	6.5	5.3	19.8	14.5
	1992	49.2	11.7	9.9	7.4	29.2	21.8
	1993	63.7	8.5	7.2	4.1	20.6	16.5
	1994	86.2	4.5	2.3	1.5	7.0	5.5

[1] Meat count is expressed as number of meats per pound.

Table 9. Distribution of standardized stratified mean weight (g, meat) per tow among various meat count intervals for sea scallops from NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

Area	Year	Total Biomass Per Tow (g)	Harvestable[2] Biomass Per Tow (g)	Meat Weight (g, meat) Per Tow [1] Meat Count Interval[3] 80 - 40	40 - 35	35 - 30	30 - 25	<25
South Channel	1975	918	812	39	26	34	43	670
	1977	1957	1938	156	102	218	220	1242
	1978	1173	1149	51	45	74	118	861
	1979	1541	1529	475	141	45	38	830
	1980	668	552	127	15	13	21	376
	1981	677	652	165	39	32	27	389
	1982	1165	671	296	34	22	21	298
	1983	827	773	313	67	55	53	285
	1984	387	360	59	20	22	26	233
	1985	869	763	174	56	100	117	316
	1986	820	577	153	42	41	38	303
	1987	891	724	281	77	69	59	238
	1988	539	459	188	37	36	34	164
	1989	331	271	57	14	17	17	166
	1990	1143	603	259	68	65	53	158
	1991	1505	707	376	49	34	29	219
	1992	2162	1377	1081	67	59	40	130
	1993	394	281	137	16	13	13	102
	1994	478	438	237	57	34	26	84
Southeast Part	1975	1023	1018	16	20	36	67	879
	1977	687	679	57	30	29	24	539
	1978	934	928	19	10	15	14	870
	1979	720	710	34	6	14	13	643
	1980	739	707	245	52	25	12	373
	1981	461	458	55	30	25	16	332
	1982	316	315	9	9	11	7	279
	1983	273	248	14	4	12	19	199
	1984	240	228	63	28	12	10	115
	1985	238	219	46	15	14	19	125
	1986	463	407	78	19	18	13	279
	1987	664	604	153	116	73	35	227
	1988	323	319	46	22	28	36	187
	1989	296	233	25	17	19	26	146
	1990	150	146	41	9	11	5	80
	1991	245	210	65	9	8	5	123
	1992	371	337	65	38	38	48	148
	1993	235	229	15	7	10	15	182
	1994	280	248	9	8	14	12	205
USA Northern Edge and Peak	1985	450	393	125	30	26	17	195
	1986	610	481	103	38	43	33	264
	1987	852	735	286	59	62	62	266
	1988	918	772	302	104	74	65	227
	1989[4]	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1990[5]	2052	1832	1457	159	58	40	118
	1991	1163	848	344	92	71	76	265
	1992	682	605	214	73	60	51	207
	1993	256	250	61	28	19	22	120
	1994	241	218	26	13	12	13	154
USA Georges Bank (All Areas)	1985	574	505	127	37	54	58	229
	1986	632	489	111	34	36	29	279
	1987	826	701	254	79	67	55	246
	1988	632	544	199	59	48	46	192
	1989[6]	-	-	-	-	-	-	-
	1990[5]	1202	894	597	84	50	37	126
	1991	1099	649	295	56	42	41	215
	1992	1216	860	534	63	54	46	163
	1993	308	258	81	19	15	17	126
	1994	346	314	108	30	21	19	136

[1] Meat weight values derived from shell height values using 1978-1982 USA research survey equation, ln Meat Weight (g) = -11.7656 + 3.1693 ln Shell Height (mm) (n = 5863, r = 0.98).
[2] Stratified mean weight (g, meat) per tow for sea scallops ≥70 mm, ≤80 count.
[3] Meat count is expressed as number of meats per pound.
[4] Not sampled.
[5] Stratum 72 not sampled.
[6] Not calculated due to incomplete survey coverage.

Table 9. (continued).

Area	Year	Total Biomass Per Tow (g)	Harvestable[1] Biomass Per Tow (g)	Meat Weight (g, meat) Per Tow[2]				
				Meat Count Interval[3]				
				80 - 40	40 - 35	35 - 30	30 - 25	<25
Total Northern Edge and Peak	1975	2228	2015	538	285	207	162	823
	1977	5299	5064	1826	522	621	531	1564
	1978	7910	7604	632	468	746	818	4940
	1979	4666	4461	1009	261	233	256	2702
	1980	2963	2052	623	236	227	164	802
	1981	4417	3788	2565	244	221	157	601
	1982	1068	950	294	94	98	104	360
	1983	746	669	128	56	66	65	354
	1984	1133	837	227	74	65	65	406
	1985	2104	1846	1287	130	104	92	233
	1986	2676	2592	754	510	498	351	479
	1987	1913	1613	549	168	178	181	537
	1988	1760	1533	635	176	164	141	417
	1989[4]	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1990[5]	3097	2679	1382	278	204	201	614
	1991	1539	1143	353	103	93	102	492
	1992[6]	-	-	-	-	-	-	-
	1993	1422	1395	275	141	152	171	656
	1994	1573	1485	399	169	137	131	649
Total Georges Bank (All Areas)	1975	1471	1343	236	130	105	96	776
	1977	3298	3178	938	289	372	329	1250
	1978	4020	3879	295	220	351	398	2615
	1979	2801	2702	633	169	124	132	1644
	1980	1892	1373	412	139	128	94	600
	1981	1841	1625	919	103	92	66	445
	1982	964	743	243	59	57	59	325
	1983	688	627	168	51	53	52	303
	1984	725	569	142	48	41	42	296
	1985	1358	1193	694	85	86	87	241
	1986	1961	1678	477	301	294	209	397
	1987	1348	1136	388	129	123	114	382
	1988	1096	958	381	102	97	86	292
	1989[6]	-	-	-	-	-	-	-
	1990[5]	1848	1467	732	153	118	112	352
	1991	1294	830	308	68	59	60	335
	1992[6]	-	-	-	-	-	-	-
	1993	867	815	182	76	80	90	387
	1994	977	915	275	103	81	75	381

[1] Meat weight values derived from shell height values using 1978-1982 USA research survey equation, ln Meat Weight (g) = -11.7656 + 3.1693 ln Shell Height (mm) (n = 5863, r = 0.98).
[2] Stratified mean weight (g, meat) per tow for sea scallops ≥70 mm, ≤80 count.
[3] Meat count is expressed as number of meats per pound.
[4] Not sampled.
[5] Stratum 72 not sampled.
[6] Not calculated due to incomplete survey coverage.

Table 10. Percentage distribution of harvestable biomass (meat weight) of sea scallops on Georges Bank, within various meat count intervals. Harvestable biomass is defined as all sea scallops ≥70 mm shell height. Data derived from distribution of standardized stratified mean meat weight per tow in NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

		Percent of Harvestable Biomass By Meat Count Interval[1]					
Area	Year	80 - 40	40 - 35	35 - 30	30 - 25	<30	<25
South Channel	1975	4.8	3.2	4.2	5.2	87.8	82.6
	1977	8.0	5.3	11.3	11.4	75.4	64.0
	1978	4.5	3.9	6.4	10.3	85.2	74.9
	1979	31.1	9.2	2.9	2.5	56.8	54.3
	1980	23.1	2.7	2.3	3.8	71.9	68.1
	1981	25.3	6.0	4.8	4.1	63.9	59.8
	1982	44.1	5.0	3.3	3.2	47.6	44.4
	1983	40.4	8.7	7.2	6.9	43.7	36.8
	1984	16.5	5.5	6.1	7.2	71.9	64.7
	1985	22.7	7.4	13.2	15.3	56.7	41.4
	1986	26.5	7.3	7.2	6.6	59.0	52.4
	1987	38.8	10.7	9.5	8.2	41.0	32.8
	1988	41.0	8.2	7.8	7.3	43.0	35.7
	1989	21.2	5.2	6.0	6.3	67.6	61.3
	1990	43.0	11.2	10.8	8.7	35.0	26.3
	1991	53.1	6.9	4.9	4.1	35.1	31.0
	1992	78.5	4.9	4.2	2.9	12.4	9.5
	1993	48.7	5.8	4.7	4.5	40.8	36.3
	1994	54.1	13.1	7.8	5.9	25.0	19.1
Southeast Part	1975	1.6	1.9	3.5	6.7	93.0	86.3
	1977	8.3	4.4	4.3	3.6	83.0	79.4
	1978	2.0	1.2	1.6	1.5	95.2	93.7
	1979	4.8	0.8	1.9	1.9	92.5	90.6
	1980	34.6	7.3	3.5	1.7	54.6	52.9
	1981	11.9	6.6	5.5	3.4	76.0	72.6
	1982	2.8	2.9	3.5	2.3	90.8	88.5
	1983	5.5	1.6	5.0	7.8	87.9	80.1
	1984	27.8	12.2	5.3	4.2	54.7	50.5
	1985	20.9	6.7	6.4	8.7	66.0	57.3
	1986	19.2	4.7	4.4	3.3	71.7	68.4
	1987	25.3	19.3	12.0	5.8	43.4	37.6
	1988	14.5	7.0	8.9	11.0	69.7	58.6
	1989	10.6	7.3	8.2	11.1	73.9	62.8
	1990	27.8	6.4	7.3	3.7	58.5	54.8
	1991	31.1	4.3	3.7	2.5	60.9	58.4
	1992	19.2	11.1	11.4	14.4	58.3	43.9
	1993	6.6	3.1	4.2	6.5	86.1	79.6
	1994	3.6	3.3	5.7	5.0	87.4	82.4
USA Northern Edge and Peak	1985	31.7	7.6	6.7	4.4	54.0	49.6
	1986	21.3	8.0	8.9	6.9	61.8	54.9
	1987	38.9	7.9	8.5	8.5	44.7	36.2
	1988	39.1	13.4	9.6	8.5	37.9	29.4
	1989[2]	N/S	N/S	N/S	N/S	N/S	N/S
	1990[3]	79.5	8.7	3.2	2.2	8.6	6.4
	1991	40.6	10.9	8.4	8.9	40.1	31.2
	1992	35.4	12.0	9.9	8.4	42.7	34.3
	1993	24.2	11.2	7.8	8.8	56.8	48.0
	1994	12.1	5.9	5.3	6.2	76.7	70.5
USA Georges Bank (All Areas)	1985	25.2	7.4	10.6	11.5	56.8	45.3
	1986	22.6	7.0	7.3	6.0	63.1	57.1
	1987	36.3	11.2	9.6	7.8	42.9	35.1
	1988	36.5	10.8	8.9	8.4	43.8	35.4
	1989[4]	-	-	-	-	-	-
	1990[3]	66.7	9.4	5.6	4.2	18.3	14.1
	1991	45.5	8.6	6.5	6.3	39.4	33.1
	1992	62.1	7.3	6.3	5.4	24.3	18.9
	1993	31.6	7.2	5.7	6.5	55.5	49.0
	1994	34.5	9.5	6.8	5.8	49.2	43.4

[1] Meat count is expressed as number of meats per pound.
[2] Not sampled.
[3] Stratum 72 excluded from analyses, not sampled.
[4] Not calculated due to incomplete survey coverage.

Table 10. (continued).

Area	Year	Percent of Harvestable Biomass By Meat Count Interval[1]					
		80 - 40	40 - 35	35 - 30	30 - 25	<30	<25
Total Northern Edge and Peak	1975	26.7	14.1	10.3	8.1	48.9	40.8
	1977	36.1	10.3	12.2	10.5	41.4	30.9
	1978	8.3	6.2	9.8	10.7	75.7	65.0
	1979	22.6	5.9	5.2	5.7	66.3	60.6
	1980	30.3	11.5	11.1	8.0	47.1	39.1
	1981	67.7	6.4	5.9	4.1	20.0	15.9
	1982	30.9	9.9	10.3	10.9	48.9	38.0
	1983	19.1	8.4	9.8	9.7	62.7	53.0
	1984	27.1	8.9	7.7	7.8	56.3	48.5
	1985	69.7	7.1	5.6	5.0	17.6	12.6
	1986	29.1	19.7	19.2	13.5	32.0	18.5
	1987	34.0	10.5	11.0	11.2	44.7	33.3
	1988	41.4	11.5	10.7	9.2	36.4	27.2
	1989[4]	-	-	-	-	-	-
	1990[3]	51.6	10.4	7.6	7.5	30.4	22.9
	1991	30.8	9.0	8.2	8.9	52.0	43.1
	1992[4]	-	-	-	-	-	-
	1993	19.7	10.1	10.9	12.3	59.3	47.0
	1994	26.8	11.4	9.3	8.8	52.5	43.7
Total Georges Bank (All Areas)	1975	17.6	9.6	7.8	7.2	65.0	57.8
	1977	29.5	9.1	11.7	10.4	49.7	39.3
	1978	7.6	5.7	9.0	10.3	77.7	67.4
	1979	23.4	6.3	4.6	4.9	65.7	60.8
	1980	30.0	10.1	9.3	6.9	50.6	43.7
	1981	56.5	6.4	5.6	4.1	31.5	27.4
	1982	32.7	7.9	7.7	7.9	51.7	43.8
	1983	26.8	8.1	8.4	8.4	56.7	48.3
	1984	24.9	8.4	7.2	7.5	59.5	52.0
	1985	58.1	7.1	7.3	7.3	27.5	20.2
	1986	28.4	18.0	17.5	12.5	36.1	23.6
	1987	34.2	11.3	10.8	10.1	43.7	33.6
	1988	39.7	10.7	10.1	9.0	39.5	30.5
	1989[4]	-	-	-	-	-	-
	1990[3]	49.9	10.4	8.1	7.6	31.6	24.0
	1991	37.1	8.2	7.0	7.3	47.7	40.4
	1992[4]	-	-	-	-	-	-
	1993	22.3	9.3	9.9	11.1	58.5	47.4
	1994	30.0	11.3	8.8	8.2	49.9	41.7

[1] Meat count is expressed as number of meats per pound.
[2] Not sampled.
[3] Stratum 72 excluded from analyses, not sampled.
[4] Not calculated due to incomplete survey coverage.

Table 11. Distribution of standardized mean number per tow among various meat count intervals for sea scallops from NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

		Stratified Mean Number of Scallops Per Tow						
		Total Number	Harvestable	Meat Count Interval[1]				
Area	Year	Per Tow	Number Per Tow	80 - 40	40 - 35	35 - 30	30 - 25	<25
South Channel	1975	75.0	29.9	4.6	2.0	2.2	2.3	18.8
	1977	95.4	89.1	18.6	7.9	14.2	12.2	36.2
	1978	57.4	49.7	5.4	3.5	4.8	6.5	29.5
	1979	95.0	88.2	47.9	10.8	2.9	2.1	24.5
	1980	109.9	30.2	15.9	1.1	0.8	1.2	11.2
	1981	52.0	36.5	19.0	3.0	2.1	1.5	10.9
	1982	266.8	53.0	39.7	2.6	1.4	1.2	8.1
	1983	74.8	55.8	36.3	5.2	3.6	2.9	7.8
	1984	31.3	17.7	6.9	1.5	1.4	1.5	6.4
	1985	87.6	47.3	21.1	4.3	6.5	6.5	8.9
	1986	152.3	37.0	19.9	3.3	2.7	2.1	9.0
	1987	140.7	56.1	35.0	5.9	4.5	3.3	7.4
	1988	68.5	36.0	23.9	2.9	2.3	1.8	5.1
	1989	36.8	15.1	7.1	1.1	1.1	0.9	4.9
	1990	308.7	49.9	32.3	5.2	4.2	2.9	5.3
	1991	496.3	64.2	50.5	3.7	2.2	1.6	6.2
	1992	394.6	171.8	156.4	5.2	3.8	2.2	4.2
	1993	55.1	24.5	18.3	1.2	0.9	0.7	3.4
	1994	56.3	37.6	26.9	4.4	2.2	1.5	2.6
Southeast Part	1975	40.2	38.4	1.9	1.5	2.3	3.8	28.9
	1977	30.4	27.2	6.2	2.3	1.9	1.3	15.5
	1978	29.3	27.1	2.0	0.8	1.0	0.8	22.5
	1979	28.9	21.2	4.0	0.4	0.9	0.7	15.2
	1980	63.2	41.7	25.8	4.0	1.6	0.7	9.6
	1981	20.8	19.4	5.8	2.3	1.6	0.9	8.8
	1982	10.6	9.8	0.9	0.7	0.7	0.4	7.1
	1983	20.5	9.2	1.6	0.3	0.8	1.1	5.4
	1984	17.5	12.9	6.4	2.2	0.8	0.5	3.0
	1985	20.9	11.8	5.3	1.1	0.9	1.1	3.4
	1986	49.5	20.6	9.2	1.5	1.2	0.7	8.0
	1987	62.7	39.6	16.7	9.0	4.7	1.9	7.3
	1988	17.5	16.1	5.2	1.7	1.8	2.0	5.4
	1989	35.4	11.8	3.0	1.3	1.2	1.4	4.9
	1990	10.0	8.4	4.5	0.7	0.7	0.3	2.2
	1991	32.6	14.1	9.0	0.7	0.5	0.3	3.6
	1992	30.8	20.5	7.6	2.9	2.5	2.7	4.8
	1993	11.8	9.5	1.8	0.5	0.6	0.8	5.8
	1994	28.5	8.9	1.0	0.6	0.9	0.7	5.7
USA Northern Edge and Peak	1985	48.4	26.6	16.2	2.3	1.7	0.9	5.5
	1986	74.2	28.6	13.0	2.9	2.8	1.8	8.1
	1987	116.6	54.6	34.3	4.5	4.1	3.4	8.3
	1988	126.7	60.9	31.3	6.7	4.1	3.1	6.5
	1989[2]	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1990[3]	263.7	196.8	174.4	12.3	3.8	2.2	4.1
	1991	185.6	66.9	42.4	7.1	4.6	4.2	8.6
	1992	71.1	45.0	25.7	5.6	3.9	2.8	7.0
	1993	18.3	15.6	6.8	2.2	1.3	1.2	4.1
	1994	25.3	10.4	3.0	1.0	0.7	0.7	5.0
USA Georges Bank (All Areas)	1985	58.3	31.8	15.8	2.9	3.5	3.2	6.4
	1986	90.2	28.9	14.0	2.7	2.3	1.6	8.3
	1987	114.5	51.9	30.7	6.1	4.4	3.0	7.7
	1988	78.8	40.8	24.5	4.5	3.2	2.5	6.1
	1989[4]	-	-	-	-	-	-	-
	1990[3]	233.0	87.8	71.9	6.4	3.2	2.1	4.2
	1991	278.2	54.1	38.3	4.3	2.7	2.3	6.5
	1992	193.9	91.2	74.9	4.8	3.6	2.5	5.4
	1993	31.8	17.8	10.4	1.4	1.0	0.9	4.1
	1994	38.6	21.1	12.3	2.3	1.4	1.0	4.1

[1] Meat count is expressed as number of meats per pound.
[2] Not sampled.
[3] Stratum 72 excluded from analyses, not sampled.
[4] Not calculated due to incomplete survey coverage.

Table 11. (continued).

Area	Year	Stratified Mean Number of Scallops Per Tow						
		Total Number Per Tow	Harvestable Number Per Tow	Meat Count Interval[1]				
				80 - 40	40 - 35	35 - 30	30 - 25	<25
Total Northern Edge and Peak	1975	219.7	135.9	61.9	21.9	13.4	9.0	29.7
	1977	450.9	384.8	220.5	40.1	40.3	29.5	54.4
	1978	550.6	372.9	71.1	35.9	48.5	45.4	172.0
	1979	329.9	257.9	122.4	20.0	15.1	14.2	86.2
	1980	809.4	143.7	75.4	18.2	14.8	9.0	26.3
	1981	683.1	405.7	343.4	18.7	14.4	8.7	20.5
	1982	106.2	65.3	34.1	7.3	6.3	5.7	11.9
	1983	85.3	37.1	14.1	4.3	4.3	3.6	10.8
	1984	347.8	54.0	28.3	5.7	4.2	3.6	12.2
	1985	276.7	192.2	162.8	10.0	6.8	5.1	7.5
	1986	368.6	195.6	86.5	39.2	32.4	19.5	18.0
	1987	272.4	122.2	67.5	13.0	11.6	10.0	20.1
	1988	223.7	124.4	77.3	13.6	10.7	7.8	15.0
	1989[4]	-	-	-	-	-	-	-
	1990[3]	459.8	236.0	166.1	21.3	13.3	11.2	24.1
	1991	231.1	78.9	43.5	7.9	6.1	5.7	15.7
	1992[4]	-	-	-	-	-	-	-
	1993	94.8	85.7	31.0	10.9	9.9	9.5	24.4
	1994	148.4	97.0	44.7	13.0	8.9	7.3	23.1
Total Georges Bank (All Areas)	1975	126.3	74.6	27.2	10.0	6.8	5.3	25.3
	1977	252.6	218.3	113.0	22.2	24.2	18.2	40.7
	1978	263.7	184.0	32.9	16.9	22.8	22.1	89.3
	1979	188.9	152.3	73.2	13.0	8.1	7.3	50.7
	1980	469.7	92.3	49.2	10.7	8.4	5.2	18.8
	1981	249.6	152.4	121.3	7.9	6.0	3.7	13.5
	1982	142.2	51.2	29.9	4.5	3.7	3.3	9.8
	1983	70.1	38.2	19.1	3.9	3.4	2.9	8.9
	1984	183.3	34.6	17.3	3.7	2.7	2.3	8.6
	1985	167.9	111.6	87.4	6.5	5.6	4.8	7.3
	1986	252.9	123.0	55.3	23.2	19.1	11.6	13.8
	1987	190.9	85.4	47.6	9.9	8.0	6.3	13.6
	1988	135.1	75.6	46.6	7.9	6.3	4.8	10.0
	1989[4]	-	-	-	-	-	-	-
	1990[3]	320.9	127.3	88.3	11.8	7.7	6.2	13.3
	1991	283.1	62.3	39.6	5.2	3.8	3.3	10.4
	1992[4]	-	-	-	-	-	-	-
	1993	66.6	51.6	21.5	5.8	5.2	5.0	14.1
	1994	96.2	61.4	30.9	7.9	5.2	4.2	13.2

[1] Meat count is expressed as number of meats per pound.
[2] Not sampled.
[3] Stratum 72 excluded from analyses, not sampled.
[4] Not calculated due to incomplete survey coverage.

Table 12. Percentage distribution of harvestable number of sea scallops on Georges Bank, within various meat count intervals. Harvestable scallops are defined as all sea scallops ≥70 mm shell height. Data derived from distribution of standardized stratified mean number per tow of scallops in NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

		Percent of Harvestable Scallops By Meat Count Interval[1]					
Area	Year	80 - 40	40 - 35	35 - 30	30 - 25	<30	<25
South Channel	1975	15.3	6.6	7.5	7.9	70.6	62.7
	1977	20.9	8.8	15.9	13.7	54.4	40.7
	1978	10.8	6.9	9.7	13.2	72.6	59.4
	1979	54.3	12.3	3.3	2.4	30.1	27.7
	1980	52.6	3.8	2.7	3.9	40.9	37.0
	1981	52.2	8.2	5.6	4.1	34.0	29.9
	1982	74.9	4.9	2.7	2.2	17.5	15.3
	1983	65.0	9.3	6.4	5.3	19.3	14.0
	1984	39.1	8.6	8.1	8.1	44.2	36.1
	1985	44.5	9.1	13.8	13.7	32.6	18.9
	1986	53.9	8.8	7.2	5.7	30.1	24.4
	1987	62.3	10.6	8.0	5.8	19.1	13.3
	1988	66.2	8.0	6.5	5.2	19.3	14.1
	1989	47.1	7.1	7.1	6.2	38.7	32.5
	1990	64.7	10.4	8.5	5.8	16.4	10.6
	1991	78.6	5.8	3.5	2.5	12.1	9.6
	1992	91.0	3.0	2.2	1.3	3.7	2.4
	1993	74.6	5.1	3.5	2.9	16.8	13.9
	1994	71.5	11.8	5.9	3.8	10.8	7.0
Southeast Part	1975	4.8	3.9	6.1	9.8	85.2	75.4
	1977	22.7	8.4	6.9	5.0	62.0	57.0
	1978	7.4	3.0	3.6	2.8	86.0	83.2
	1979	18.7	2.1	4.2	3.5	75.0	71.5
	1980	62.1	9.5	3.9	1.6	24.5	22.9
	1981	29.7	12.0	8.4	4.5	49.9	45.4
	1982	8.9	7.2	7.3	4.1	76.6	72.5
	1983	17.0	3.3	8.8	11.6	70.9	59.3
	1984	49.8	16.6	6.2	4.1	27.4	23.3
	1985	45.1	9.5	7.7	8.9	37.7	28.8
	1986	44.8	7.2	5.7	3.6	42.3	38.7
	1987	42.2	22.6	11.9	4.9	23.3	18.4
	1988	32.4	10.6	11.4	12.1	45.6	33.5
	1989	25.1	11.1	10.5	12.1	53.3	41.2
	1990	53.0	8.6	8.2	3.6	30.2	26.6
	1991	63.9	5.0	3.6	2.0	27.5	25.5
	1992	37.0	14.1	12.2	13.1	36.7	23.6
	1993	18.9	5.7	6.6	8.7	68.8	60.1
	1994	11.2	7.0	10.4	7.7	71.4	63.7
USA Northern Edge and Peak	1985	60.7	8.7	6.4	3.6	24.2	20.6
	1986	45.3	10.3	9.7	6.4	34.7	28.3
	1987	62.8	8.2	7.4	6.3	21.6	15.3
	1988	60.5	13.1	7.9	6.0	18.5	12.5
	1989[2]	N/S	N/S	N/S	N/S	N/S	N/S
	1990[3]	88.6	6.2	2.0	1.1	3.2	2.1
	1991	63.4	10.6	6.9	6.3	19.1	12.8
	1992	57.2	12.4	8.7	6.3	21.7	15.4
	1993	44.1	13.9	8.1	7.8	33.9	26.1
	1994	28.6	9.5	7.2	7.1	54.7	47.6
USA Georges Bank (All Areas)	1985	49.6	9.0	11.0	10.2	30.4	20.2
	1986	48.4	9.1	8.1	5.6	34.4	28.8
	1987	59.1	11.7	8.4	5.9	20.8	14.9
	1988	60.1	11.0	7.7	6.2	21.2	15.0
	1989[4]	-	-	-	-	-	-
	1990[3]	81.8	7.3	3.7	2.4	7.2	4.8
	1991	70.8	8.0	5.0	4.2	16.2	12.0
	1992	82.1	5.3	3.9	2.8	8.7	5.9
	1993	58.1	8.0	5.4	5.2	28.5	23.3
	1994	58.0	10.9	6.6	4.8	24.5	19.7

[1] Meat count is expressed as number of meats per pound.
[2] Not sampled.
[3] Stratum 72 excluded from analyses, not sampled.
[4] Not calculated due to incomplete survey coverage.

Table 12. (continued).

Area	Year	Percent of Harvestable Scallops By Meat Count Interval[1]					
		80 - 40	40 - 35	35 - 30	30 - 25	<30	<25
Total Northern Edge and Peak	1975	45.5	16.1	9.9	6.7	28.5	21.8
	1977	57.3	10.4	10.5	7.7	21.8	14.1
	1978	19.1	9.6	13.0	12.2	58.3	46.1
	1979	47.4	7.8	5.9	5.5	38.9	33.4
	1980	52.5	12.6	10.3	6.3	24.6	18.3
	1981	84.7	4.6	3.5	2.1	7.2	5.1
	1982	52.1	11.1	9.7	8.8	27.1	18.3
	1983	37.9	11.7	11.5	9.7	38.9	29.2
	1984	52.4	10.6	7.8	6.7	29.2	22.5
	1985	84.7	5.2	3.5	2.7	6.6	3.9
	1986	44.2	20.1	16.6	9.9	19.1	9.2
	1987	55.3	10.6	9.4	8.2	24.7	16.5
	1988	62.2	10.9	8.5	6.3	18.4	12.1
	1989[4]	-	-	-	-	-	-
	1990[3]	70.4	9.1	5.6	4.7	14.9	10.2
	1991	55.2	10.0	7.7	7.2	27.1	19.9
	1992[4]	-	-	-	-	-	-
	1993	36.1	12.7	11.6	11.1	39.6	28.5
	1994	46.1	13.4	9.2	7.5	31.3	23.8
Total Georges Bank (All Areas)	1975	36.5	13.3	9.1	7.2	41.1	33.9
	1977	51.7	10.2	11.1	8.4	27.0	18.6
	1978	17.9	9.2	12.4	12.0	60.5	48.5
	1979	48.1	8.5	5.3	4.8	38.1	33.3
	1980	53.3	11.6	9.0	5.7	26.1	20.4
	1981	79.6	5.2	3.9	2.4	11.3	8.9
	1982	58.4	8.9	7.2	6.4	25.5	19.1
	1983	50.1	10.2	8.9	7.6	30.8	23.2
	1984	49.9	10.7	7.8	6.8	31.6	24.8
	1985	78.3	5.9	5.0	4.3	10.8	6.5
	1986	44.9	18.8	15.6	9.4	20.7	11.3
	1987	55.7	11.6	9.4	7.4	23.3	15.9
	1988	61.7	10.4	8.3	6.3	19.6	13.3
	1989[4]	-	-	-	-	-	-
	1990[3]	69.4	9.2	6.0	4.9	15.4	10.5
	1991	63.5	8.4	6.1	5.4	22.0	16.6
	1992[4]	-	-	-	-	-	-
	1993	41.6	11.3	10.1	9.7	37.0	27.3
	1994	50.3	12.9	8.6	6.7	28.2	21.5

[1] Meat count is expressed as number of meats per pound.
[2] Not sampled.
[3] Stratum 72 excluded from analyses, not sampled.
[4] Not calculated due to incomplete survey coverage.

Table 13. Percentage distribution of harvestable biomass (meat weight) of sea scallops in the USA Georges Bank and Mid-Atlantic regions, within various meat count intervals. Harvestable biomass is defined as all sea scallops ≥70 mm shell height (≤80 count). Data derived from distribution of standardized stratified mean meat weight per tow in NEFSC 1994 research vessel sea scallop survey.

	Percent Harvestable Biomass			
	Meat Count Interval			
Area	80-40	40-35	35-30	<30
Virginia-No. Carolina	81.8	11.0	2.8	4.4
Delmarva	87.0	2.3	0.6	10.1
New York Bight	58.9	8.2	5.6	27.3
Mid-Atlantic	**70.4**	**5.9**	**3.6**	**20.1**
South Channel	54.1	13.1	7.8	25.0
Southeast Part	3.6	3.3	5.7	87.4
USA No. Edge And Peak	12.1	5.9	5.3	76.7
USA Georges Bank	**34.5**	**9.5**	**6.8**	**49.2**
Total USA Georges Bank and Mid-Atlantic Regions	**59.9**	**7.0**	**4.5**	**28.6**

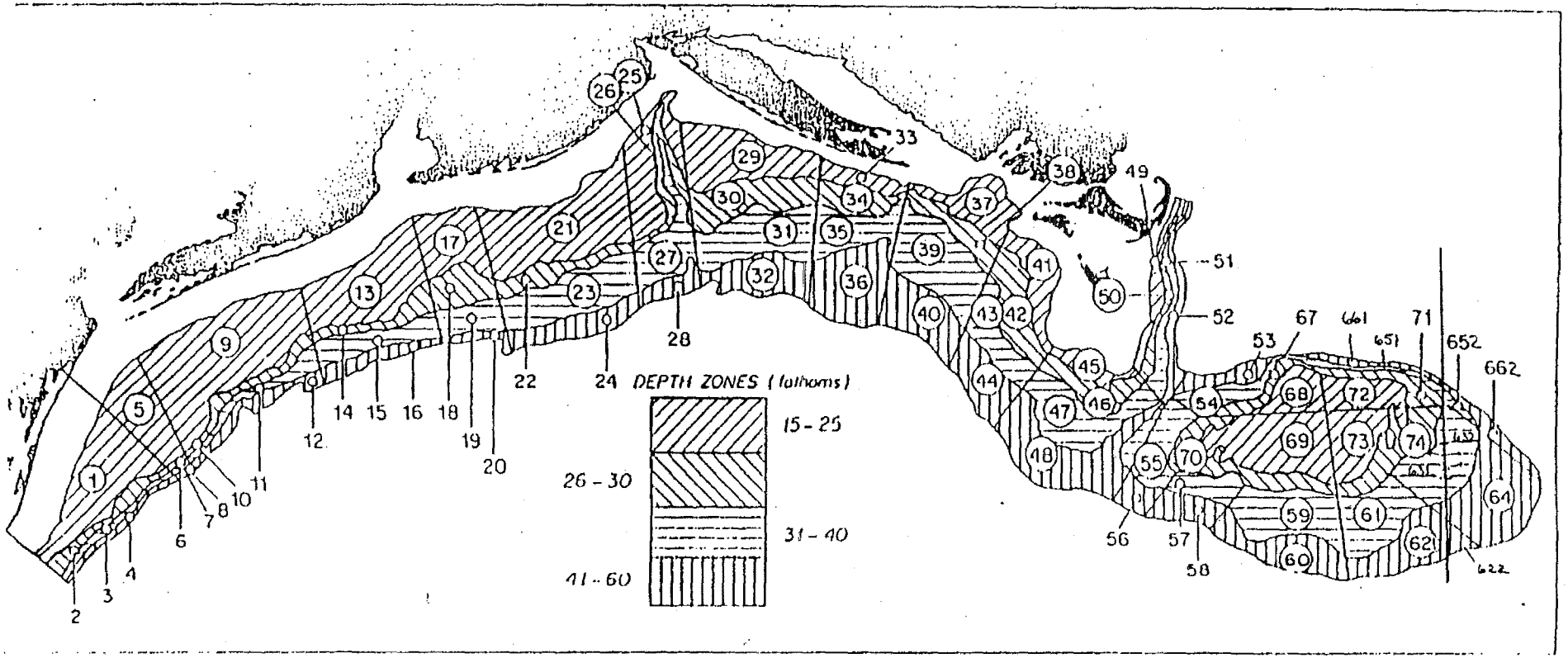


Figure 1. USA Northeast Fisheries Science Center sea scallop research vessel survey sampling strata in the Northwest Atlantic, Georges Bank to Cape Hatteras, used in annual surveys since 1979. For analytic purposes, survey strata are grouped by major fishing regions: Virginia-North Carolina (Strata 6-7); Delmarva (Strata 10-11, 14-15, 18-19); New York Bight (Strata 22-31, 33-35); South Channel (Strata46-47, 49-55); Southeast Part (Strata 58-60); USA Northern Edge and Peak (61,621,631,651,661,71,72,74), Canadian Northern Edge and Peak (Strata 622,632,64,652,662).

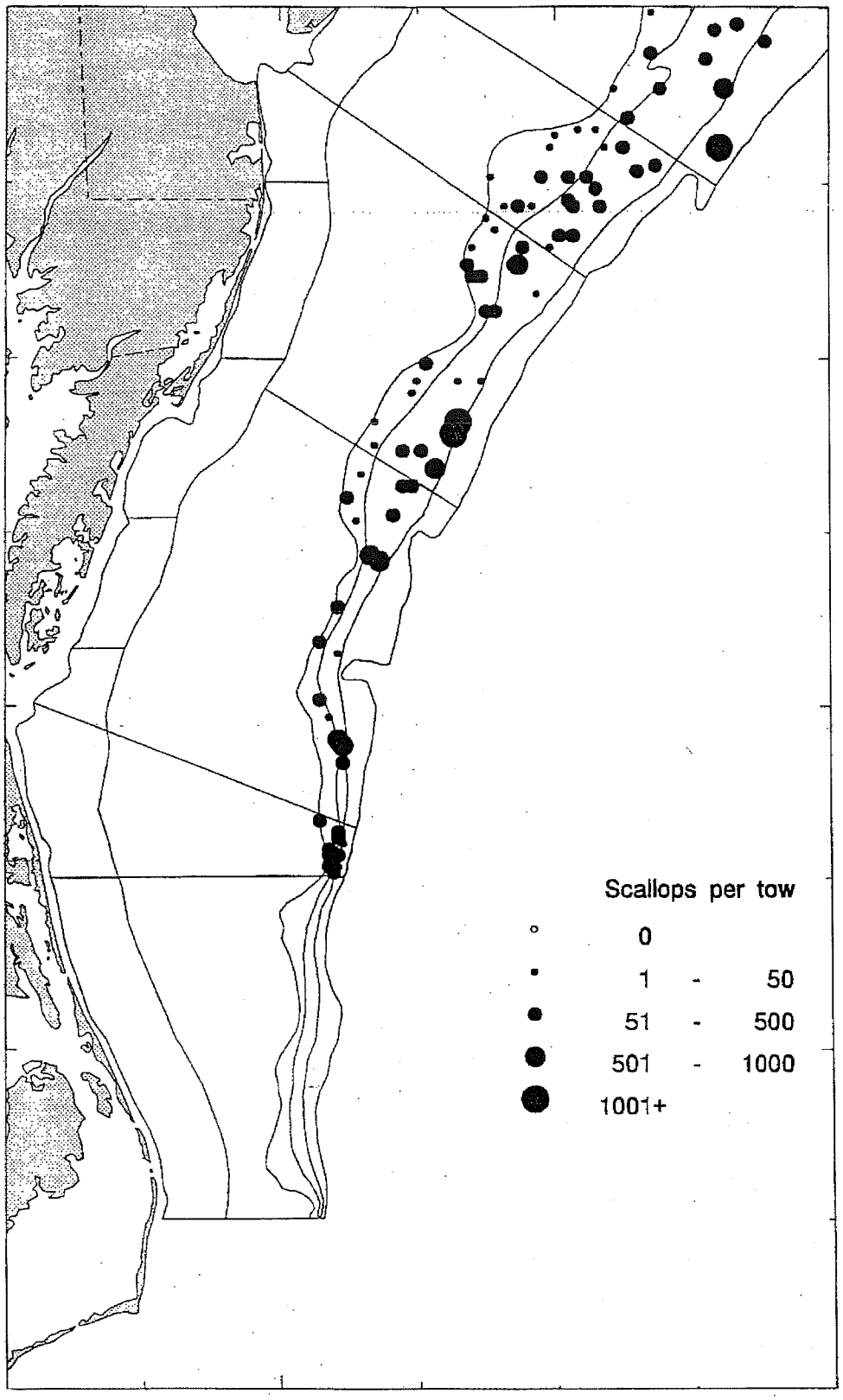


Figure 2. Distribution of sea scallops (number per tow) observed in the NEFSC sea scallop research vessel survey in the Virginia-North Carolina and Delmarva areas of the Mid-Atlantic region, 1994.

1994 NEW YORK BIGHT
ALL SCALLOPS

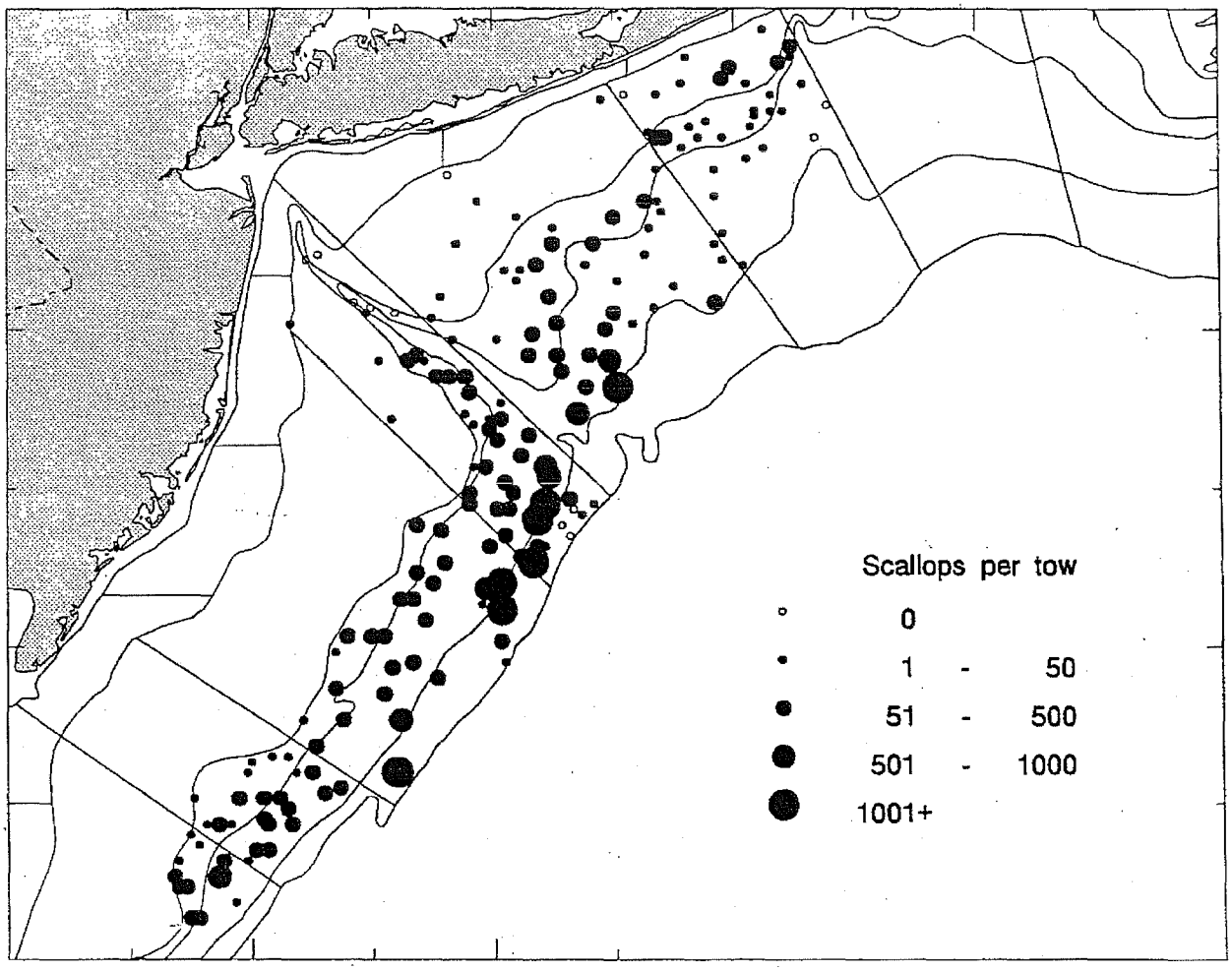


Figure 3. Distribution of sea scallops (number per tow) observed in the NEFSC sea scallop research vessel survey in the New York Bight area of the Mid-Atlantic region, 1994.

1994 GEORGES BANK
ALL SCALLOPS

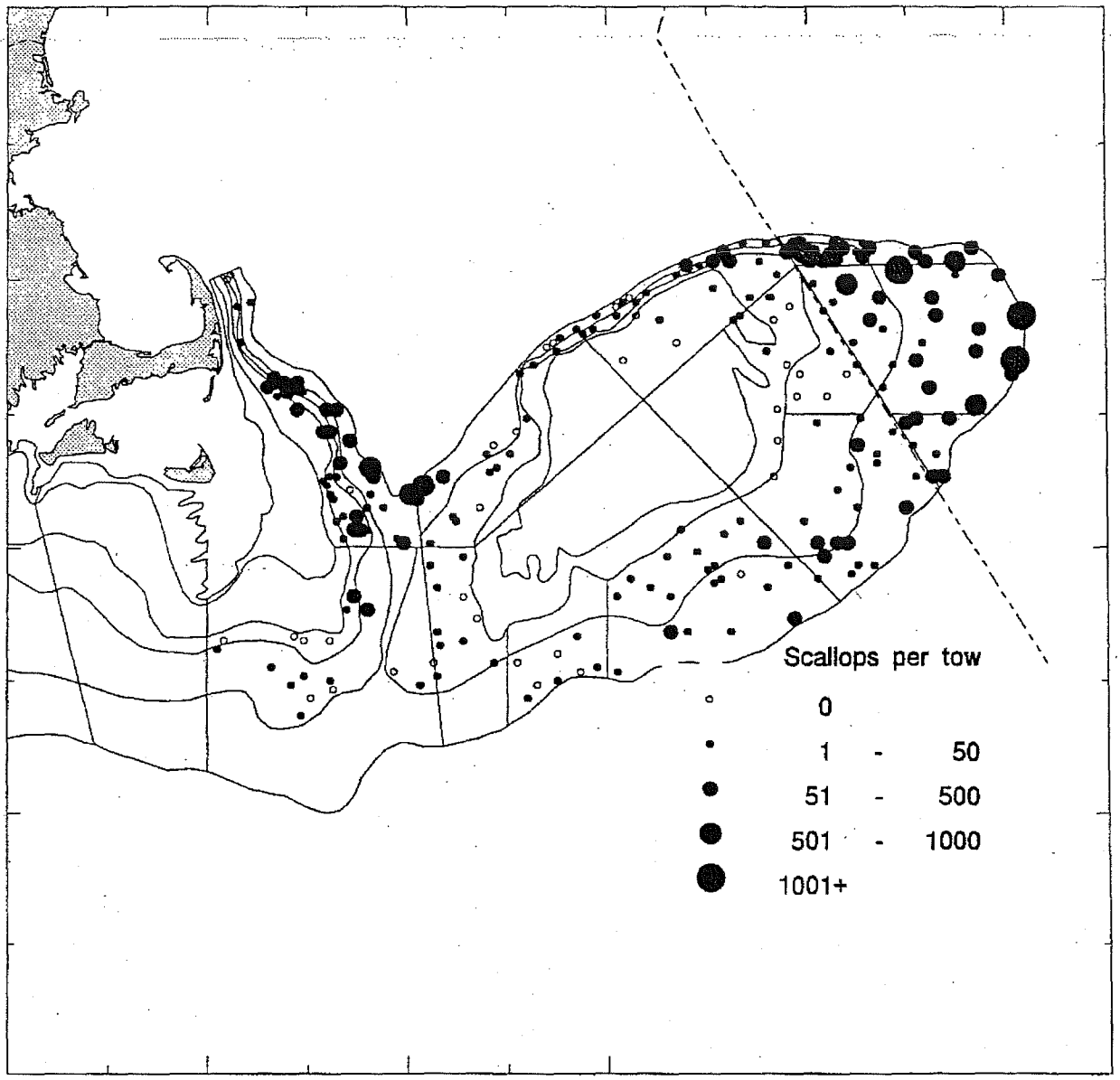


Figure 4. Distribution of sea scallops (number per tow) observed in the NEFSC sea scallop research vessel survey in the South Channel, Southeast Part, USA Northern Edge and Peak and Canadian Northern Edge and Peak areas of the Georges Bank region, 1994.

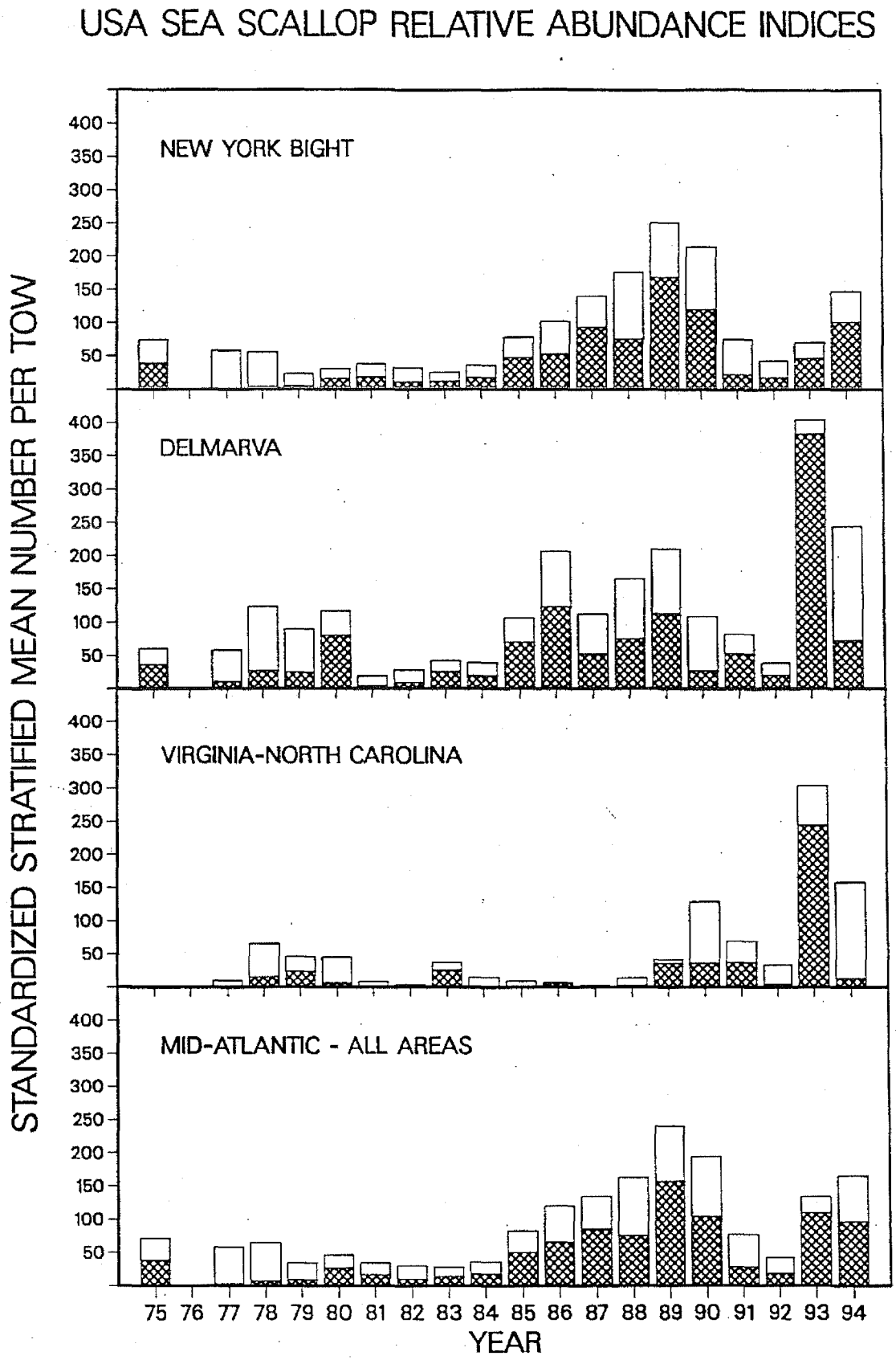


Figure 5. Relative abundance indices of sea scallops, by principal areas in the Mid-Atlantic, from USA sea scallop research vessel surveys conducted during 1975 and 1977-1994. The shaded portion of each bar represents the relative abundance of pre-recruit scallops (<70 mm shell height); the upper, non-shaded portion of each bar represents the relative abundance of recruited or harvestable-size scallops (≥70 mm shell height).

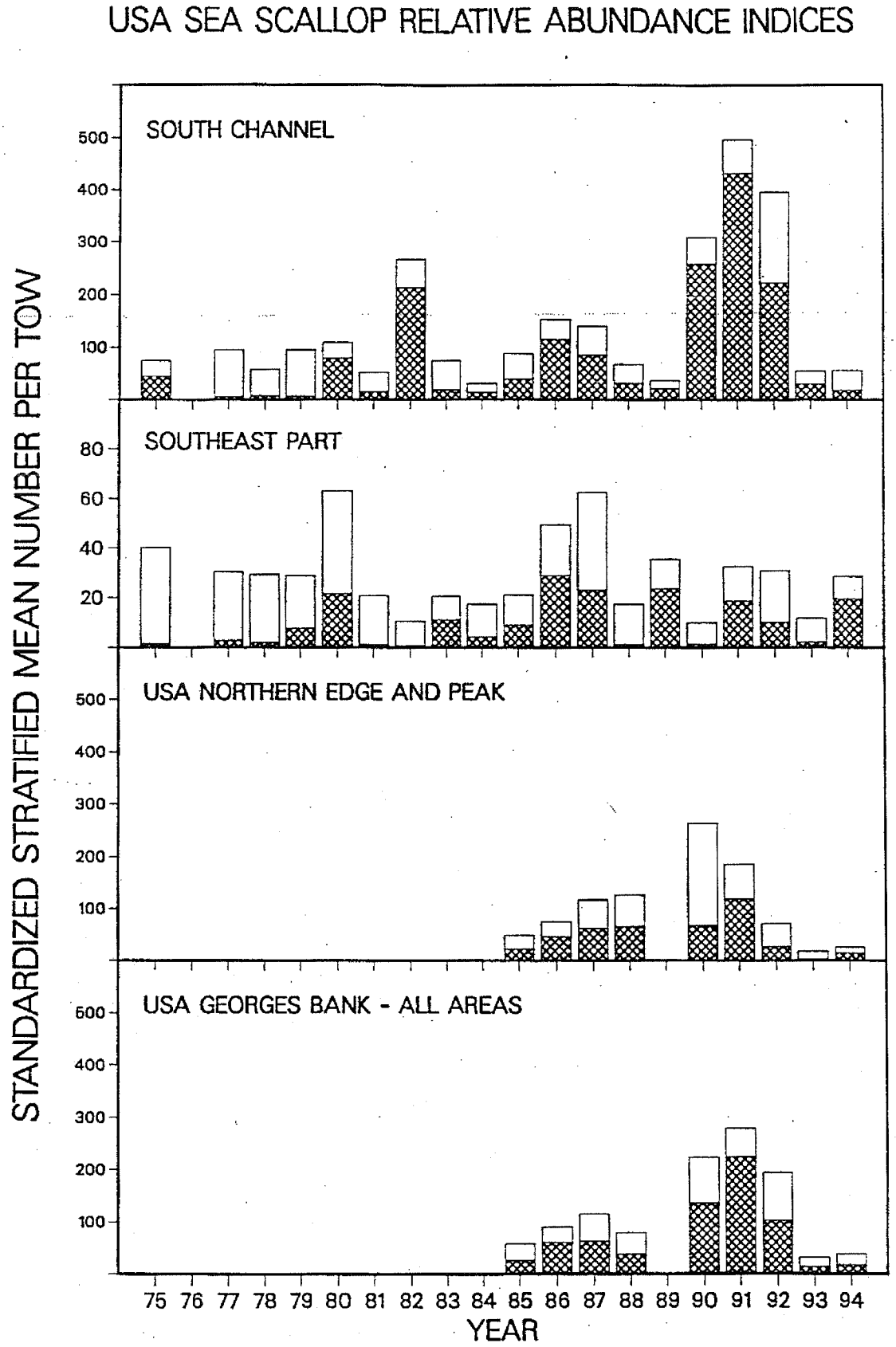


Figure 6. Relative abundance indices of sea scallops, by principal areas on USA Georges Bank, from USA sea scallop research vessel surveys conducted during 1975 and 1977-1994. The shaded portion of each bar represents the relative abundance of pre-recruit scallops (<70 mm shell height); the upper, non-shaded portion of each bar represents the relative abundance of recruited or harvestable-size scallops (≥70 mm shell height).

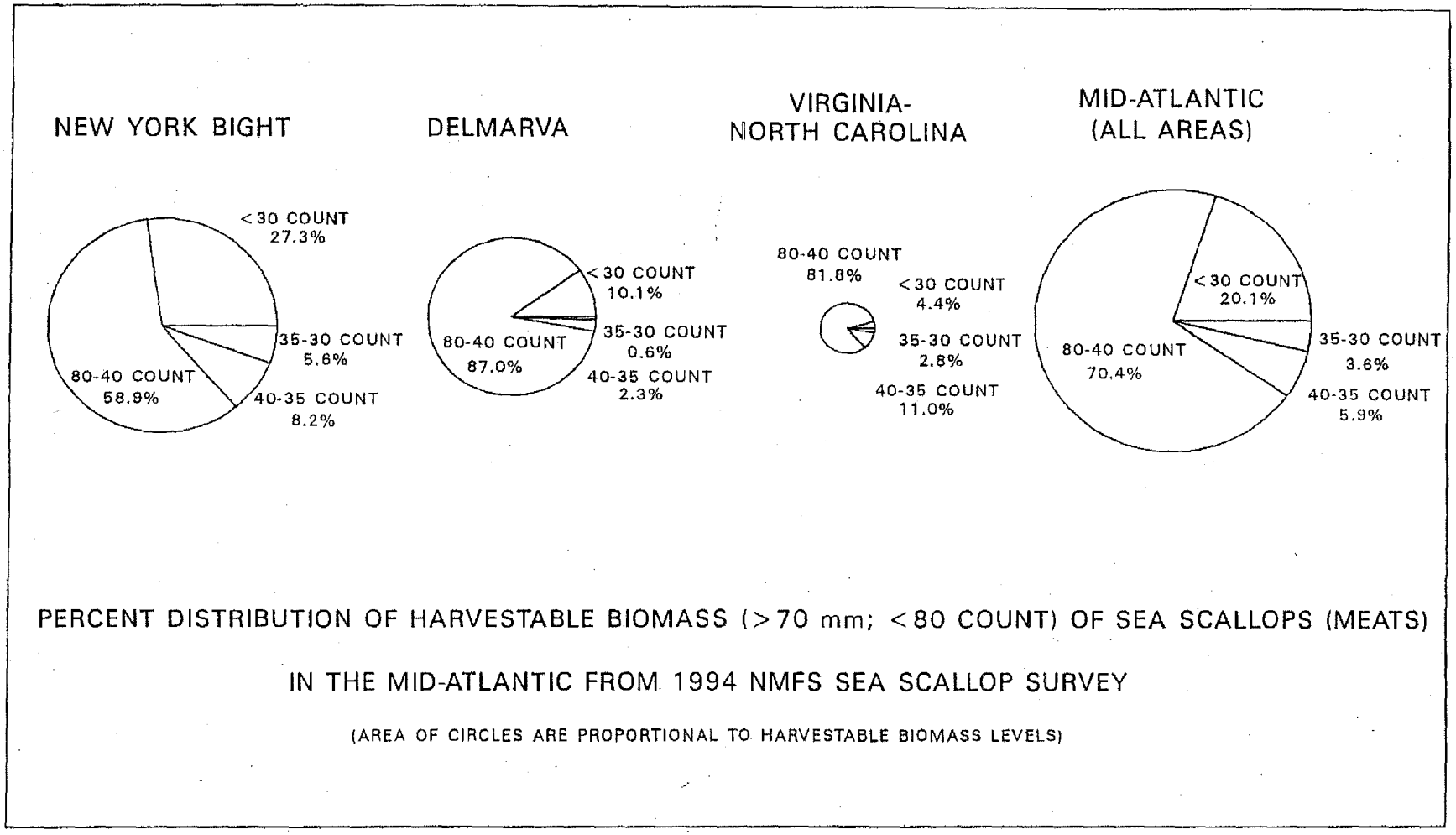


Figure 7. Percentage distribution of harvestable biomass [meat weight] of sea scallops, within various meat count intervals [number of meats per pound], from the 1994 USA sea scallop research vessel survey in the Mid-Atlantic region. Harvestable biomass is defined as all sea scallops >70 mm shell height. Data derived from the 1994 survey distributions of standard stratified mean meat weight per tow.

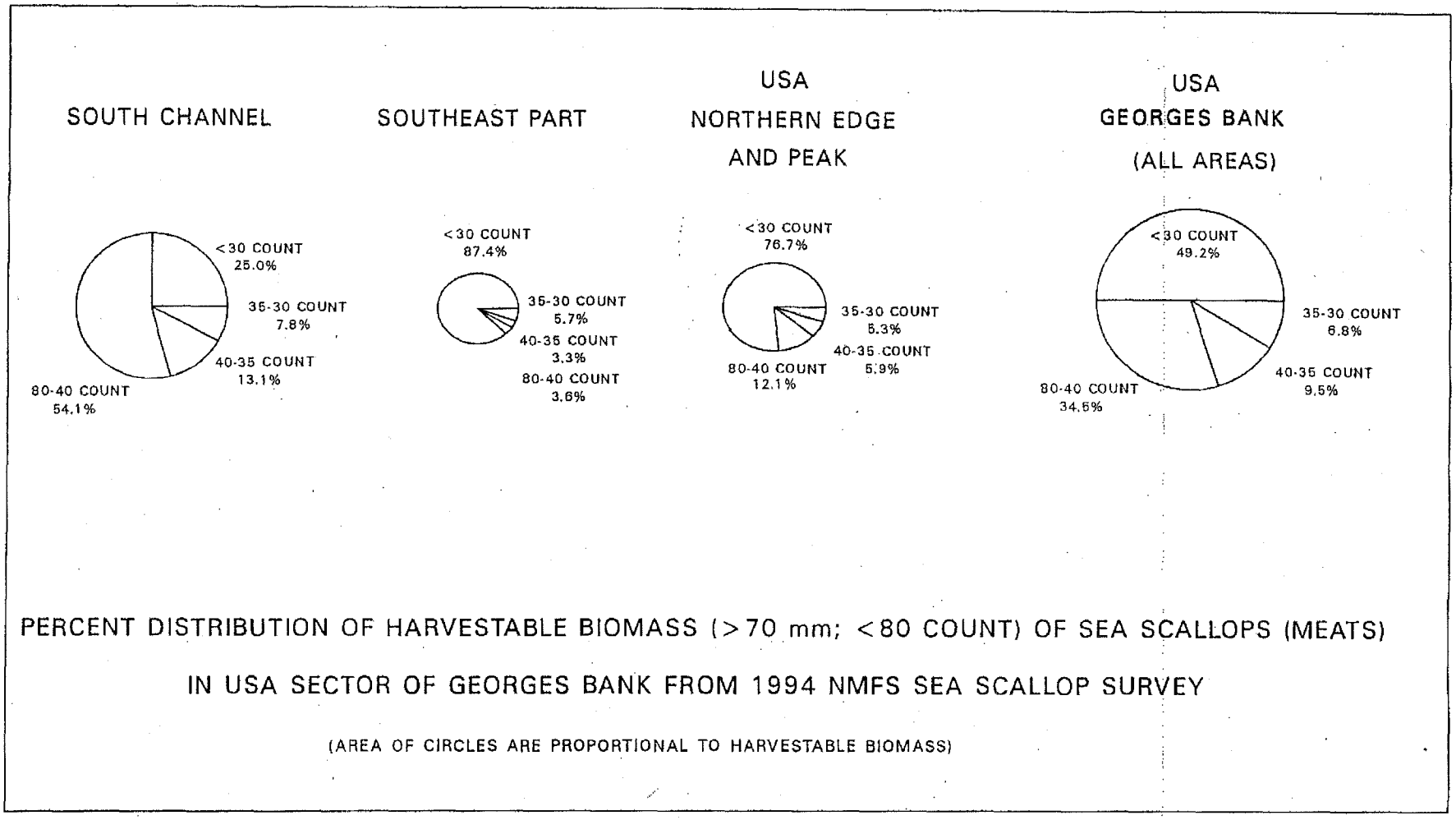


Figure 8. Percentage distribution of harvestable biomass [meat weight] of sea scallops, within various meat count intervals [number of meats per pound], from the 1994 USA sea scallop research vessel survey in the USA portion of the Georges Bank region. Harvestable biomass is defined as all sea scallops >70 mm shell height. Data derived from the 1994 survey distributions of standard stratified mean meat weight per tow.

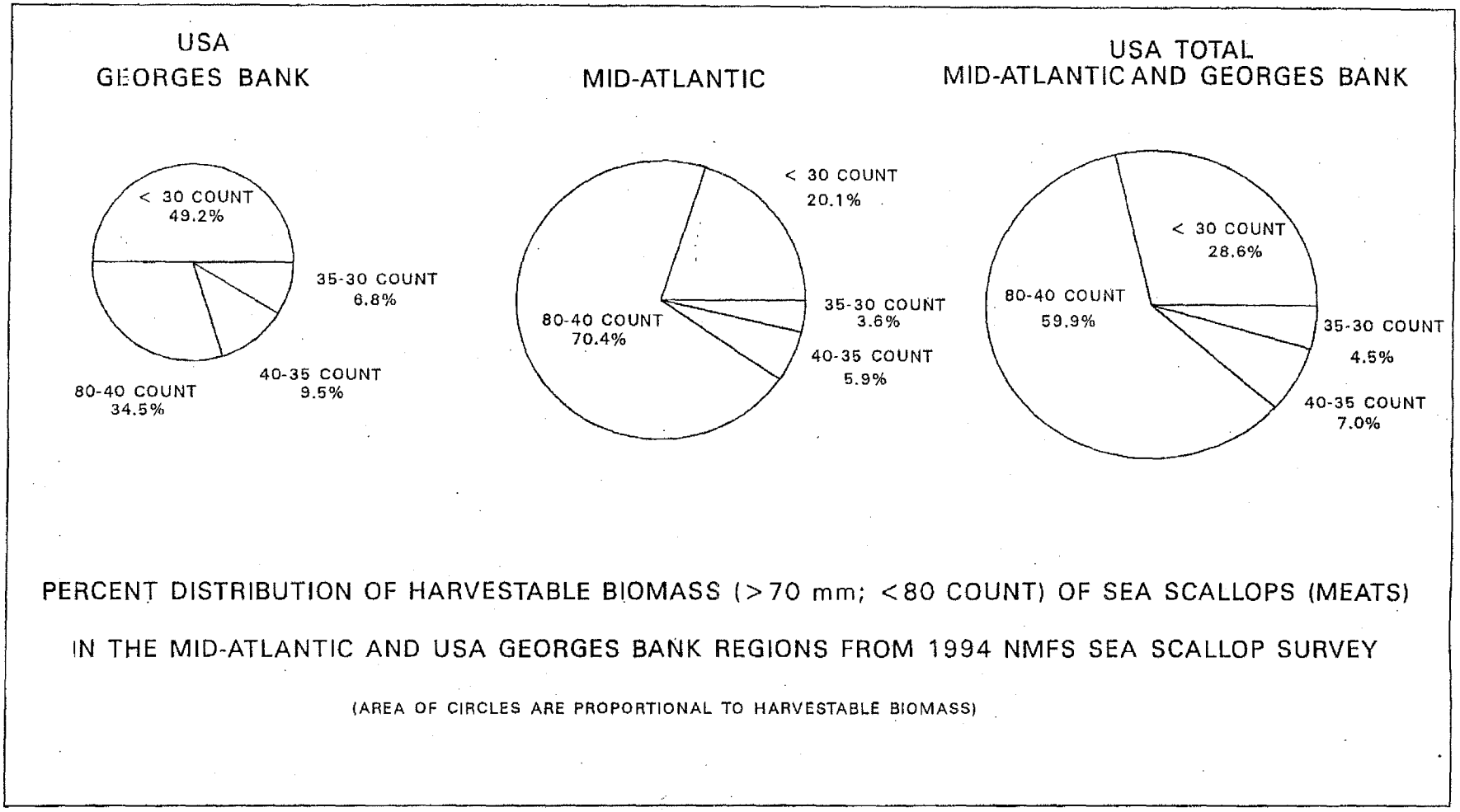


Figure 9. Percentage distribution of harvestable biomass [meat weight] of sea scallops, within various meat count intervals [number of meats per pound], from the 1994 USA sea scallop research vessel survey in the USA portion of Georges Bank and the Mid-Atlantic regions. Harvestable biomass is defined as all sea scallops >70 mm shell height. Data derived from the 1994 survey distributions of standard stratified mean meat weight per tow.

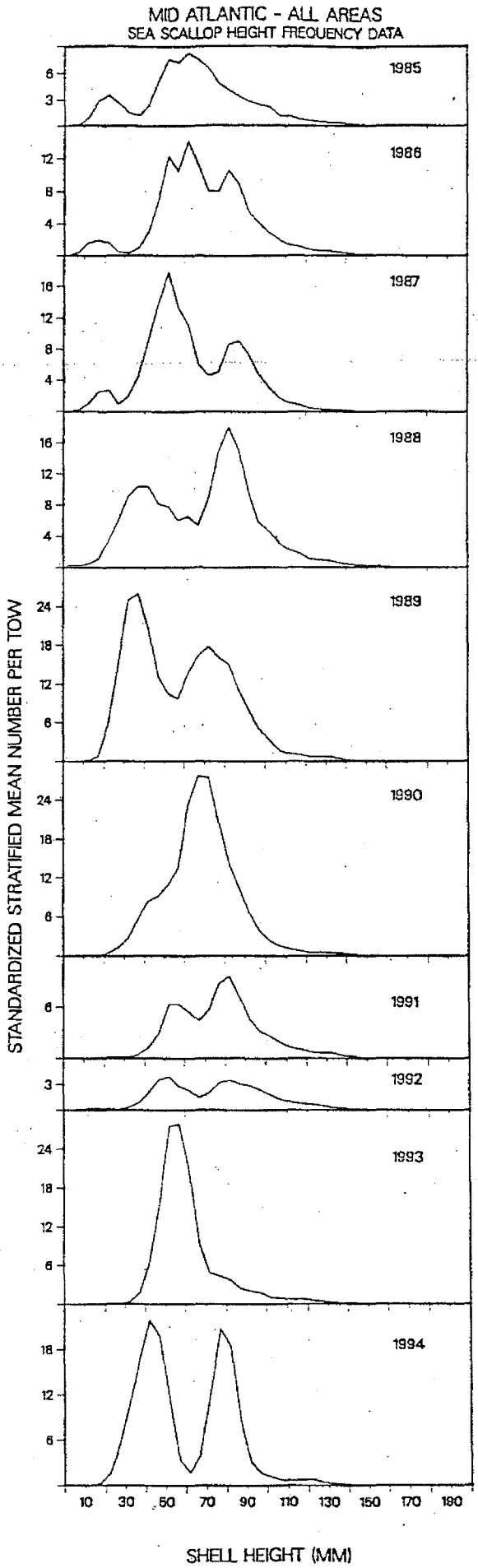


Figure 10.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from the Mid-Atlantic region, 1985-1994.

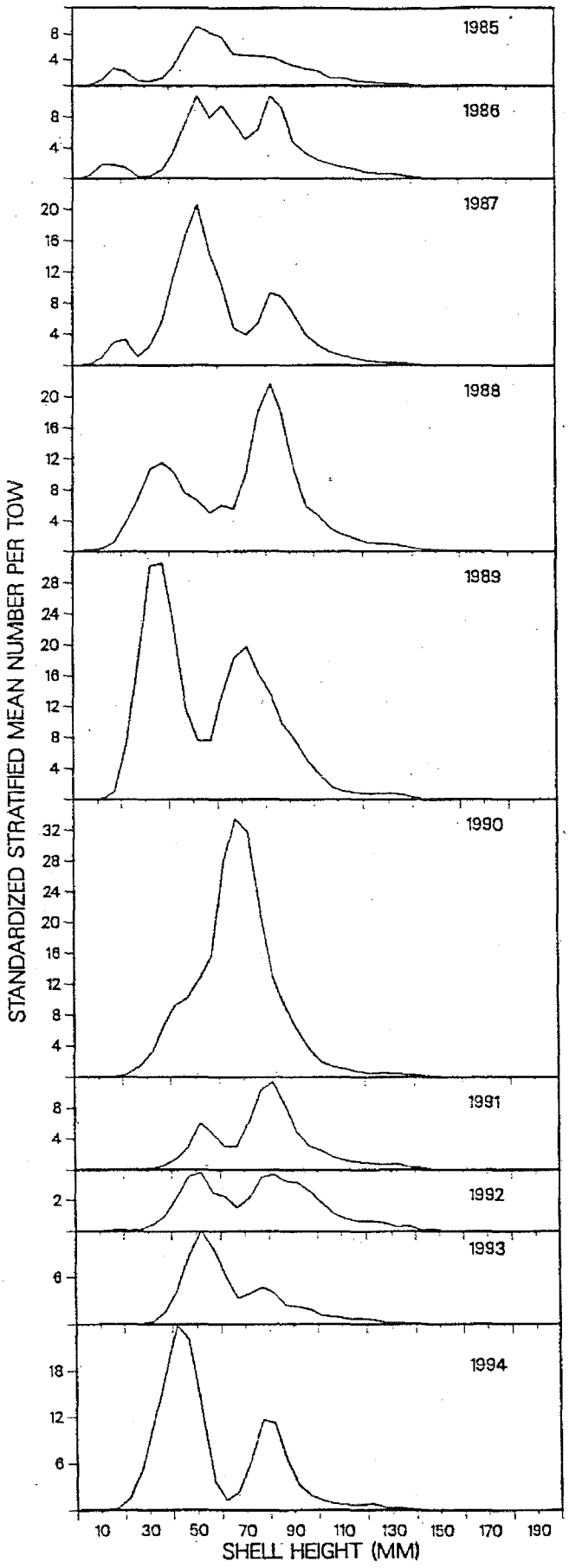


Figure 11.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from the New York Bight area, 1985-1994.

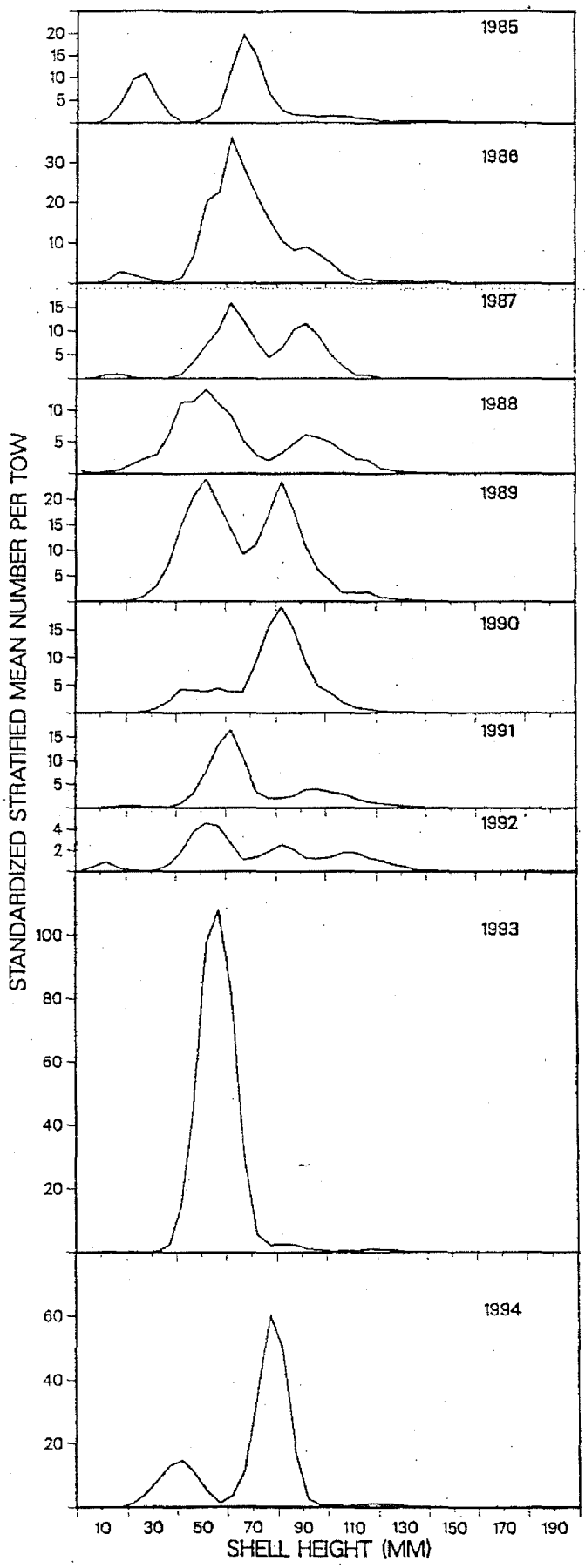


Figure 12.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from the Delmarva area, 1985-1994.

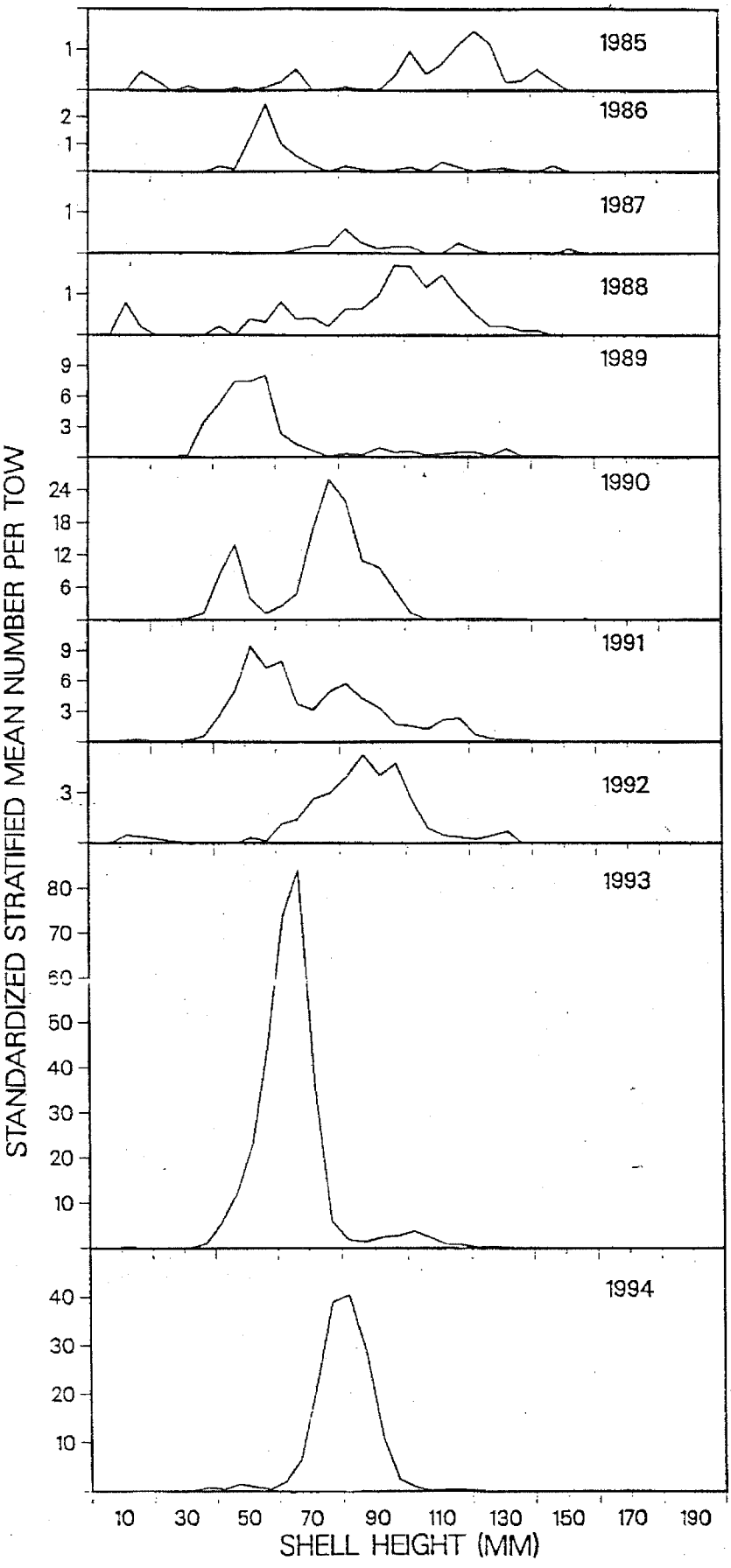


Figure 13.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from the Virginia-North Carolin area, 1985-1994.

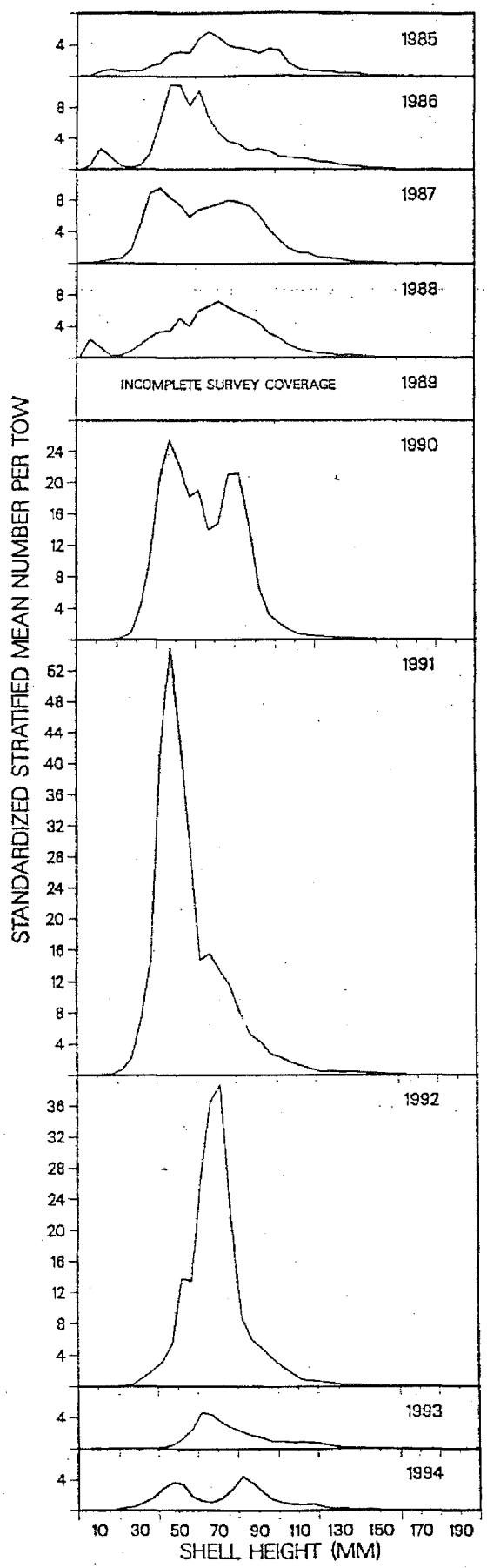


Figure 14.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from USA Georges Bank region, 1985-1994.

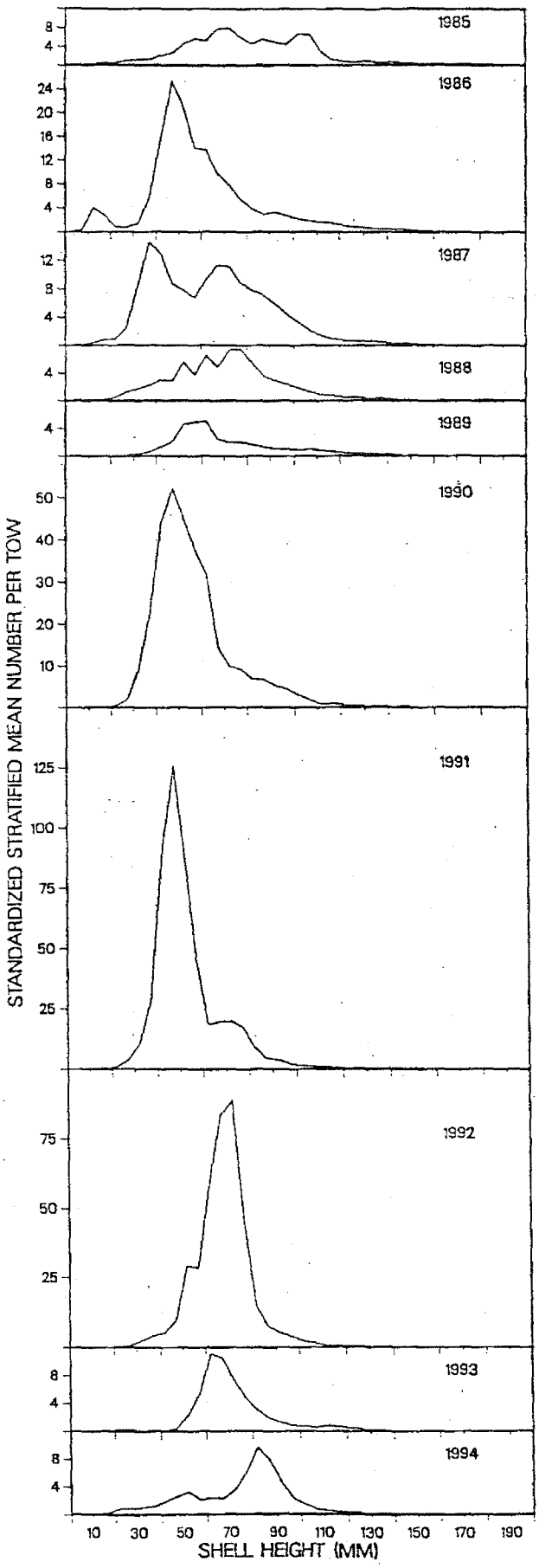


Figure 15.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from the South Channel area, 1985-1994.

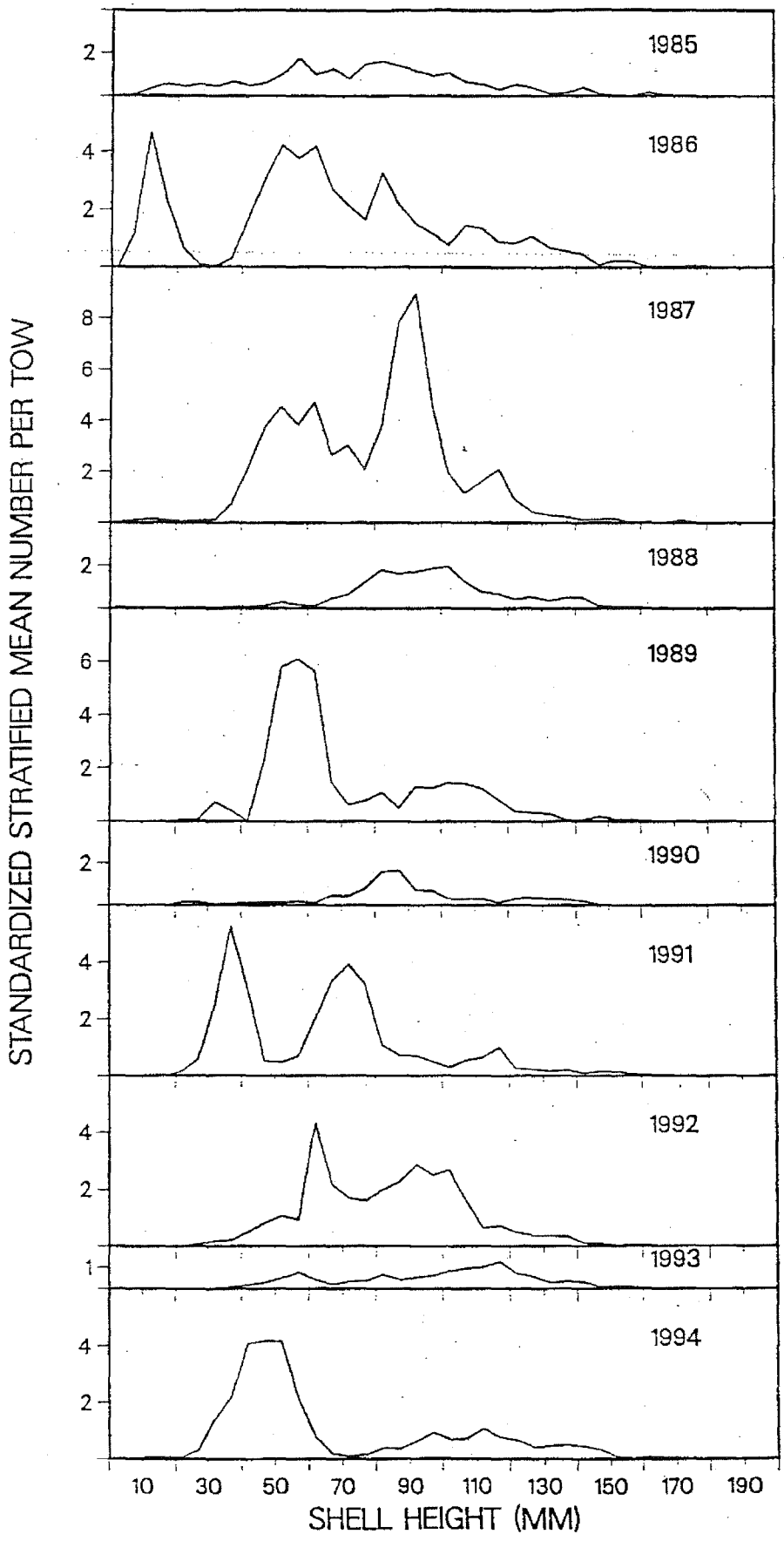


Figure 16.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from the Southeast Part area, 1985-1994.

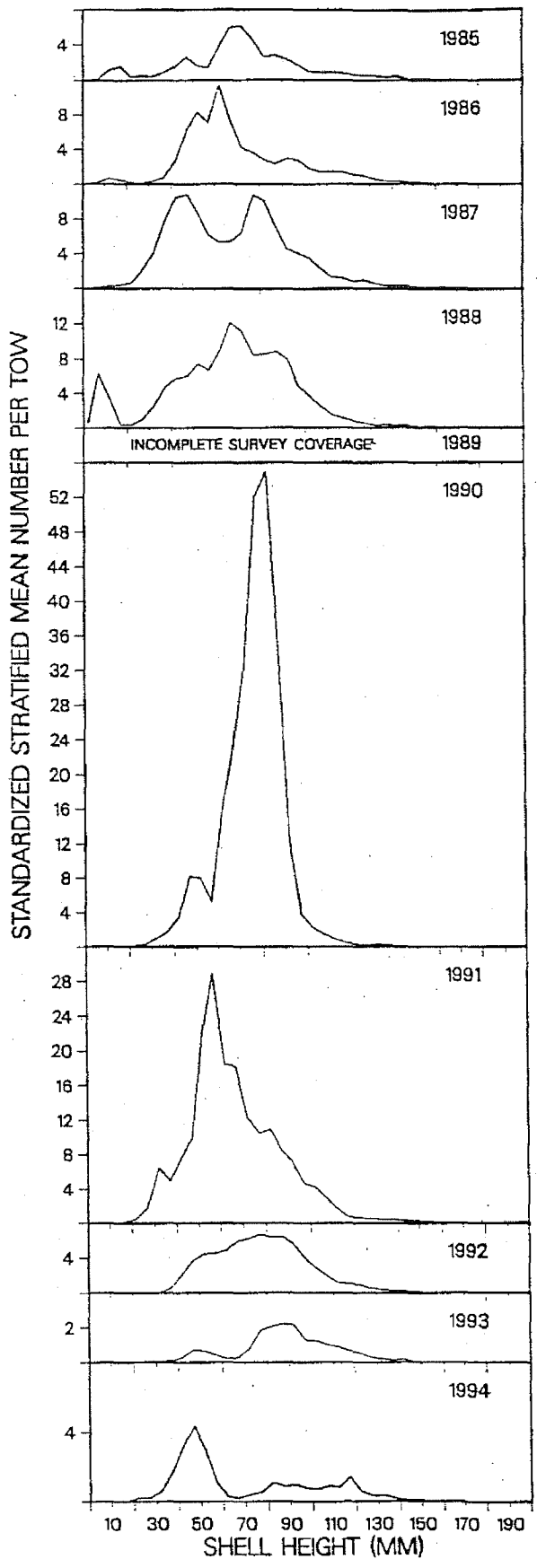


Figure 17.

USA sea scallop research vessel survey shell height frequency distributions of sea scallops from the USA Northern Edge and Peak area, 1985-1994.

Appendix Table 1. Number of tows accomplished in the NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
1	1163	5	5	5	N/S	N/S	N/S	2	2	4
2	175	2	N/S	5	N/S	2	2	2	2	4
3	126	1	2	4	N/S	2	2	2	2	3
4	117	4	1	2	N/S	N/S	2	2	2	2
5	453	1	2	4	4	4	4	3	3	3
6	62	N/S	N/S	2	2	1	2	4	4	5
7	46	N/S	1	1	1	2	1	3	4	4
8	74	N/S	N/S	N/S	1	2	1	2	2	2
VA -NC (6-7)	108	N/S	1	3	3	3	3	7	8	9
9	2171	5	6	8	8	8	8	8	6	6
10	152	2	N/S	5	5	5	5	8	8	8
11	229	3	3	7	7	7	6	6	8	8
12	204	1	4	2	2	2	3	3	3	4
13	1127	4	2	5	5	5	4	4	4	4
14	219	1	1	7	7	7	6	6	8	10
15	394	5	2	12	12	12	12	12	12	12
16	211	1	1	2	2	2	3	3	7	7
17	749	2	3	4	3	4	4	4	4	4
18	249	2		8	7	7	7	7	6	6
19	274	2	4	6	5	5	5	5	7	8
20	120	N/S	1	N/S	1	1	3	3	3	3
Delmarva (10-11 14-15, 18-19)	1517	15	10	45	43	43	41	44	49	52
21	1650	4	16	7	6	6	4	4	4	4
22	312	1	5	15	12	12	12	12	8	8
23	714	3	27	16	20	20	2	20	16	16
24	476	3	19	3	3	3	6	6	6	6
25	648	2	4	5	4	4	7	7	6	7
26	188	N/S	2	7	8	9	9	9	13	13
27	451	1	9	12	12	11	12	12	10	10
28	149	1	2	2	2	2	3	3	7	6
29	1096	6	4	5	8	8	8	8	6	8
30	669	1	6	14	14	14	14	14	15	15
31	932	7	15	24	24	24	25	24	24	24
32	627	3	12	2	2	2	5	5	4	3
33	363	1	4	2	2	4	7	7	10	10
34	203	N/S	3	4	4	4	7	7	10	14
35	601	2	1	7	7	6	5	5	5	5
36	694	3	1	2	2	2	2	2	2	2
NY Bight (22-31 33-35)	6802	28	101	116	120	121	117	134	136	142
Mid Atlantic	8427	43	112	164	166	167	161	185	193	203

N/S = not sampled.

Appendix Table 1. continued

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1994 Sampling Ratio
1	1163	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S	N/S
2	175	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S	N/S
3	126	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S	N/S
4	117	3	3	3	4	N/S	N/S	N/S	N/S	N/S	N/S	N/S
5	453	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S	N/S
6	62	5	5	5	6	5	3	5	5	5	5	12
7	46	5	5	5	4	5	3	5	5	5	5	9
8	74	3	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S
VA -NC (6-7)	108	10	10	10	10	10	6	10	10	10	10	11
9	2171	4	4	4	3	N/S	N/S	N/S	N/S	N/S	N/S	N/S
10	152	8	8	8	8	8	8	8	8	8	8	19
11	229	8	8	8	8	8	8	8	8	8	8	29
12	204	4	4	4	4	4	N/S	N/S	N/S	N/S	N/S	N/S
13	1127	4	4	3	4	N/S	N/S	N/S	N/S	N/S	N/S	N/S
14	219	10	12	12	12	12	12	12	12	12	12	18
15	394	12	12	11	12	12	12	12	12	12	12	33
16	211	8	8	7	8	8	N/S	N/S	N/S	N/S	N/S	N/S
17	749	3	3	1	3	N/S	N/S	N/S	N/S	N/S	N/S	N/S
18	249	8	10	10	10	10	10	10	10	8	10	25
19	274	8	12	12	12	12	12	11	12	10	12	23
20	120	3	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S
Delmarva (10-11 14-15, 18-19)	1517	54	62	61	62	62	62	61	62	58	62	24
21	1650	4	4	2	4	N/S	N/S	N/S	N/S	N/S	N/S	N/S
22	312	8	8	8	8	8	8	8	8	8	8	39
23	714	16	16	16	16	16	16	16	16	16	16	45
24	476	6	6	4	6	6	5	6	6	6	5	95
25	648	4	4	4	4	4	3	4	4	4	4	162
26	188	14	14	14	13	14	12	14	14	14	14	13
27	451	12	20	19	19	20	17	20	20	20	20	23
28	149	6	10	10	10	10	10	10	10	10	10	15
29	1096	6	6	6	6	6	5	6	6	6	6	183
30	669	15	15	15	15	15	14	15	15	15	15	45
31	932	24	24	24	23	24	24	24	24	22	23	41
32	627	4	4	4	4	4	N/S	N/S	N/S	N/S	N/S	N/S
33	363	10	7	10	10	10	10	10	10	7	10	36
34	203	10	13	14	14	14	14	14	14	10	14	15
35	601	6	9	10	10	10	10	10	10	8	10	60
36	694	2	2	2	2	2	N/S	N/S	N/S	N/S	N/S	N/S
NY Bight (22-31 33-35)	6802	137	152	154	154	157	148	157	157	146	155	44
Mid Atlantic	8427	201	224	225	226	229	216	228	229	214	227	37

N/S = not sampled.

Appendix Table 2. Number of tows accomplished in the NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
45	392	3	3	2	2	N/S	2	2	2	3
46	416	3	N/S	4	4	N/S	5	6	6	6
47	871	13	4	9	9	4	9	9	9	9
48	1109	2	3	3	3	3	3	3	4	4
49	244	3	8	7	5	5	5	6	6	7
50	150	5	4	4	4	5	5	8	12	12
51	139	4	N/S	7	7	7	7	8	12	12
52	307	4	6	3	3	5	5	6	6	6
53	268	5	4	1	3	N/S	5	6	6	6
54	278	7	2	7	5	4	6	6	6	6
55	364	14	2	4	7	10	9	6	6	5
56	209	1	1	N/S	2	2	2	3	3	3
South Channel (46-47, 49-55)	3037	58	30	46	47	40	56	61	69	69
57	184	N/S	3	4	1	1	1	3	3	3
58	300	3	2	2	2	2	2	4	4	4
59	538	8	9	13	10	10	9	10	8	8
60	816	10	10	3	8	8	8	8	8	8
SE Part (58-60)	1654	21	21	18	20	20	19	22	20	20
61	576	N/S	6	3	N/S	18	N/S	7	7	7
62	701	N/S	11	10	13	20	N/S	9	9	9
621	547	-	-	-	-	-	-	-	-	-
622	154	-	-	-	-	-	-	-	-	-
63	694	15	15	12	37	44	15	10	10	10
631	340	-	-	-	-	-	-	-	-	-
632	354	-	-	-	-	-	-	-	-	-
64	988	7	22	36	36	174	56	14	14	14
65	164	8	3	8	16	16	12	12	15	14
651	102	-	-	-	-	-	-	-	-	-
652	62	-	-	-	-	-	-	-	-	-
66	266	6	12	4	11	12	15	14	14	14
661	117	-	-	-	-	-	-	-	-	-
662	149	-	-	-	-	-	-	-	-	-
71	146	4	N/S	3	21	4	3	4	4	5
72	504	4	N/S	N/S	3	8	N/S	5	4	4
73	501	2	N/S	N/S	2	9	N/S	5	4	4
74	433	7	2	N/S	16	15	N/S	5	5	5
USA N. Edge & Peak*	2765	-	-	-	-	-	-	-	-	-
USA Georges Bank**	7456	-	-	-	-	-	-	-	-	-
Canada N. Edge & Peak*	1707	-	-	-	-	-	-	-	-	-
Total N. Edge & Peak	4472	51	71	76	153	311	101	80	82	82
Total Georges Bank	9163	130	122	140	220	371	176	163	171	171

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak regions.

N/S = not sampled.
\- = not calculated.

Appendix Table 2. continued.

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1994 Sampling Ratio
45	392	3	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S
46	416	6	6	6	6	6	6	6	6	5	6	69
47	871	10	N/S	12	12	12	12	12	12	12	12	73
48	1109	9	N/S	9	9	9	N/S	N/S	N/S	N/S	N/S	N/S
49	244	9	9	7	9	8	6	7	8	6	7	35
50	150	12	15	16	16	15	9	15	15	11	15	10
51	139	12	12	11	12	12	10	10	10	9	12	12
52	307	7	12	11	12	12	7	12	10	10	12	26
53	268	7	7	7	7	7	7	7	7	7	7	38
54	278	7	7	7	7	6	10	7	7	6	7	40
55	364	7	N/S	9	10	10	10	10	10	10	10	36
56	209	3	N/S	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S
South Channel (46-47, 49-55)	3037	77	68	86	91	88	76	86	85	76	88	40
57	184	3	3	3	3	3	N/S	N/S	N/S	N/S	N/S	N/S
58	300	4	8	8	8	8	8	8	8	8	8	38
59	538	12	12	12	12	12	12	12	12	12	12	45
60	816	12	12	12	12	11	12	12	12	12	12	68
SE Part (58-60)	1654	28	32	32	32	31	32	32	32	32	32	52
61	576	8	8	8	8	N/S	8	8	8	8	8	72
62	701	-	-	-	-	-	-	-	-	-	-	-
621	547	12	12	12	12	N/S	12	12	12	12	12	46
622	154	4	5	6	6	N/S	6	1	N/S	6	6	26
63	694	-	-	-	-	-	-	-	-	-	-	-
631	340	7	7	7	7	N/S	7	7	7	7	7	49
632	354	7	12	8	8	N/S	7	2	N/S	8	8	44
64	988	16	107	16	16	N/S	16	N/S	N/S	16	15	66
65	164	-	-	-	-	-	-	-	-	-	-	-
651	102	10	12	12	12	N/S	12	12	11	9	11	9
652	62	6	5	10	10	N/S	9	10	N/S	11	10	6
66	266	-	-	-	-	-	-	-	-	-	-	-
661	117	10	12	12	12	N/S	12	12	12	9	12	10
662	149	8	17	7	8	N/S	3	1	N/S	7	8	19
71	146	6	6	6	6	N/S	6	6	5	6	6	24
72	504	6	6	6	6	N/S	N/S	6	6	6	6	84
73	501	5	6	6	6	N/S	N/S	N/S	N/S	N/S	N/S	N/S
74	433	8	7	9	8	N/S	8	8	8	8	8	54
USA N. Edge & Peak*	2765	67	70	71	71	N/S	65	71	69	65	70	40
USA Georges Bank**	7456	172	170	189	194	-	173	189	186	173	190	39
Canada N. Edge & Peak*	1707	41	146	47	48	N/S	41	14	N/S	48	47	36
Total N. Edge & Peak	4472	108	216	118	119	-	106	85	-	113	117	38
Total Georges Bank	9163	213	316	236	242	-	214	203	-	223	237	39

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
\- = not calculated.

Appendix Table 3. Standardized mean number of sea scallops per tow by stratum, and standardized stratified mean number of sea scallops per tow by area and region, from the NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
1	1163	0.0	0.0	25.4	N/S	N/S	N/S	1.0	0.0	0.0
2	175	3.0	N/S	9.8	N/S	0.5	0.0	5.5	40.0	0.0
3	126	933.0	2.0	5.3	N/S	0.5	2.5	0.0	1.5	1.0
4	117	11.5	0.0	0.0	N/S	N/S	0.5	1.5	0.0	0.5
5	453	0.0	0.5	22.5	1.5	0.0	0.0	0.0	7.7	0.0
6	62	N/S	N/S	92.0	72.0	58.0	12.5	4.5	34.0	10.4
7	46	N/S	10.0	30.0	12.0	29.0	3.0	3.7	42.3	20.8
8	74	N/S	N/S	N/S	18.0	0.0	0.0	1.5	2.0	3.5
VA -NC (6-7)	108	N/S	10.0	65.6	46.4	45.6	8.5	4.1	37.5	14.8
9	2171	24.4	12.0	4.3	130.0	11.4	9.1	7.0	5.5	4.8
10	152	80.5	N/S	134.6	165.0	148.0	26.2	18.0	47.4	14.9
11	229	41.7	55.3	113.0	64.9	78.1	14.8	16.5	44.6	12.6
12	204	0.0	2.0	0.5	0.0	0.5	3.0	5.3	5.3	5.0
13	1127	82.3	45.0	34.8	4.4	5.6	0.8	0.3	0.0	0.8
14	219	72.0	48.0	68.9	53.7	61.7	13.7	23.8	33.1	18.2
15	394	113.0	60.5	127.0	113.4	97.9	21.7	40.4	57.8	53.3
16	211	1.0	13.0	0.0	0.0	23.0	1.5	97.0	15.1	8.0
17	749	13.0	12.7	1.5	4.7	6.3	2.3	1.3	0.8	1.8
18	249	22.5	N/S	108.0	48.7	40.7	10.9	10.7	7.7	42.2
19	274	13.5	65.5	66.2	102.2	273.0	26.2	47.6	53.4	68.0
20	120	N/S	0.0	N/S	3.0	50.0	10.0	8.0	0.0	2.0
Delmarva (10-11, 14-15, 18-19)	1517	60.2	58.2	103.1	90.0	117.0	19.0	28.6	42.2	39.1
21	1650	2.8	0.9	0.4	9.3	0.8	1.3	4.0	0.5	6.8
22	312	11.0	73.2	21.1	16.8	10.2	3.1	4.7	4.9	10.4
23	714	99.0	99.9	106.4	66.2	77.4	63.8	32.8	25.9	64.5
24	476	88.3	2.4	8.0	6.3	9.7	3.7	20.2	7.5	29.8
25	648	41.0	19.0	9.2	17.0	8.5	39.6	14.3	6.2	9.3
26	188	N/S	60.0	42.6	19.0	42.1	89.8	104.0	25.4	64.8
27	451	22.0	164.4	94.5	32.3	35.3	35.0	38.2	21.2	63.5
28	149	0.0	30.0	34.0	2.5	0.5	18.5	118.3	10.6	39.5
29	1096	8.8	29.0	17.4	14.9	24.0	6.0	2.3	19.7	23.4
30	669	23.0	106.0	106.4	16.9	35.6	37.3	30.0	31.2	21.9
31	932	222.9	70.1	95.4	20.0	33.0	53.3	46.3	30.0	34.0
32	627	0.0	2.1	2.5	1.5	1.0	1.0	1.8	0.8	13.0
33	363	240.0	25.3	88.5	25.5	40.3	126.0	61.3	47.3	23.8
34	203	N/S	102.3	73.0	44.0	70.5	93.3	123.1	210.0	150.1
35	601	4.0	0.0	11.3	10.7	9.3	3.8	9.0	0.0	27.2
36	694	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NY Bight (22-31, 33-35)	6802	74.1	58.1	56.0	22.9	30.6	37.8	31.8	25.5	35.8
Mid Atlantic	8427	71.4	57.9	64.6	35.3	46.3	34.1	30.9	28.7	36.1

N/S = not sampled.
- = not calculated.

Appendix Table 3. continue.

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	HISTORIC LOW	HIGH
1	1163	8.7	0.0	0.7	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	25.4
2	175	0.3	0.0	1.0	1.7	N/S	N/S	N/S	N/S	N/S	N/S	0.0	40.0
3	126	1.0	0.0	0.0	0.7	N/S	N/S	N/S	N/S	N/S	N/S	0.0	933.0
4	117	0.0	0.0	0.0	4.8	N/S	N/S	N/S	N/S	N/S	N/S	0.0	11.5
5	453	0.7	0.0	0.0	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	22.5
6	62	12.2	10.6	0.4	4.5	71.4	35.3	92.6	51.4	440.0	161.4	0.4	440.0
7	46	4.8	3.0	4.6	27.0	1.4	256.7	37.6	9.0	121.6	155.2	1.4	256.7
8	74	0.0	0.0	0.0	3.3	0.0	N/S	N/S	N/S	N/S	N/S	0.0	18.0
VA -NC (6-7)	108	9.0	7.4	2.2	14.1	41.6	129.6	69.2	33.3	304.4	158.8	2.2	304.4
9	2171	23.5	7.8	14.0	7.0	N/S	N/S	N/S	N/S	N/S	N/S	4.3	130.0
10	152	36.6	228.1	132.8	73.4	177.0	39.6	196.9	79.8	549.9	184.8	14.9	549.9
11	229	42.4	246.8	105.8	62.3	89.5	54.3	127.5	81.9	804.1	422.9	12.6	804.1
12	204	0.8	1.5	1.5	8.8	0.8	N/S	N/S	N/S	N/S	N/S	0.0	8.8
13	1127	0.8	0.3	1.0	21.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	82.3
14	219	159.7	267.8	195.8	142.1	148.2	135.0	28.8	15.8	137.8	53.0	13.7	267.8
15	394	62.6	194.6	88.9	114.3	311.8	87.3	90.6	35.4	559.3	422.3	21.7	559.3
16	211	5.9	5.0	3.4	5.4	3.6	N/S	N/S	N/S	N/S	N/S	0.0	97.0
17	749	1.3	11.7	19.0	0.7	N/S	N/S	N/S	N/S	N/S	N/S	0.7	19.0
18	249	84.6	127.2	91.7	149.6	224.7	98.1	14.6	16.0	35.6	39.4	7.7	224.7
19	274	237.5	203.5	92.3	129.8	220.3	211.6	76.2	29.4	313.7	212.0	13.5	313.7
20	120	5.7	6.0	4.3	1.0	1.0	N/S	N/S	N/S	N/S	N/S	0.0	50.0
Delmarva (10-11, 14-15, 18-19)	1517	106.2	206.9	112.4	115.0	210.3	108.6	82.8	39.7	404.1	244.4	19.0	404.1
21	1650	9.3	0.3	5.0	5.3	N/S	N/S	N/S	N/S	N/S	N/S	0.3	9.3
22	312	21.3	25.9	118.1	136.9	102.4	35.0	15.4	10.3	62.8	53.4	3.1	136.9
23	714	96.0	185.6	199.1	357.9	574.3	698.9	129.6	70.4	120.3	336.4	25.9	698.9
24	476	8.0	1.3	0.8	23.8	26.7	6.8	13.3	2.0	82.7	583.0	0.8	583.0
25	648	19.0	14.8	71.0	54.5	54.8	4.0	6.8	45.0	27.3	11.8	4.0	71.0
26	188	72.2	65.9	423.7	186.6	256.2	24.8	116.1	286.0	53.2	54.4	19.0	423.7
27	451	232.1	266.0	372.6	611.6	1350.7	903.9	275.9	81.9	200.6	360.5	21.2	1350.7
28	149	107.5	19.0	37.1	52.4	87.9	101.3	80.7	11.8	187.2	271.9	0.0	271.9
29	1096	16.3	50.2	22.5	19.8	22.3	46.4	34.0	2.5	21.8	13.8	2.3	50.2
30	669	52.1	84.1	196.8	240.5	192.2	89.2	39.2	34.5	78.2	67.9	16.9	240.5
31	932	157.8	195.1	190.4	291.7	329.1	392.2	175.2	78.1	109.1	167.8	20.0	392.2
32	627	0.8	2.3	0.0	8.0	8.0	N/S	N/S	N/S	N/S	N/S	0.0	13.0
33	363	67.2	56.6	241.5	63.2	14.6	35.2	30.1	8.1	10.7	39.7	8.1	241.5
34	203	74.8	205.5	159.2	202.6	138.8	78.6	43.9	27.7	11.2	51.0	11.2	210.0
35	601	112.8	92.6	38.3	28.8	81.8	11.2	5.2	14.9	8.6	14.6	0.0	112.8
36	694	0.0	0.0	0.0	0.5	0.0	N/S	N/S	N/S	N/S	N/S	0.0	0.5
NY Bight (22-31, 33-35)	6802	78.3	102.5	140.5	176.4	250.4	213.9	75.9	43.0	70.6	147.9	22.9	250.4
Mid Atlantic	8427	82.5	120.0	133.6	163.2	240.5	193.8	77.0	42.3	133.6	165.4	28.7	240.5

N/S = not sampled.
- = not calculated.

Appendix Table 4. Standardized mean number of pre-recruit [<70 mm shell height] sea scallop per tow by stratum, and standardized stratified mean number of per-recruit scallops per tow by area and region from the NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
1	1163	0.0	0.0	20.6	N/S	N/S	N/S	1.0	0.0	0.0
2	175	2.5	N/S	8.6	N/S	0.5	0.0	5.0	34.5	0.0
3	126	756.0	0.5	4.0	N/S	0.0	2.0	0.0	1.5	1.0
4	117	11.5	0.0	0.0	N/S	N/S	0.5	1.5	0.0	0.5
5	453	0.0	0.5	13.3	0.8	0.0	0.0	0.0	3.3	0.0
6	62	N/S	N/S	20.0	40.5	3.0	1.5	0.3	19.5	0.0
7	46	N/S	0.0	9.0	1.0	11.5	0.0	0.7	34.3	0.5
8	74	N/S	N/S	N/S	0.0	0.0	0.0	0.0	0.0	0.5
VA -NC (6-7)	108	N/S	0.0	15.3	23.7	6.6	0.9	0.4	25.8	0.2
9	2171	16.0	1.7	3.3	67.6	3.0	3.8	0.6	3.5	0.5
10	152	69.0	N/S	39.0	79.6	68.0	5.4	4.6	32.1	2.6
11	229	34.0	4.3	52.6	4.9	36.0	1.0	3.0	34.3	3.0
12	204	0.0	0.0	0.0	0.0	0.0	0.5	1.7	1.3	0.3
13	1127	49.8	0.0	1.0	0.6	2.0	0.2	0.0	0.0	0.5
14	219	33.0	6.0	9.4	12.7	36.4	3.4	4.5	19.4	2.7
15	394	65.0	19.5	29.9	28.3	68.2	4.7	20.4	36.7	28.6
16	211	1.0	0.0	0.0	0.0	22.5	0.5	75.3	3.6	3.7
17	749	6.5	1.3	0.0	2.0	0.3	1.0	0.3	0.3	0.0
18	249	13.5	N/S	22.6	5.6	25.7	1.4	0.9	1.7	17.2
19	274	1.5	7.0	14.3	36.8	230.8	11.6	16.6	26.3	47.0
20	120	N/S	0.0	N/S	0.0	49.0	9.0	6.3	0.0	0.7
Delmarva (10-11 14-15, 18-19)	1517	36.2	10.7	27.3	25.4	81.1	4.7	10.0	25.7	19.8
21	1650	2.0	0.4	0.4	1.5	0.0	0.2	1.5	0.0	3.0
22	312	9.0	0.4	1.5	9.7	4.7	0.3	0.8	0.3	6.3
23	714	64.0	4.2	5.8	18.2	54.6	29.1	20.8	15.1	49.2
24	476	21.3	0.5	0.7	4.3	7.0	1.3	11.3	2.5	19.7
25	648	32.5	0.3	0.2	0.5	2.5	29.0	4.0	2.5	3.9
26	188	N/S	0.0	0.7	5.6	17.2	70.0	24.0	10.5	25.8
27	451	8.0	2.9	1.7	5.6	14.6	17.8	17.7	6.5	45.1
28	149	0.0	1.5	6.5	2.5	0.0	8.5	81.3	1.9	26.8
29	1096	4.3	0.3	3.8	2.4	11.6	1.4	0.8	9.0	7.1
30	669	15.0	3.5	11.1	4.1	12.0	22.5	4.5	17.6	7.1
31	932	111.7	2.1	2.2	4.4	13.0	33.2	7.4	6.7	13.9
32	627	0.0	0.1	1.5	0.0	0.5	1.0	0.8	0.0	5.0
33	363	139.0	0.3	4.0	5.0	16.3	31.3	11.3	16.9	5.3
34	203	N/S	1.3	0.5	8.0	42.5	29.0	50.7	126.6	56.7
35	601	0.0	0.0	0.4	1.1	3.2	1.5	2.2	0.0	2.8
36	694	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NY Bight (22-31 33-35)	6802	39.4	1.5	3.3	5.3	15.4	18.9	10.9	11.6	17.5
Mid Atlantic	8427	38.8	2.7	7.8	9.1	27.1	16.1	10.6	14.3	17.7

N/S = not sampled.
- = not calculated.

Appendix Table 4. continued.

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	HISTORIC LOW	HIGH
1	1163	5.3	0.0	0.7	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	20.6
2	175	0.3	0.0	1.0	1.7	N/S	N/S	N/S	N/S	N/S	N/S	0.0	34.5
3	126	0.0	0.0	0.0	0.7	N/S	N/S	N/S	N/S	N/S	N/S	0.0	756.0
4	117	0.0	0.0	0.0	4.3	N/S	N/S	N/S	N/S	N/S	N/S	0.0	11.5
5	453	0.0	0.0	0.0	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	13.3
6	62	2.2	9.2	0.0	3.3	62.0	3.0	59.2	6.6	352.4	12.6	0.0	352.4
7	46	1.0	0.8	0.2	2.8	0.2	81.7	7.6	0.8	101.0	14.2	0.0	101.0
8	74	0.0	0.0	0.0	2.3	0.0	N/S	N/S	N/S	N/S	N/S	0.0	2.3
VA -NC (6-7)	108	1.7	5.6	0.1	3.1	35.7	36.5	37.2	4.1	245.3	13.3	0.0	245.3
9	2171	17.8	5.8	7.3	3.7	N/S	N/S	N/S	N/S	N/S	N/S	0.5	67.6
10	152	22.6	181.1	42.8	38.0	122.6	10.5	150.5	45.4	522.4	17.5	2.6	522.4
11	229	24.4	225.6	47.3	31.6	44.5	20.8	111.9	55.9	777.5	88.5	1.0	777.5
12	204	0.0	0.8	1.0	7.3	0.8	N/S	N/S	N/S	N/S	N/S	0.0	7.3
13	1127	0.0	0.3	0.3	11.3	N/S	N/S	N/S	N/S	N/S	N/S	0.0	49.8
14	219	131.7	128.7	112.3	98.4	102.2	60.7	12.0	5.8	130.4	9.3	2.7	131.7
15	394	35.3	101.4	47.8	83.9	118.3	14.6	49.8	16.1	528.0	163.8	4.7	528.0
16	211	3.5	1.1	0.6	3.1	1.8	N/S	N/S	N/S	N/S	N/S	0.0	75.3
17	749	0.0	9.0	9.0	0.7	N/S	N/S	N/S	N/S	N/S	N/S	0.0	9.0
18	249	68.9	61.7	51.2	101.8	133.4	7.9	0.8	1.9	28.0	13.2	0.8	133.4
19	274	137.9	89.8	24.7	80.8	147.8	53.9	37.6	14.4	297.9	67.7	1.5	297.9
20	120	3.0	1.0	0.7	0.7	0.7	N/S	N/S	N/S	N/S	N/S	0.0	49.0
Delmarva (10-11 14-15, 18-19)	1517	70.3	123.5	52.9	75.9	113.1	27.7	53.5	20.9	384.1	73.4	4.7	384.1
21	1650	5.5	0.0	4.5	2.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	5.5
22	312	13.8	17.1	95.1	74.3	69.5	10.7	6.5	3.9	53.1	20.6	0.3	95.1
23	714	72.1	109.0	109.6	100.2	406.9	326.1	74.3	25.9	82.2	238.8	4.2	406.9
24	476	0.7	0.3	0.3	23.2	23.0	1.2	9.3	0.7	74.0	552.8	0.3	552.8
25	648	5.3	4.8	60.8	33.0	40.0	2.3	2.0	14.0	14.5	0.3	0.2	60.8
26	188	48.7	17.2	390.6	41.2	183.4	6.2	99.7	222.6	14.5	15.3	0.0	390.6
27	451	165.3	124.6	286.6	349.7	984.9	571.9	44.7	30.8	125.7	185.9	1.7	984.9
28	149	70.8	2.0	13.5	40.9	70.5	36.2	9.7	3.8	170.0	244.2	0.0	244.2
29	1096	3.3	33.0	13.2	3.5	10.3	30.2	2.7	0.5	12.2	6.3	0.3	33.0
30	669	23.7	52.2	111.2	101.5	97.9	43.4	19.5	10.0	56.1	17.9	3.5	111.2
31	932	122.7	82.7	117.8	127.1	210.9	261.0	34.8	27.0	62.4	93.0	2.1	261.0
32	627	0.3	0.0	0.0	7.8	6.3	N/S	N/S	N/S	N/S	N/S	0.0	7.8
33	363	17.2	21.1	179.2	16.5	2.0	21.7	1.7	1.4	4.4	33.0	0.3	179.2
34	203	19.6	133.1	62.3	55.7	37.8	30.7	1.5	5.8	1.6	35.7	0.5	133.1
35	601	41.2	54.3	23.4	16.6	44.7	2.6	0.2	1.5	2.1	10.6	0.0	54.3
36	694	0.0	0.0	0.0	0.5	0.0	N/S	N/S	N/S	N/S	N/S	0.0	0.5
NY Bight (22-31 33-35)	6802	47.4	53.2	94.4	75.9	168.6	121.1	22.2	17.7	46.6	102.1	1.5	168.6
Mid Atlantic	8427	51.0	65.2	85.8	74.9	156.9	103.2	28.0	18.1	109.9	95.8	2.7	156.9

N/S = not sampled.
- = not calculated.

Appendix Table 5. Standardized mean number of harvestable-size [>70 mm shell height] sea scallops per tow by stratum, and standardized stratified mean number of harvestable-size sea scallops per tow by area and region, from the NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
1	1163	0.0	0.0	4.8	N/S	N/S	N/S	0.0	0.0	0.0
2	175	0.5	N/S	1.2	N/S	0.0	0.0	0.5	5.5	0.0
3	126	177.0	1.5	1.3	N/S	0.5	0.5	0.0	0.0	0.0
4	117	0.0	0.0	0.0	N/S	N/S	0.0	0.0	0.0	0.0
5	453	0.0	0.0	9.3	0.8	0.0	0.0	0.0	4.3	0.0
6	62	N/S	N/S	72.0	31.5	55.0	11.0	4.3	14.5	10.4
7	46	N/S	10.0	21.0	11.0	17.5	3.0	3.0	8.0	20.3
8	74	N/S	N/S	N/S	18.0	0.0	0.0	1.5	2.0	3.0
VA -NC (6-7)	108	N/S	10.0	50.3	22.8	39.0	7.6	3.7	11.7	14.6
9	2171	8.4	10.3	1.0	62.4	8.4	5.4	6.4	2.0	4.3
10	152	11.5	N/S	95.6	85.4	80.0	20.8	13.4	15.3	12.3
11	229	7.7	51.0	60.4	60.0	42.1	13.8	13.5	10.4	9.6
12	204	0.0	2.0	0.5	0.0	0.5	2.5	3.7	4.0	4.8
13	1127	32.5	45.0	33.8	3.8	3.6	0.6	0.3	0.0	0.3
14	219	39.0	42.0	59.4	41.0	25.3	10.3	19.3	13.8	15.5
15	394	48.0	41.0	97.1	85.2	29.7	17.0	20.0	21.1	24.7
16	211	0.0	13.0	0.0	0.0	0.5	1.0	21.7	11.6	4.3
17	749	6.5	11.3	1.5	2.7	6.0	1.3	1.0	0.5	1.8
18	249	9.0	N/S	85.4	43.1	15.0	9.4	9.9	6.0	25.0
19	274	12.0	58.5	51.8	65.4	42.2	14.6	31.0	27.1	21.0
20	120	N/S	0.0	N/S	3.0	1.0	1.0	1.7	0.0	1.3
Delmarva (10-11 14-15, 18-19)	1517	24.1	47.5	75.9	64.5	35.8	14.3	18.6	16.4	19.2
21	1650	0.8	0.5	0.0	7.8	0.8	1.2	2.5	0.5	3.8
22	312	2.0	72.8	19.6	7.2	5.5	2.8	3.9	4.6	4.1
23	714	35.0	95.7	100.6	48.1	22.8	34.7	12.1	10.8	15.3
24	476	67.0	1.8	7.3	2.0	2.7	2.3	8.8	5.0	10.2
25	648	8.5	18.8	9.0	16.5	6.0	10.6	10.3	3.7	5.4
26	188	N/S	60.0	41.9	13.4	24.9	19.8	80.0	14.9	39.1
27	451	14.0	161.6	92.8	26.8	20.6	17.3	20.6	14.7	18.4
28	149	0.0	28.5	27.5	0.0	0.5	10.0	37.0	8.7	12.7
29	1096	4.5	28.8	13.6	12.5	12.4	4.6	1.5	10.7	16.3
30	669	8.0	102.5	95.2	12.7	23.6	14.8	25.5	13.6	14.8
31	932	111.1	68.0	93.2	15.6	20.0	20.0	39.0	23.2	20.2
32	627	0.0	2.0	1.0	1.5	0.5	0.0	1.0	0.8	8.0
33	363	101.0	25.0	84.5	20.5	24.0	94.8	50.0	30.4	18.5
34	203	N/S	101.0	72.5	36.0	28.0	64.3	72.4	83.4	93.4
35	601	4.0	0.0	10.9	9.6	6.2	2.3	6.8	0.0	24.4
36	694	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NY Bight (22-31 33-35)	6802	34.7	56.7	52.7	17.6	15.2	19.0	20.9	14.0	18.4
Mid Atlantic	8427	32.6	55.1	56.8	26.2	19.2	18.0	20.3	14.4	18.5

N/S = not sampled.
- = not calculated.

Appendix Table 5. continued.

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	HISTORIC LOW	HIGH
1	1163	3.3	0.0	0.0	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	4.8
2	175	0.0	0.0	0.0	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	5.5
3	126	1.0	0.0	0.0	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	177.0
4	117	0.0	0.0	0.0	0.5	N/S	N/S	N/S	N/S	N/S	N/S	0.0	0.5
5	453	0.7	0.0	0.0	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	9.3
6	62	10.0	1.4	0.4	1.2	9.4	32.3	33.4	44.8	87.6	148.8	0.4	148.8
7	46	3.8	2.2	4.4	24.3	1.2	175.0	30.0	8.2	20.6	141.0	1.2	175.0
8	74	0.0	0.0	0.0	1.0	0.0	N/S	N/S	N/S	N/S	N/S	0.0	18.0
VA -NC (6-7)	108	7.4	1.7	2.1	11.0	5.9	93.1	32.0	29.2	59.1	145.5	1.7	145.5
9	2171	5.8	2.0	6.8	3.3	N/S	N/S	N/S	N/S	N/S	N/S	1.0	62.4
10	152	14.0	47.0	90.0	35.4	54.4	29.1	46.4	34.4	27.5	167.3	11.5	167.3
11	229	18.0	21.1	58.5	30.6	45.0	33.5	15.6	26.0	26.6	334.4	7.7	334.4
12	204	0.8	0.8	0.5	1.5	0.0	N/S	N/S	N/S	N/S	N/S	0.0	4.8
13	1127	0.8	0.0	0.7	9.8	N/S	N/S	N/S	N/S	N/S	N/S	0.0	45.0
14	219	28.0	139.2	83.5	43.7	46.0	74.3	16.8	9.9	7.3	43.8	7.3	139.2
15	394	27.3	93.2	41.1	30.4	193.4	72.7	40.8	19.3	31.3	258.5	17.0	258.5
16	211	2.4	3.9	2.9	2.3	1.9	N/S	N/S	N/S	N/S	N/S	0.0	21.7
17	749	1.3	2.7	10.0	0.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	11.3
18	249	15.8	65.5	40.5	47.8	91.3	90.2	13.8	14.1	7.6	26.2	6.0	91.3
19	274	99.6	113.7	67.6	49.1	72.6	157.7	38.6	15.0	15.8	144.3	12.0	157.7
20	120	2.7	5.0	3.7	0.3	0.3	N/S	N/S	N/S	N/S	N/S	0.0	5.0
Delmarva (10-11 14-15, 18-19)	1517	35.8	83.5	59.4	39.1	97.2	80.9	29.3	18.8	21.1	171.0	14.3	171.0
21	1650	3.8	0.3	0.5	3.3	N/S	N/S	N/S	N/S	N/S	N/S	0.0	7.8
22	312	7.5	8.8	23.0	62.6	32.9	24.3	8.9	6.4	9.6	32.8	2.0	72.8
23	714	23.9	76.6	89.6	257.7	167.4	372.8	55.3	44.4	38.1	97.7	10.8	372.8
24	476	7.3	1.0	0.5	0.7	3.7	5.6	4.0	1.3	8.7	30.2	0.5	67.0
25	648	13.8	10.0	10.3	21.5	14.8	1.7	4.8	31.0	12.8	11.5	1.7	31.0
26	188	23.5	48.7	33.1	145.4	72.9	18.6	16.4	63.4	38.7	39.1	13.4	145.4
27	451	66.8	141.4	86.1	261.9	365.8	332.0	231.2	51.1	74.9	174.7	14.0	365.8
28	149	36.7	17.0	23.6	11.5	17.4	65.1	71.0	8.0	17.2	27.7	0.0	71.0
29	1096	13.0	17.2	9.3	16.3	12.0	16.2	31.3	2.0	9.7	7.5	1.5	31.3
30	669	28.3	31.9	85.6	139.1	94.3	45.9	19.7	24.5	22.1	50.0	8.0	139.1
31	932	35.1	112.4	72.7	164.7	118.2	131.2	140.4	51.2	46.8	74.8	15.6	164.7
32	627	0.5	2.3	0.0	0.3	1.8	N/S	N/S	N/S	N/S	N/S	0.0	8.0
33	363	50.0	35.4	62.3	46.7	12.6	13.5	28.4	6.7	6.3	6.6	6.3	101.0
34	203	55.2	72.4	96.9	146.9	101.0	47.9	42.4	21.9	9.6	15.3	9.6	146.9
35	601	71.7	38.2	14.9	12.2	37.1	8.6	5.0	13.4	6.5	4.0	0.0	71.7
36	694	0.0	0.0	0.0	0.0	0.0	N/S	N/S	N/S	N/S	N/S	0.0	0.0
NY Bight (22-31 33-35)	6802	30.9	49.3	46.0	100.5	81.8	92.8	53.7	25.3	24.0	45.8	14.0	100.5
Mid Atlantic	8427	31.5	54.8	47.9	88.3	83.6	90.6	49.0	24.2	23.8	69.6	14.4	90.6

N/S = not sampled.
- = not calculated.

Appendix Table 6. Standardized mean weight [g] of sea scallops per tow by stratum, and stratified mean weight of sea scallops per tow by area and region, from the NEFSC sea scallop research vessel surveys in the Mid-Atlantic, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
1	1163	0	0	100	N/S	N/S	N/S	4	0	0
2	175	12	N/S	39	N/S	1	0	16	146	0
3	126	4943	18	19	N/S	5	14	0	4	2
4	117	30	0	0	N/S	N/S	1	2	0	1
5	453	0	1	137	10	0	0	0	208	0
6	62	N/S	N/S	1530	554	932	309	131	538	206
7	46	N/S	227	660	218	171	61	102	349	345
8	74	N/S	N/S	N/S	278	0	0	21	46	86
VA -NC (6-7)	108	N/S	227	1159	411	608	204	119	458	265
9	2171	145	266	19	1045	150	168	147	82	110
10	152	472	N/S	1834	1225	1127	448	331	456	347
11	229	203	856	1226	924	743	407	435	468	211
12	204	0	34	9	0	14	39	105	137	76
13	1127	467	1411	1142	142	116	24	7	0	3
14	219	767	1102	1634	888	700	205	446	490	325
15	394	1191	966	2178	1133	711	404	551	569	478
16	211	5	279	0	0	39	13	455	188	76
17	749	346	288	27	40	230	72	48	17	87
18	249	169	N/S	1781	934	398	207	346	205	547
19	274	160	849	1158	845	1282	301	573	502	434
20	120	N/S	0	N/S	39	63	24	28	0	18
Delmarva (10-11 14-15, 18-19)	1517	555	941	1672	991	808	329	467	459	406
21	1650	14	10	1	297	17	25	61	18	138
22	312	59	1404	506	194	137	72	109	130	177
23	714	632	1707	2269	1086	571	528	373	296	379
24	476	1282	19	72	23	39	25	105	85	178
25	648	342	501	233	566	176	269	210	75	144
26	188	N/S	1208	1017	350	630	494	908	302	641
27	451	315	2425	1797	561	473	270	387	420	419
28	149	0	547	249	2	3	107	541	110	237
29	1096	107	723	480	380	415	140	45	271	287
30	669	237	1812	2135	302	626	382	442	395	315
31	932	1912	1206	1874	375	428	408	567	509	315
32	627	0	27	31	17	5	5	17	14	123
33	363	2751	533	2134	472	510	1100	865	611	245
34	203	N/S	1401	1402	732	536	793	1134	1445	1192
35	601	163	0	192	271	149	27	87	0	279
36	694	0	0	0	0	0	0	0	0	0
NY Bight (22-31 33-35)	6802	717	1029	1158	439	378	321	350	317	318
Mid Atlantic	8427	686	1012	1251	538	458	321	368	344	333

N/S = not sampled.
- = not calculated.

Appendix Table 6. continued.

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	HISTORIC LOW	HIGH
1	1163	40	0	2	0	N/S	N/S	N/S	N/S	N/S	N/S	0	100
2	175	0	0	4	6	N/S	N/S	N/S	N/S	N/S	N/S	0	146
3	126	16	0	0	2	N/S	N/S	N/S	N/S	N/S	N/S	0	4943
4	117	0	0	0	18	N/S	N/S	N/S	N/S	N/S	N/S	0	30
5	453	30	0	0	0	N/S	N/S	N/S	N/S	N/S	N/S	0	208
6	62	333	70	16	33	344	459	714	630	1971	1430	16	1971
7	46	93	46	61	476	13	1617	319	92	494	1235	13	1617
8	74	0	0	0	23	0	N/S	N/S	N/S	N/S	N/S	0	278
VA -NC (6-7)	108	231	60	35	222	203	952	546	401	1342	1347	35	1347
9	2171	191	52	109	107	N/S	N/S	N/S	N/S	N/S	N/S	19	1045
10	152	380	1167	1186	766	967	424	1013	552	1722	1446	331	1834
11	229	408	883	830	637	718	412	627	388	1975	2822	203	2822
12	204	10	9	7	38	1	N/S	N/S	N/S	N/S	N/S	0	137
13	1127	11	1	15	241	N/S	N/S	N/S	N/S	N/S	N/S	0	1411
14	219	444	1824	1372	887	917	990	390	246	463	488	205	1824
15	394	552	1376	636	615	2246	829	805	377	1859	2238	377	2246
16	211	46	38	31	53	21	N/S	N/S	N/S	N/S	N/S	0	455
17	749	35	47	190	0	N/S	N/S	N/S	N/S	N/S	N/S	0	346
18	249	286	980	680	911	1385	1028	325	353	250	479	169	1781
19	274	1271	1479	999	875	1016	1652	654	349	1039	1499	160	1652
20	120	68	48	41	2	6	N/S	N/S	N/S	N/S	N/S	0	68
Delmarva (10-11 14-15, 18-19)	1517	584	1299	899	768	1332	930	633	368	1249	1572	329	1672
21	1650	82	10	19	63	N/S	N/S	N/S	N/S	N/S	N/S	1	297
22	312	165	212	583	1128	714	402	257	143	294	545	59	1404
23	714	545	1100	1347	3053	2347	4016	865	633	593	1275	296	4016
24	476	121	9	10	22	71	51	79	14	248	918	9	1282
25	648	294	324	348	419	367	50	114	629	223	290	50	629
26	188	410	756	1190	1778	1208	334	593	1076	501	470	302	1778
27	451	1163	1705	1407	3294	4301	4386	2333	670	938	1669	270	4386
28	149	574	174	286	227	347	677	717	109	544	502	0	717
29	1096	265	473	174	572	343	521	679	94	190	138	45	723
30	669	472	652	1286	1946	1402	751	446	432	561	597	237	2135
31	932	714	1493	1060	2007	1501	1886	1463	739	637	869	315	2007
32	627	8	33	0	8	32	N/S	N/S	N/S	N/S	N/S	0	123
33	363	646	595	1226	719	216	330	530	152	149	212	149	2751
34	203	780	1428	1286	1818	1268	790	723	489	210	316	210	1818
35	601	936	700	268	226	594	135	164	213	152	100	0	936
36	694	0	0	0	0	0	N/S	N/S	N/S	N/S	N/S	0	0
NY Bight (22-31 33-35)	6802	530	776	761	1357	1146	1232	727	411	403	615	317	1357
Mid Atlantic	842	536	861	777	1237	1167	1174	708	403	567	797	321	1251

N/S = not sampled.
- = not calculated.

Appendix Table 7. Standardized mean number of sea scallops per tow by stratum, and standardized stratified mean number of sea scallops per tow by area and region, from the NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
45	392	34.3	0.0	0.0	0.0	N/S	0.0	0.0	17.0	0.0
46	416	41.0	N/S	20.3	9.0	N/S	84.4	12.7	0.5	19.7
47	871	41.8	20.8	16.7	50.2	27.3	43.9	33.7	48.7	35.0
48	1109	24.5	0.0	0.0	0.3	0.0	2.3	45.0	12.3	33.3
49	244	83.3	213.8	123.6	178.0	174.4	50.2	24.5	34.7	34.9
50	150	849.6	362.8	323.8	1171.3	1133.6	177.2	1787.4	259.9	127.5
51	139	18.5	N/S	151.0	20.4	20.3	147.1	3158.0	673.6	63.1
52	307	8.8	3.8	4.7	4.0	4.0	28.2	90.2	34.0	4.8
53	268	3.0	141.3	173.0	32.7	N/S	35.6	27.2	33.7	20.0
54	278	65.3	262.0	12.9	31.2	50.0	24.7	94.0	52.2	20.2
55	364	6.3	0.5	0.8	1.4	12.1	0.3	4.0	26.2	20.8
56	209	0.0	9.0	N/S	3.5	0.5	3.0	0.0	2.3	6.7
South Channel (46-47, 49-55)	3037	75.0	95.4	57.4	95.0	109.9	52.0	266.8	74.8	31.3
57	184	N/S	2.3	6.0	1.0	0.0	0.0	0.0	1.7	5.7
58	300	5.7	0.5	9.5	11.5	6.0	2.5	1.5	6.3	1.5
59	538	59.0	63.9	58.9	30.3	108.0	33.8	11.8	38.1	29.1
60	816	40.4	19.3	17.0	34.4	54.6	19.0	13.1	14.1	15.6
SE Part (58-60)	1654	40.2	30.4	29.3	28.9	63.2	20.8	10.6	20.5	17.5
61	576	N/S	54.3	153.3	N/S	29.3	N/S	11.4	11.0	18.3
62	701	N/S	157.3	242.6	141.6	287.5	N/S	66.2	105.0	105.1
621	547	-	-	-	-	-	-	-	-	-
622	154	-	-	-	-	-	-	-	-	-
63	694	77.4	208.7	416.8	370.3	1605.5	62.5	63.0	39.6	39.4
631	340	-	-	-	-	-	-	-	-	-
632	354	-	-	-	-	-	-	-	-	-
64	988	470.6	606.4	878.4	486.8	1117.0	970.0	237.5	156.4	1297.3
65	164	452.3	2217.3	1001.4	739.1	6513.3	1030.8	236.4	245.0	301.4
651	102	-	-	-	-	-	-	-	-	-
652	62	-	-	-	-	-	-	-	-	-
66	266	259.8	1783.2	773.0	415.5	129.8	1214.1	297.8	219.9	332.9
661	117	-	-	-	-	-	-	-	-	-
662	149	-	-	-	-	-	-	-	-	-
71	146	129.0	N/S	1102.7	448.3	326.0	334.0	86.3	32.3	46.8
72	504	12.5	N/S	N/S	102.7	62.4	N/S	17.4	7.5	15.3
73	501	129.0	N/S	N/S	60.0	0.2	N/S	2.4	0.0	0.3
74	433	34.1	0.0	N/S	229.3	4.0	N/S	10.2	29.0	22.4
USA N. Edge & Peak*	2765	-	-	-	-	-	-	-	-	-
USA Georges Bank**	7456	-	-	-	-	-	-	-	-	-
Canada N. Edge & Peak*	1707	-	-	-	-	-	-	-	-	-
Total N. Edge & Peak	4472	219.7	450.9	550.6	329.9	809.4	683.1	106.2	85.3	347.8
Total Georges Bank	9163	126.3	252.6	263.7	188.9	469.7	249.6	142.2	70.1	183.3

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
\- = not calculated.

Appendix Table 7. continued.

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	HISTORIC LOW	HIGH
45	392	11.3	0.0	0.0	0.0	2.3	N/S	N/S	N/S	N/S	N/S	0.0	34.3
46	416	27.8	29.2	21.0	50.3	46.0	110.5	295.5	50.2	15.8	42.0	0.5	295.5
47	871	87.3	N/S	53.3	34.9	6.1	186.8	157.4	6.8	34.8	13.4	6.1	186.8
48	1109	25.3	N/S	1.7	0.6	6.3	N/S	N/S	N/S	N/S	N/S	0.0	45.0
49	244	48.3	43.0	73.1	6.7	5.1	900.2	3202.0	2398.1	34.8	65.0	5.1	3202.0
50	150	318.4	870.1	1135.9	150.6	94.2	1519.3	888.2	836.3	84.6	111.3	84.6	1787.4
51	139	82.4	481.3	610.6	378.3	275.3	1032.2	1534.2	1204.9	93.6	68.5	18.5	3158.0
52	307	243.3	43.4	117.1	99.5	40.0	248.9	140.8	867.4	259.0	200.1	3.8	867.4
53	268	35.1	57.7	114.7	30.6	26.4	21.1	66.0	25.7	36.3	121.4	3.0	173.0
54	278	32.1	92.0	106.6	31.1	50.3	159.9	186.3	43.7	12.6	11.7	11.7	262.0
55	364	39.9	N/S	7.1	89.4	1.2	31.4	18.3	22.3	5.4	6.7	0.3	89.4
56	209	6.7	N/S	0.0	13.0	8.0	N/S	N/S	N/S	N/S	N/S	0.0	13.0
South Channel (46-47, 49-55)	3037	87.6	152.3	140.7	68.5	36.8	308.7	496.3	394.6	54.6	56.3	31.3	496.3
57	184	3.0	3.0	1.0	7.3	2.7	N/S	N/S	N/S	N/S	N/S	0.0	7.3
58	300	18.5	35.3	20.9	3.8	3.5	1.1	2.3	2.5	6.4	1.9	0.5	35.3
59	538	18.7	40.5	27.2	34.9	69.0	15.9	49.9	38.6	18.8	37.7	11.8	108.0
60	816	23.3	60.6	101.5	11.2	25.1	9.4	32.3	36.0	9.3	32.3	9.3	101.5
SE Part (58-60)	1654	20.9	49.5	62.7	17.5	35.5	10.0	32.6	30.8	11.8	28.5	10.0	63.2
61	576	20.5	31.5	37.8	33.6	N/S	243.8	120.6	24.5	9.4	41.9	9.4	243.8
62	701	-	-	-	-	-	-	-	-	-	-	66.2	287.5
621	547	83.7	170.9	372.6	304.3	N/S	747.8	430.1	112.7	34.8	57.6	34.8	747.8
622	154	222.0	194.6	345.7	192.3	N/S	292.0	186.0	N/S	260.8	39.3	39.3	345.7
63	694	-	-	-	-	-	-	-	-	-	-	39.4	1605.5
631	340	15.7	45.6	2.9	3.4	N/S	7.9	20.1	21.6	0.6	1.1	0.6	45.6
632	354	269.6	80.1	328.9	317.6	N/S	222.7	151.0	N/S	41.0	119.4	41.0	328.9
64	988	844.9	1147.2	468.5	430.0	N/S	977.0	N/S	N/S	260.6	485.0	156.4	1297.3
65	164	-	-	-	-	-	-	-	-	-	-	236.4	6513.3
651	102	355.3	309.8	285.3	393.2	N/S	87.4	273.6	148.6	45.2	17.0	17.0	393.2
652	62	1574.8	511.4	1142.3	725.4	N/S	1069.0	5697.9	N/S	303.7	378.4	303.7	5697.9
66	266	-	-	-	-	-	-	-	-	-	-	129.8	1783.2
661	117	198.0	194.7	190.2	178.8	N/S	72.5	25.3	430.2	57.0	18.3	18.3	430.2
662	149	276.9	1475.8	1291.1	256.6	N/S	490.3	195.0	N/S	321.7	183.6	183.6	1475.8
71	146	32.3	107.7	88.4	298.2	N/S	163.7	977.0	275.6	50.7	35.2	32.3	1102.7
72	504	5.8	13.0	52.3	14.8	N/S	N/S	11.0	13.0	11.7	8.7	5.8	102.7
73	501	4.6	1.0	0.0	1.5	N/S	N/S	N/S	N/S	N/S	N/S	0.0	129.0
74	433	9.1	3.1	12.3	118.5	N/S	6.4	52.0	3.0	5.5	1.4	0.0	229.3
USA N. Edge & Peak*	2765	48.4	74.2	116.6	126.7	N/S	263.7	185.6	71.1	18.7	25.3	18.7	263.7
USA Georges Bank**	7456	58.3	90.2	114.5	78.8	-	223.0	278.2	193.9	31.8	38.6	31.8	278.2
Canada N. Edge & Peak*	1707	646.3	845.6	524.7	380.8	N/S	719.6	304.7	N/S	218.7	347.8	222.0	845.6
Total N. Edge Peak	4472	276.7	368.6	272.4	223.7	-	459.8	231.1	-	94.8	148.4	85.3	809.4
Total Georges Bank	9163	167.9	252.9	190.9	135.1	-	320.9	283.1	-	66.6	96.2	67.2	469.7

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
- = not calculated.

Appendix Table 8. Standardized mean number of pre-recruit [<70 mm shell height] sea scallop per tow by stratum, and standardized stratified mean number of pre-recruit sea scallop per tow by area and region from the NEFSC sea scallop research vessel surveys on Georges Banks, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
45	392	16.7	0.0	0.0	0.0	N/S	0.0	0.0	5.0	0.0
46	416	8.7	N/S	7.3	2.0	N/S	11.8	5.2	0.3	5.0
47	871	2.2	0.0	0.7	16.4	11.0	13.6	16.0	27.0	16.9
48	1109	0.0	0.0	0.0	0.0	0.0	0.0	10.7	11.3	5.5
49	244	73.3	10.4	9.1	17.8	137.8	4.2	11.0	20.2	23.0
50	150	740.4	46.3	7.5	2.5	922.0	58.4	1429.9	96.0	77.7
51	139	2.5	N/S	110.3	1.7	4.7	120.0	2712.8	46.4	14.3
52	307	3.5	0.8	2.0	1.3	0.0	6.0	68.0	1.7	0.5
53	268	0.0	0.3	2.0	0.0	N/S	4.2	6.5	6.7	0.2
54	278	3.7	20.5	0.0	0.4	14.0	3.3	57.5	11.5	8.3
55	364	0.1	0.0	0.0	0.3	4.5	0.0	1.2	7.3	7.2
56	209	0.0	5.0	N/S	2.5	0.5	0.5	0.0	1.7	5.3
South Channel (46-47, 49-55)	3037	45.1	6.2	7.7	6.8	79.8	15.5	213.8	19.0	13.6
57	184	N/S	0.0	0.8	0.0	0.0	0.0	0.0	0.0	1.3
58	300	2.3	0.0	0.0	2.5	4.5	0.0	0.3	2.5	0.5
59	538	2.3	2.6	6.3	10.8	27.1	1.6	0.9	24.6	8.6
60	816	1.3	4.8	0.3	7.5	24.1	1.9	0.9	5.8	3.4
SE Part (58-60)	1654	1.8	3.2	2.2	7.7	21.5	1.4	0.8	11.3	4.6
61	576	N/S	0.2	1.3	N/S	9.4	N/S	0.1	1.3	5.3
62	701	N/S	7.4	55.1	31.1	205.4	N/S	7.9	60.4	75.2
621	547	-	-	-	-	-	-	-	-	-
622	154	-	-	-	-	-	-	-	-	-
63	694	13.0	46.9	133.2	43.6	1386.8	22.7	37.5	14.1	22.2
631	340	-	-	-	-	-	-	-	-	-
632	354	-	-	-	-	-	-	-	-	-
64	988	192.1	97.9	374.0	179.9	853.6	320.7	78.1	94.1	1165.9
65	164	284.0	156.0	126.0	139.1	6032.4	294.8	122.3	197.3	179.8
651	102	-	-	-	-	-	-	-	-	-
652	62	-	-	-	-	-	-	-	-	-
66	266	39.3	347.6	74.3	49.6	51.4	862.2	167.1	114.3	211.0
661	117	-	-	-	-	-	-	-	-	-
662	149	-	-	-	-	-	-	-	-	-
71	146	59.8	N/S	592.7	43.2	106.5	110.0	24.3	14.8	13.6
72	504	0.5	N/S	N/S	11.7	6.1	N/S	9.4	0.3	0.3
73	501	105.5	N/S	N/S	4.5	0.2	N/S	1.8	0.0	0.0
74	433	6.9	0.0	N/S	5.8	0.1	N/S	2.8	11.2	7.4
USA N. Edge & Peak*	2765	-	-	-	-	-	-	-	-	-
USA Georges Bank**	7456	-	-	-	-	-	-	-	-	-
Canada N. Edge & Peak*	1707	-	-	-	-	-	-	-	-	-
Total N. Edge & Peak	4472	83.8	66.1	177.8	72.0	665.7	277.4	40.9	48.3	293.8
Total Georges Bank	9163	51.7	34.4	79.7	36.6	377.4	97.2	91.0	31.9	148.7

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
- = not calculated.

Appendix Table 8. continued.

Stratum	Area (sq mi)	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	HISTORIC LOW	HIGH
45	392	9.7	0.0	0.0	0.0	0.3	N/S	N/S	N/S	N/S	N/S	0.0	16.7
46	416	15.0	20.2	10.5	46.0	33.5	68.2	238.5	8.2	11.3	23.0	0.3	238.5
47	871	53.7	N/S	29.5	22.6	0.8	147.7	116.3	1.7	25.3	7.3	0.0	147.7
48	1109	14.1	N/S	1.1	0.3	3.0	N/S	N/S	N/S	N/S	N/S	0.0	14.1
49	244	28.0	29.8	20.1	2.6	1.9	824.4	3129.3	1198.8	5.3	45.1	1.9	3129.3
50	150	217.3	721.1	658.6	23.8	49.6	1462.7	836.0	384.9	29.8	54.0	2.5	1462.7
51	139	55.1	417.1	469.2	77.9	215.7	995.8	1150.3	821.4	24.3	14.8	1.7	2712.8
52	307	20.1	13.5	49.7	40.8	13.9	153.5	91.5	649.8	172.1	49.3	0.0	649.8
53	268	8.1	28.6	87.7	8.9	7.0	3.2	29.6	4.0	9.0	13.4	0.0	87.7
54	278	15.1	50.9	65.1	14.6	26.3	65.5	90.9	15.3	3.6	3.0	0.0	90.9
55	364	26.6	N/S	2.6	70.9	0.2	10.5	4.0	7.1	0.9	0.5	0.0	70.9
56	209	6.3	N/S	0.0	11.7	4.0	N/S	N/S	N/S	N/S	N/S	0.0	11.7
South Channel (46-47, 49-55)	3037	40.3	115.3	84.6	32.5	21.8	258.8	432.1	222.8	30.4	18.7	6.2	432.1
57	184	0.0	0.7	0.0	0.7	1.0	N/S	N/S	N/S	N/S	N/S	0.0	1.3
58	300	15.3	30.5	15.1	0.9	1.4	0.8	1.8	0.3	0.4	1.5	0.0	30.5
59	538	8.0	20.6	13.2	2.0	56.8	1.5	14.7	12.7	6.3	25.2	0.9	56.8
60	816	7.6	33.8	32.5	1.3	9.9	2.0	27.2	12.4	0.6	22.7	0.3	33.8
SE Part (58-60)	1654	9.1	28.9	23.1	1.4	23.6	1.6	18.5	10.3	2.4	19.6	0.8	28.9
61	576	2.1	17.9	25.1	15.0	N/S	22.9	35.1	2.5	2.4	29.8	0.1	35.1
62	701	-	-	-	-	-	-	-	-	-	-	7.4	205.4
621	547	46.9	97.2	199.5	146.9	N/S	231.7	257.5	14.3	1.7	41.4	1.7	257.5
622	154	138.8	55.6	223.2	75.3	N/S	142.5	362.0	N/S	4.3	86.5	4.3	362.0
63	694	-	-	-	-	-	-	-	-	-	-	13.0	1386.8
631	340	6.3	22.6	1.3	0.1	N/S	3.2	6.0	1.6	0.3	0.0	0.0	22.6
632	354	108.7	40.4	243.3	176.8	N/S	110.0	35.5	N/S	1.8	40.5	1.8	243.3
64	988	193.9	433.7	303.8	149.8	N/S	653.1	N/S	N/S	26.1	141.5	26.1	1165.9
65	164	-	-	-	-	-	-	-	-	-	-	122.3	6032.4
651	102	168.4	259.8	138.2	238.0	N/S	26.1	252.3	77.5	16.4	2.1	2.1	259.8
652	62	664.0	364.6	254.6	246.0	N/S	469.3	4225.0	N/S	20.9	202.2	20.9	4225.0
66	266	-	-	-	-	-	-	-	-	-	-	39.3	862.2
661	117	97.7	133.8	123.8	101.5	N/S	6.7	8.1	342.8	12.4	1.7	1.7	342.8
662	149	167.1	1167.0	428.1	167.3	N/S	11.3	24.0	N/S	37.4	59.3	11.3	1167.0
71	146	13.8	71.3	49.0	202.5	N/S	43.4	858.7	94.0	9.8	5.7	5.7	858.7
72	504	0.8	4.5	16.8	6.8	N/S	N/S	3.7	1.2	0.7	0.2	0.2	16.8
73	501	0.4	0.7	0.0	0.5	N/S	N/S	N/S	N/S	N/S	N/S	0.0	105.5
74	433	0.8	0.0	7.6	54.9	N/S	1.0	25.9	0.6	1.5	0.0	0.0	54.9
USA N. Edge & Peak*	2765	21.8	45.6	62.0	65.8	N/S	66.9	118.7	26.1	3.1	14.9	3.1	118.7
USA Georges Bank**	7456	26.5	61.3	62.6	37.9	-	135.2	224.1	102.7	14.0	17.5	14.0	224.1
Canada N. Edge & Peak*	1707	186.0	379.5	293.0	153.7	N/S	431.7	206.4	N/S	19.5	110.6	19.5	431.7
Total N. Edge & Peak	4472	84.5	173.0	150.2	99.4	-	223.8	152.2	-	9.1	51.4	9.1	665.7
Total Georges Bank	9163	56.2	129.8	105.5	59.5	-	193.6	220.8	-	15.0	34.8	15.0	377.4

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
\- = not calculated.

Appendix Table 9. Standardized mean number of harvestable-size [>70 mm shell height] sea scallops per tow by stratum, and standardized stratified mean number of harvestable-size sea scallops per tow by area and region, from the NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
45	392	17.7	0.0	0.0	0.0	N/S	0.0	0.0	12.0	0.0
46	416	32.3	N/S	13.0	7.0	N/S	72.6	7.5	0.2	14.7
47	871	39.6	20.8	16.0	33.8	16.3	30.3	17.7	21.7	18.1
48	1109	24.5	0.0	0.0	0.3	0.0	2.3	34.3	1.0	27.8
49	244	10.0	203.4	114.4	160.2	36.6	46.0	13.5	14.5	11.9
50	150	109.2	316.5	316.3	1168.8	211.6	118.8	357.5	163.9	49.7
51	139	16.0	N/S	40.7	18.7	15.6	27.1	445.3	627.2	48.8
52	307	5.3	3.0	2.7	2.7	4.0	22.2	22.2	32.3	4.3
53	268	3.0	141.0	171.0	32.7	N/S	31.4	20.7	27.0	19.8
54	278	61.6	241.5	12.9	30.8	36.0	21.3	36.5	40.7	11.8
55	364	6.2	0.5	0.8	1.1	7.6	0.3	2.8	18.8	13.6
56	209	0.0	4.0	N/S	1.0	0.0	2.5	0.0	0.7	1.3
South Channel (46-47, 49-55)	3037	29.9	89.1	49.7	88.2	30.2	36.5	53.0	55.8	17.7
57	184	N/S	2.3	5.3	1.0	0.0	0.0	0.0	1.7	4.3
58	300	3.3	0.5	9.5	9.0	1.5	2.5	1.3	3.8	1.0
59	538	56.8	61.3	52.6	19.5	80.9	32.2	10.9	13.5	20.5
60	816	39.1	14.5	16.7	26.9	30.5	17.1	12.3	8.4	12.3
SE Part (58-60)	1654	38.4	27.2	27.1	21.2	41.6	19.4	9.8	9.2	12.9
61	576	N/S	54.2	152.0	N/S	19.9	N/S	11.3	9.7	13.0
62	701	N/S	149.9	187.5	110.5	82.1	N/S	58.3	44.6	29.9
621	547	-	-	-	-	-	-	-	-	-
622	154	-	-	-	-	-	-	-	-	-
63	694	64.4	161.7	283.6	326.7	218.7	39.7	25.5	25.5	17.2
631	340	-	-	-	-	-	-	-	-	-
632	354	-	-	-	-	-	-	-	-	-
64	988	278.4	508.5	504.4	306.9	263.4	649.3	159.4	62.3	131.4
65	164	168.3	2061.3	875.4	600.0	480.9	736.1	114.1	47.7	121.6
651	102	-	-	-	-	-	-	-	-	-
652	62	-	-	-	-	-	-	-	-	-
66	266	220.5	1435.6	698.8	365.9	78.3	351.9	130.7	105.6	121.9
661	117	-	-	-	-	-	-	-	-	-
662	149	-	-	-	-	-	-	-	-	-
71	146	69.3	N/S	510.0	405.0	219.5	224.0	62.0	17.5	33.2
72	504	12.0	N/S	N/S	91.0	56.3	N/S	8.0	7.3	15.0
73	501	23.5	N/S	N/S	55.5	0.0	N/S	0.6	0.0	0.3
74	433	27.3	0.0	N/S	223.5	3.9	N/S	7.4	17.8	15.0
USA N. Edge & Peak*	2765	-	-	-	-	-	-	-	-	-
USA Georges Bank**	7456	-	-	-	-	-	-	-	-	-
Canada N. Edge & Peak*	1707	-	-	-	-	-	-	-	-	-
Total N. Edge & Peak	4472	135.8	384.8	372.9	257.9	143.7	405.7	65.4	37.1	54.0
Total Georges Bank	9163	74.6	218.3	184.0	152.3	92.3	152.4	51.2	38.3	34.6

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
\- = not calculated.

Appendix Table 9. continued.

Stratum	Area (sq mi)	YEAR										HISTORIC	
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	LOW	HIGH
45	392	1.7	0.0	0.0	0.0	2.0	N/S	N/S	N/S	N/S	N/S	0.0	17.7
46	416	12.8	9.0	10.5	4.3	12.5	42.3	57.0	2.0	4.5	19.0	0.2	72.6
47	871	33.6	N/S	23.8	12.3	5.2	39.1	41.1	5.2	9.5	6.2	5.2	41.1
48	1109	11.2	N/S	0.6	0.2	3.3	N/S	N/S	N/S	N/S	N/S	0.0	34.3
49	244	20.3	13.2	53.0	4.1	3.3	75.8	72.7	1199.4	29.5	19.9	3.3	1199.4
50	150	101.2	148.9	477.3	126.8	44.6	56.6	52.2	451.4	54.8	57.3	44.6	1168.8
51	139	27.3	64.2	141.5	300.4	59.7	36.4	383.9	383.5	69.2	53.8	15.6	627.2
52	307	223.1	29.9	67.4	58.7	26.1	95.4	49.3	217.6	86.9	150.8	2.7	223.1
53	268	27.0	29.1	27.0	21.7	19.4	17.9	36.4	21.7	27.3	108.0	3.0	171.0
54	278	17.0	41.1	41.4	16.6	24.0	94.4	95.4	28.4	9.0	8.7	8.7	241.5
55	364	13.3	N/S	4.6	18.5	1.0	20.9	14.3	15.2	4.5	6.2	0.3	20.9
56	209	0.3	N/S	0.0	1.3	4.0	N/S	N/S	N/S	N/S	N/S	0.0	4.0
South Channel (46-47, 49-55)	3037	47.4	37.0	56.1	36.1	15.1	49.9	64.2	171.8	24.1	37.6	15.1	171.8
57	184	3.0	2.3	1.0	6.7	1.7	N/S	N/S	N/S	N/S	N/S	0.0	6.7
58	300	3.3	4.8	5.8	2.9	2.1	0.3	0.5	2.3	6.0	0.4	0.3	9.5
59	538	10.7	19.9	14.0	32.9	12.2	14.4	35.2	25.9	12.6	12.5	10.7	80.9
60	816	15.7	26.8	69.0	9.9	15.2	7.4	5.1	23.6	8.7	9.6	5.1	69.0
SE Part (58-60)	1654	11.8	20.6	39.6	16.1	11.8	8.4	14.1	20.5	9.5	8.9	8.4	41.6
61	576	18.4	13.6	12.6	18.6	N/S	220.9	85.5	22.0	7.0	12.1	7.0	220.9
62	701	-	-	-	-	-	-	-	-	-	-	29.9	187.5
621	547	36.8	73.8	173.1	157.4	N/S	516.1	172.6	98.5	33.2	16.2	16.2	516.1
622	154	83.3	139.0	122.5	117.0	N/S	149.5	115.5	N/S	256.5	52.8	52.8	256.5
63	694	-	-	-	-	-	-	-	-	-	-	17.2	326.7
631	340	9.4	23.0	1.6	3.3	N/S	4.7	14.1	20.0	0.3	1.1	0.3	23.0
632	354	160.9	39.7	85.6	140.9	N/S	112.7	115.5	N/S	39.3	78.9	39.3	160.9
64	988	651.0	713.5	164.7	280.2	N/S	323.9	N/S	N/S	234.5	343.5	62.3	713.5
65	164	-	-	-	-	-	-	-	-	-	-	47.7	2061.3
651	102	186.9	50.0	147.2	155.2	N/S	61.3	21.3	71.1	28.8	14.9	14.9	186.9
652	62	910.8	146.8	887.7	479.4	N/S	599.7	1172.9	N/S	282.8	176.2	146.8	1172.9
66	266	-	-	-	-	-	-	-	-	-	-	78.3	1435.6
661	117	100.3	60.8	66.5	77.3	N/S	65.8	17.2	87.4	44.6	16.6	16.6	100.3
662	149	109.8	308.8	863.0	89.4	N/S	479.0	171.0	N/S	284.3	124.4	89.4	863.0
71	146	18.5	36.3	39.4	95.7	N/S	120.3	118.3	181.6	40.8	29.5	17.5	510.0
72	504	5.0	8.5	35.5	8.0	N/S	N/S	7.3	11.8	11.0	8.5	5.0	91.0
73	501	4.2	0.3	0.0	1.0	N/S	N/S	N/S	N/S	N/S	N/S	0.0	55.5
74	433	8.4	3.1	4.8	63.6	N/S	5.4	26.1	2.4	4.0	1.4	0.0	223.5
USA N. Edge & Peak*	2765	26.6	28.6	54.6	60.9	N/S	196.8	66.9	45.0	15.6	10.4	10.4	196.8
USA Georges Bank**	7456	31.8	28.9	51.9	40.8	-	87.8	54.1	91.2	17.8	21.1	17.8	91.2
Canada N. Edge & Peak*	1707	460.3	466.0	231.7	227.2	N/S	287.9	98.3	N/S	199.2	237.2	98.3	466.0
Total N. Edge & Peak	4472	192.2	195.6	122.2	124.4	-	236.0	78.9	-	85.7	97.0	37.1	405.7
Total Georges Bank	9163	111.6	123.0	85.4	75.6	-	127.3	62.3	-	51.6	61.4	34.6	218.3

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
- = not calculated.

Appendix Table 10. Standardized mean weight [g] of sea scallops per tow by stratum, and standardized stratified mean weight of sea scallops per tow by area and region, from the NEFSC sea scallop research vessel surveys on Georges Bank, 1975, 1977-1994.

Stratum	Area (sq mi)	YEAR 1975	1977	1978	1979	1980	1981	1982	1983	1984
45	392	556	0	0	0	N/S	0	0	289	0
46	416	1029	N/S	454	312	N/S	1283	208	10	363
47	871	1114	872	533	1045	450	469	482	597	416
48	1109	878	0	0	12	0	70	745	25	535
49	244	568	3293	2360	4162	1082	1440	206	365	254
50	150	3571	3945	5717	12907	3154	1380	6901	2084	778
51	139	646	N/S	1043	558	454	663	9261	6177	709
52	307	163	102	59	38	159	516	491	693	109
53	268	100	4559	4277	959	N/S	599	727	617	608
54	278	1669	5188	563	1183	882	495	1015	699	315
55	364	235	20	27	36	239	20	84	428	278
56	209	0	53	N/S	10	0	61	0	27	31
South Channel (46-47, 49-55)	3037	918	1957	1173	1541	668	677	1165	827	387
57	184	N/S	96	282	13	0	0	0	84	189
58	300	113	5	424	161	16	51	55	136	25
59	538	1345	1557	1732	824	1396	786	418	506	433
60	816	1145	368	596	858	571	398	345	170	192
SE Part (58-60)	1654	1023	689	934	720	739	461	316	273	240
61	576	N/S	1724	4864	N/S	794	N/S	396	347	528
62	701	N/S	3022	4303	2689	1933	N/S	953	870	670
621	547	-	-	-	-	-	-	-	-	-
622	154	-	-	-	-	-	-	-	-	-
63	694	1355	2343	5849	5003	5068	757	559	509	419
631	340	-	-	-	-	-	-	-	-	-
632	354	-	-	-	-	-	-	-	-	-
64	988	4038	7373	10240	5964	4421	6466	2373	1315	2885
65	164	3658	22843	15856	7960	12587	7683	1632	1108	1546
651	102	-	-	-	-	-	-	-	-	-
652	62	-	-	-	-	-	-	-	-	-
66	266	3230	16857	14687	8948	1327	5329	2195	1500	1833
661	117	-	-	-	-	-	-	-	-	-
662	149	-	-	-	-	-	-	-	-	-
71	146	1596	N/S	10007	6194	2732	2619	948	554	639
72	504	348	N/S	N/S	1876	1408	N/S	176	158	365
73	501	820	N/S	N/S	677	1	N/S	7	0	2
74	433	740	0	N/S	3217	60	N/S	157	307	308
USA N. Edge & Peak*	2765	-	-	-	-	-	-	-	-	-
USA Georges Bank**	7456	-	-	-	-	-	-	-	-	-
Canada N. Edge & Peak*	1707	-	-	-	-	-	-	-	-	-
Total N. Edge & Peak	4472	2228	5299	7910	4666	2963	4417	1068	746	1133
Total Georges Bank	9163	1471	3298	4020	2801	1892	1841	964	688	725

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
\- = not calculated.

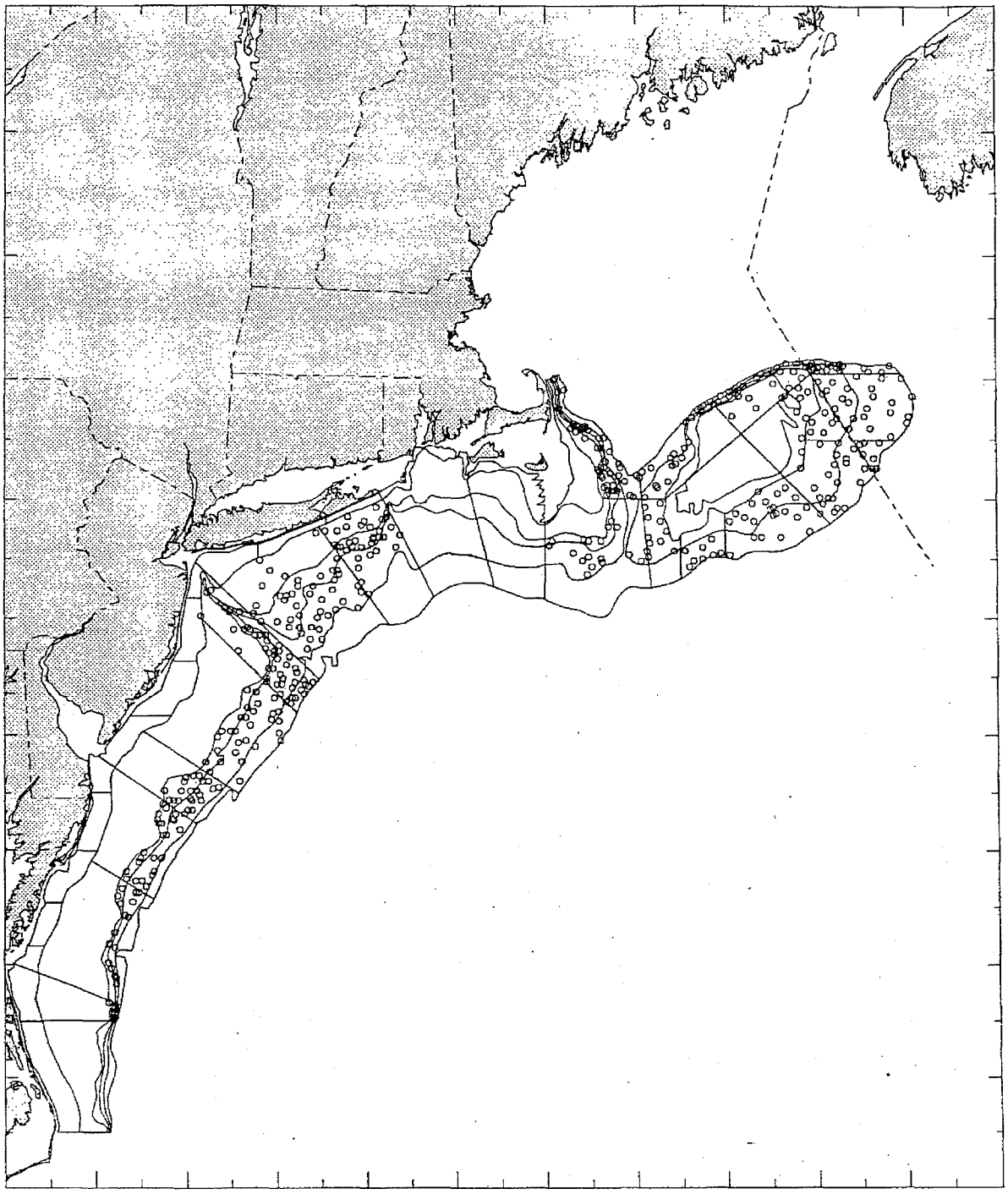
Appendix Table 10. continued.

Stratum	Area	YEAR										HISTORIC	
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	LOW	HIGH
45	392	46	0	0	0	21	N/S	N/S	N/S	N/S	N/S	0	556
46	416	190	183	288	171	289	632	1438	533	130	264	10	1438
47	871	750	N/S	581	276	202	834	849	145	261	169	145	1114
48	1109	209	N/S	7	3	62	N/S	N/S	N/S	N/S	N/S	0	878
49	244	383	355	490	82	74	3032	5676	13243	285	346	74	13243
50	150	1729	2964	5638	1516	811	3089	2322	4847	624	736	624	12907
51	139	562	1436	2326	3017	1236	1448	4515	5980	733	677	454	9261
52	307	3244	614	1033	782	496	1446	738	3519	1375	1618	38	3519
53	268	709	821	820	494	330	355	610	454	356	1144	100	4559
54	278	499	945	777	291	511	1519	1349	454	172	217	172	5188
55	364	417	N/S	103	564	37	318	298	274	152	118	20	564
56	209	12	N/S	0	20	41	N/S	N/S	N/S	N/S	N/S	0	61
South Channel (46-47, 49-55)	3037	869	820	891	539	331	1143	1505	2162	384	478	331	2162
57	184	123	71	54	117	101	N/S	N/S	N/S	N/S	N/S	0	282
58	300	139	99	86	33	41	8	14	38	132	20	5	424
59	538	249	616	287	689	433	232	551	539	322	383	232	1732
60	816	267	496	1125	189	299	149	129	382	209	307	129	1145
SE Part (58-60)	1654	238	463	664	323	296	150	245	371	232	280	150	1023
61	576	401	406	423	337	N/S	2020	1250	444	180	386	180	4864
62	701	-	-	-	-	-	-	-	-	-	-	670	4303
621	547	610	1257	2360	1959	N/S	5437	2503	1290	466	384	384	5437
622	154	1420	2392	1841	1725	N/S	2000	3495	N/S	4102	1259	1259	4102
63	694	-	-	-	-	-	-	-	-	-	-	419	5849
631	340	193	466	33	86	N/S	139	402	449	11	20	11	466
632	354	1918	913	1826	2097	N/S	1938	3247	N/S	945	1774	913	3247
64	988	6481	9976	3084	3782	N/S	5213	N/S	N/S	3754	4981	1315	10240
65	164	-	-	-	-	-	-	-	-	-	-	1108	22843
651	102	2250	1633	1884	1985	N/S	777	992	963	386	299	299	2250
652	62	9178	3013	9670	6083	N/S	8103	24834	N/S	4253	3609	3013	24834
66	266	-	-	-	-	-	-	-	-	-	-	1327	16857
661	117	1412	1183	949	1566	N/S	944	343	1962	474	227	227	1962
662	149	1992	5960	10875	1428	N/S	6719	2950	N/S	4708	2684	1428	10875
71	146	383	1030	603	1794	N/S	1413	3439	2026	497	499	383	10007
72	504	101	216	763	161	N/S	N/S	200	243	280	167	101	1876
73	501	99	4	0	25	N/S	N/S	N/S	N/S	N/S	N/S	0	820
74	433	258	95	81	1186	N/S	134	566	63	78	29	0	3217
USA N. Edge & Peak*	2765	450	610	852	918	N/S	2052	1163	682	256	1573	256	2052
USA Georges Bank**	7456	574	632	826	632	-	1202	1099	1216	308	977	303	1216
Canada N. Edge & Peak*	1707	4784	6809	3630	3125	N/S	4480	2148	N/S	3310	3730	2148	6809
Total N. Edge & Peak	4472	2104	2976	1913	1760	-	3097	1539	-	1422	1573	746	7910
Total Georges Bank	9163	1358	1962	1348	1096	-	1849	1294	-	867	977	688	4020

* USA N. Edge & Peak: Strata 61, 621, 631, 651, 661, 71, 72, 74;
Canada N. Edge & Peak: Strata 622, 632, 64, 652, 662.

** USA Georges Bank: Combined South Channel, SE Part, and USA Edge & Peak areas.

N/S = not sampled.
\- = not calculated.



Appendix Figure 1. Sampling stations occupied during the 1994 NEFSC sea scallop research vessel survey.