PRELIMINARY REVISED ESTIMATES OF MARINE MAMMAL AND MARINE TURTLE BYCATCH BY THE U.S. ATLANTIC PELAGIC LONGLINE FLEET, 1992-1998[1]

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Introduction

Longline is the principal gear used to fish for tuna (*Thunnus spp.*) and swordfish (*Xiphias gladius*) in the U.S. North Atlantic (including the Gulf of Mexico) (Berkeley *et al.*, 1981; Hoey and Bertolino, 1988). Non-targeted bycatch of this fishery includes species of marine mammals and sea turtles, which are hooked or entangled in the longline. Under the 1994 Amendments to the Marine Mammal Protection Act, sec. 118, all U.S. commercial fisheries are categorized according to the level of marine mammal mortality and serious injury they are associated with. The U.S. pelagic longline fishery operating in the Atlantic Ocean, Gulf of Mexico, and Caribbean is categorized as a Category I fishery and requires a monitoring program to establish the level of marine mammal takes and to collect data to aid in the development of take reduction plans.

Estimates of the bycatch of marine mammals and turtles by the U.S. pelagic longline fishery in 1992-1997 and 1998 have been published previously (Johnson *et al*., 1999; Yeung, 1999*a*, 1999*b*). In the previous reports, the robustness of the bycatch estimates from several different pooling schemes for bycatch rates were examined, from no pooling (stratified estimates by year-quarter-grouped fishing area (NAREA)) to the highest level of pooling (within year-large fishing region (MAREA)). No bycatch estimates were made for strata without observer effort in the previous reports.

In this report another pooling scheme is examined in which the criterion of a minimum number of observed sets determines the level of pooling. The levels of quarter, year and NAREA are successively pooled in that order until the criterion is met. In many cases, this scheme leads to a redistribution of estimated bycatch across strata, so that there are fewer empty cells with no bycatch estimates than in previous reports, but the summed total of the bycatch estimates across strata are generally not greatly different. The purpose of this report is to alert drafters of a biological opinion to the possibility of changes in the time-area distribution and magnitude of bycatch estimates as a result of different pooling schemes. The methodology and assumptions are described in the following section; it is just one method that might be applied in this circumstance and others will be explored for the full report, which will also include estimates for 1999. This preliminary report also does not apply serious injury criteria to provide estimates of animals that are released alive but likely to die subsequently; these estimates will be provided in the full report.

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Methods

The principal change in methodology from previous reports (Johnson *et al*., 1999; Yeung 1999*a*, 1999*b*) is in the setting of a criterion of a minimum number of observed sets (N_{min}) from which to estimate bycatch rates for a time-area stratum. Quarters, years, and finally NAREA are pooled in that order until the criterion is met. The order of pooling follows the increasing order of significance of these three factors in a generalized linear regression model (GLM) on CPUE. Since the 1992-97 and 1998 estimates were first reported, several changes have also been made to the datasets. Some data have been corrected, including location data. The fishing area previously was defined by the locations where the longline was set out to begin fishing, but now is defined by the location where the haul-back of the longline began after fishing. Also, the parts of sets that were interrupted (*e.g.*, when the main line was severed) previously were defined as separate sets, but now have been combined. Data sources and methods of bycatch estimation are the same and are only briefly recapitulated here:

Data

Effort reported by the fishery was obtained from the Atlantic Large Pelagic Logbook database maintained by the SEFSC (Southeast Fisheries Science Center), which contains daily fishing effort reported by all U.S. Atlantic longline vessels landing swordfish and tuna (Cramer and Adams, 2000). Observed catch and effort were obtained from the SEFSC Observer Program database (Lee and Brown, 1998).

Large Pelagic Logbook Data

Daily logbook reports of catch and effort from permitted U.S. vessels targeting large pelagic fishes have been required under the Atlantic Swordfish Fishery Management Plan since 1986. This information is collected in the Large Pelagic Logbook database. Not withstanding errors due to mis-reporting, fishery-reported effort from the logbook (reported effort) is taken as representative of the actual permitted effort expended by the U.S. pelagic longline fleet in the Atlantic. Observed bycatch rates are raised to the amount of reported effort in the logbook for estimating total bycatch. Reported effort units are individual set (gear deployment) records reporting at least 100 hooks fished, and which were not reported to be bottom longline sets or which did not indicate a target of sharks or species other than tunas or swordfish. Reported effort (hooks and sets fished) are classified by fishing area (Figure 1) and calendar quarters. Effort missing location data are proportionally distributed among fishing areas based on the distribution of known set locations for the pertinent year and calendar quarter. Effort missing calendar quarter data within a fishing area are proportionally distributed among quarters based on the distribution of effort across quarters within the area.

Observer Data

Systematic sampling by scientific observers on board U.S. pelagic longline vessels in the Atlantic permitted to land and sell swordfish was implemented in 1992, under the mandate of the 1991 amendments to the U.S. Fishery Management Plan (FMP) for Swordfish. The estimated bycatch rates of regulated (*e.g*., undersized swordfish, billfishes, bluefin tuna, sharks, etc.) and protected species (*e.g*., marine mammals, marine turtles, etc.) in the pelagic longline fishery are based on the data collected by the observer sampling program.

The species identifications associated with the observer data sometimes are problematic. It is likely that the green and Kemp's ridley takes are mis-identifications (Hoey, 1998; Witzell, 1999) and it is also likely that the hawksbill is a mis-identification (Witzell, pers. comm.). Even though take estimates are made for these species, these turtles probably represented loggerheads, the most common hard-shelled turtle taken in the fishery. In subsequent years, species identification must be confirmed.

Geographical stratification

The span of ocean fished by the U.S. Atlantic pelagic longline fleet is divided into eleven areas, which are further classified into six NAREAs (grouped fishing areas) (Figure 1). The NAREAs are the 1) Caribbean (CAR), 2) Gulf of Mexico (GOM), and 3) Northeast Distant (NED) AREAs, along with the combined 4) Southeast Coastal (SEC) [Florida East Coast (FEC) + South Atlantic Bight (SAB)], 5) Northeast Coastal (NEC) [Northeast Coastal (NEC) + Mid-Atlantic Bight (MAB)], and 6) Offshore South (OFS) [Sargasso (SAR) + North Central Atlantic (NCA) + Tuna South (TUS) + Tuna North (TUN)] AREAs. In previous reports, in order to assess the sensitivity of the estimation method to pooling, three major regions (MAREA) were also defined: 1) within the U.S. Atlantic EEZ (US Atl: SEC and NEC); 2) other Atlantic waters (OthAtl: NED, OFS, and CAR); 3) the Gulf of Mexico (GOM).

In general, fishing effort is classified based on reported or observed latitude and longitudes. When in some cases location information was not available, fishing areas (for catch and effort) were assigned based on examination of neighboring sets (neighboring days of fishing on the same trip) or observer logs. Where specific locations could not be determined or extrapolated from neighboring days, the reported sets were proportionally assigned to fishing areas based on the overall distribution of the reported effort with known locations.

Catch Estimation

Catch estimates are based solely on observer reports of release condition and serious injury criteria (Yeung 1999*b*) were not applied in this preliminary report. Estimates of bycatch of marine mammals and marine turtles were constructed using the delta-lognormal method (Pennington, 1983). The method assumes a lognormal distribution of the positive bycatch rate observations. Effectively, the estimates are constructed as a product of the proportion of successful occurrences of an event and the average rate at which the event occurs for those successful events. The variance is a function of the variability of the positive bycatch rates as well the number of successful and unsuccessful sets. Total bycatch for an analytical stratum (taxon-fishing area-quarter), *C*, is estimated as:

$$C = H \frac{m_c}{N} e^{L} G_{m_c}\left(\frac{s_L^{\,2}}{2}\right), \qquad (1)$$

H = reported number of hooks that were set, divided by 1000,

m_c= number of sets in which a non-zero bycatch of the species group was observed (positive sets),

N = total number of sets observed,

$L = \sum L_i \big/ m_c$,

$s_L^{\,2} = \dfrac{\sum (L_i - L)^2}{m_c - 1}$, where

$L_i = \log_e(catch_i / hooks_i \times 1000)$, $\log_e$-transformed bycatch rate for the ith positive set, i=1,...,m_c,
L = mean of L_i,
s_L^2 = sample variance of L_i;

and the function $G_{m_c}(\frac{s_L^2}{2})$ is:

$$G_{m_c}(\frac{s_L^2}{2}) = 1 + \frac{m_c - 1}{m_c}(\frac{s_L^2}{2}) + \sum_{j=2}^{\infty} \frac{(m_c - 1)^{2j-1}}{m_c^j (m_c + 1)(m_c + 3)...(m_c + 2j - 3)} \times \frac{(\frac{s_L^2}{2})^j}{j!}. \quad (2)$$

Numerically, the series was computed over j terms, until a convergence criterion of <0.001 change in the function was achieved (usually less than 10 terms were required). The estimate of variance of the bycatch takes the form:

$$V(C) = \frac{m_c}{N}(He^L)^2[\frac{m_c}{N} G_{m_c}{}^2(\frac{s_L^2}{2}) - (\frac{m_c - 1}{N - 1}) G_{m_c}(\frac{m_c - 2}{m_c - 1} s_L{}^2)]. \quad (3)$$

Bycatch estimates by stratum are assumed independent and as such estimated bycatch and the associated variances are summed across strata to produce region-wide annual estimates. The coefficient of variation for the stratum-wise estimate of bycatch is taken as:

$$CV = \frac{\sqrt{V(C)}}{C}. \quad (4)$$

Approximate (1-a) × 100% confidence intervals (a=0.05) are constructed assuming a lognormal distribution as: $(U_{1-a/2}, L_{1-a/2}) = (Ck, C/k)$, where $U_{1-a/2}$ and $L_{1-a/2}$ represent the upper and lower confidence bounds, $k = \exp[z_a(\log_e(1 + CV^2))^{1/2}]$, and z_α the associated (1-a) × 100th percentile z-score (Burnham *et al*., 1987, see p. 212). The lack of incorporation of (a) covariance terms and (b) variance of proportion of positive sets (m_c/N) in $V(C)$, along with an assumption of effort (H) being a known constant, may cause the actual variance of bycatch estimate to be underestimated. This in turn will produce the narrower confidence interval which will have a lower than the desired confidence level.

Treatment of strata with no observer effort

In the previous reports (Johnson *et al*., 1999; Yeung, 1999*a*, 1999*b*), when there was no observer effort for a particular analytical stratum, *i.e.*, N=0, the mean bycatch rate L and the proportion of positive sets, m_c/N were not estimated. No estimate of take was made for the stratum even though logbooks show that there was fishing effort (H>0). When no pooling of observed effort was employed in estimating bycatch in the previous reports, *i.e.*, estimates stratified by NAREA, year and quarter (Table 9, Johnson *et al*., 1999; Table 6 Yeung, 1999*a*; Table 5, Yeung, 1999*b*), there were many cells with no observed effort (Table 4). These empty cells occurred mainly in the NAREAs of CAR, NED, and OFS, which together comprised the MAREA of "OthAtl" where observed effort was habitually low. When observed effort was pooled across quarters within an NAREA-year stratum (Table 11, Johnson *et al*., 1999; Table 7, Yeung, 1999*a*; Table 6, Yeung, 1999*b*), cells with no observed effort only occurred in OFS in 1992, and NED in 1996 and 1998. With further pooling across quarters and NAREAs within an MAREA-year stratum (Table 12, Johnson *et al*., 1999; Table 8, Yeung, 1999*a*; Table 7, Yeung,

1999*b*), there were no empty cells, and all except one cell (OthAtl 1998) had at least 30 observed sets. Therefore, depending on which pooling level was used, some degree of pooling was actually employed to eliminate strata without observed effort in the previous reports.

The methods used herein for the revised estimates differ from those used in the past in that the degree of pooling of observed effort was assessed stepwise using a criterion of minimum number of observed sets (N_{min}). First, the effect of year, quarter, and NAREA on the catch rate was evaluated with a GLM: L'_j = year + quarter + NAREA, where the catch rate (including zero catch rates) in the jth observed set $L'_j = \log_e(\text{catch/hooks} + 0.00001)$, $j = 1, 2,..., N$.[2] The model was assessed for 1) all turtles species combined, 2) all turtle species combined excluding leatherbacks, 3) leatherbacks only, and 4) all marine mammal species combined among all NAREAs (Table 1). The results indicated that NAREA was responsible for the greatest model effect. Generally, the Type III sums of squares was greater and the probability>F was smaller for year than for quarter, indicating that the effect of quarter may be marginally less significant than year. Similar analyses using just data from the two northernmost NAREAs, NEC and NED, where turtle interactions have been associated with oceanographic features and have been reported to vary dramatically among years (Hoey, 1998), indicates that for marine turtles the variable year has greater proportional effect when only the two northern fishing NAREAs were considered than when all NAREAs were considered; for marine mammals the differences were marginal (Table 2). In any case, the effect of NAREA is still the greatest. In contrast, when just the southern four NAREAs were considered, NAREA was a significant model effect only for all turtles combined, or for all turtles except leatherbacks; when leatherbacks were excluded, quarter, but not year, was also significant; no effects were significant for leatherbacks and marine mammals (Table 3). These results indicate that, depending on the area and species group for which an estimate is made, the pooling order might vary.

The standard pooling priority order of quarter, year, and NAREA (**qyn**), established according to the increasing order of variance explained attributed to the effect (Tables 1 and 2), is adopted in this report since this order applies in most of the cases tested. For comparison, we also provide bycatch estimates using a pooling priority order of year, quarter, and NAREA (**yqn**) established according to the increasing order of variance explained attributed to the effect when just the southern NAREAs were examined (Table 3). NAREA accounts for >70% of the variance in catch rate in each of the four species groups tested. It is the most significant effect in the model and the last to enter the pooling scheme. Thus, in the absence of observer data for a stratum, data were first pooled across quarters to obtain a minimum sample size of N_{min} observed sets, which was arbitrarily set at the low level of 5 and high of 30 sets observed to evaluate the effect of N_{min} on the bycatch estimates. Should the pooling across quarters not suffice to achieve the minimum sample size, data were then pooled across years, and lastly across NAREAs to obtain an estimate of L and m_c/N, for the stratum. The variance for the bycatch $V(C)$ is then estimated over the pooled stratum. This was done once again, changing the pooling order to year, quarter, and then NAREA to evaluate the sensitivity of the pooling order on the resulting bycatch estimates.

[2] The constant of 0.00001 was selected because it is one order of magnitude smaller than the lowest catch rate on a positive set and would have the least influence on the catch rates of positive sets. However, the choice of constant: 0.00001, 0.0001, 0.001, 0.01, 0.1, and 1.0 made no difference in the relative order of contribution of the model effects to the model nor on the fits of the models.

Results and Discussion

Observed effort for each NAREA-year-quarter stratum for 1992-1998 are summarized in Tables 4 (sets) and 5 (hooks), and the logbook-reported effort in Tables 6 (sets) and 7 (hooks). The observed and reported efforts are the same as reported in Tables 1-4 of Johnson *et al*. (1999) for 1992-1997 and Tables 1-2 in Yeung (1999*b*) for 1998. The revised quarterly estimates of bycatch of marine mammals and marine turtles are given respectively in Table 8 (compared with Table 9, Johnson *et al*., 1999; Table 6, Yeung, 1999*a*; Table 5, Yeung, 1999*b*), and a quarterly summary of estimates sorted by species is given in Table 9.

All taxon groups examined fit the **qyn** pooling order according to the GLM results when all NAREAs were considered (Table 1) and also when only NED and NEC were considered (Table 2). When only CAR, GOM, OFS, and SEC were considered in the GLM, year takes marginal precedence over quarter for the marine turtles group (Table 3). The overall results support our use of the **qyn** pooling order as standard in this report. Part *a* of Tables 8 and 9 pertain to the results from a pooling order of quarter-year- NAREA and N_{min}=5 (**qyn5**). For comparison, estimates pertaining to year, quarter, NAREA (**yqn5**) at the same N_{min} are given in part *b* of Tables 8 and 9. An N_{min} of 30 produced similar results as an N_{min} of 5, which means that even with the lower criterion, most strata tend to attain close to or greater than 30 observed sets. Results from N_{min}=30 are therefore only given as annual summary estimates in Table 10 for reference. The extent of pooling can be determined by examination of Table 4; any cell with a number of observations less than N_{min} would have been pooled according to the pooling priority order.

With the **qyn5** scheme as standard in this report, only in four cases was there a need to pool beyond quarters to attain 5 observed sets, these being CAR in 1996, OFS in 1992, and NED in 1996 and 1998, in which pooling had to be carried to the "year" level. Never was pooling across NAREAs required. As a result, the **qyn5** pooling scheme in this report should be similar to (see Table 10) to the pooling of observed effort across quarters within an NAREA-year stratum (Table 11, Johnson *et al*., 1999; Table 7, Yeung, 1999*a*; Table 6, Yeung, 1999*b*), or the pooling of observed effort across quarters and NAREAs within an MAREA-year stratum (Table 12, Johnson *et al*., 1999; Table 8, Yeung, 1999*a*; Table 7, Yeung, 1999*b*), of the previous reports.

Previously, the annual sums of bycatch estimates (summing within MAREAs and taxonomic groups - Table 13, Johnson *et al*., 1999) indicate that the U.S. pelagic longline fleet operating in the Atlantic (including the Gulf of Mexico) during 1992-1997 caught a low of 45 (12-163, 95%CI) marine mammals in 1997 and a high of 581 (318-1,162, 95%CI) marine mammals in 1992. The annual sums of revised estimates based on the pooling order of **q**uarter-**y**ear-**N**AREA (Table 8a) now indicate a low of 46 (9-233) in 1997 and a high of 815 (257-2,813) in 1992. The annual sums of revised estimates based on the pooling order of **y**ear-**q**uarter-**N**AREA (Table 8b) are closer to previous estimates: a low of 45 (9-229) in 1997 and a high of 563 (180-1,952) in 1992.

It also was estimated previously that the fleet caught a low of 664 (362-1,247, 95%CI) marine turtles in 1997 and a high of 3,136 (2,325-4,260 95%CI) in 1995 (Table 13, *Johnson et al.*, 1999). In this case, the annual sum of revised estimates are almost the same between the two pooling orders. The annual sum of revised estimates based on the pooling order of **q**uarter-**y**ear-**N**AREA (Table 8a) now indicate a low of 850 (244-3,233) in 1997 and a high of 3,277 (1,836-6,674) in 1995 - similar to those estimates based on the pooling order of **y**ear-**q**uarter-**N**AREA (Table 8b): a low of 809 (226-3,150) in 1997 and a high of 3,277 (1,836-6,682) in 1995. The

annual sums of the previous estimates were based on the larger fishing region of MAREAs (combined NAREAs) instead of NAREAs as in the revised estimates, and the higher level of pooling could account for the higher precision of the previous estimates. Further examination is necessary to definitively classify animals as dead and seriously injured. Meanwhile, estimates reported here for dead animals are tentative.

Quarterly estimates by the **qyn5** scheme are summed to give annual estimates by taxon in Table 10. Also presented for comparison are the estimates obtained by the **yqn** pooling order, estimates from N_{min}=30 crossed with both pooling orders, and the annual estimates from the three different pooling schemes extracted from previous reports: 1) no pooling, 2) pooling across quarters within an NAREA-year stratum, and 3) pooling across quarters and NAREAs within an MAREA-year stratum. In the previous analyses, 2) and 3), pooling was universally applied to all data, whereas in the analysis reported this report data were pooled only if the number of observations was less than N_{min}. The closest comparison between the present and previous estimates is expected to be found between **qyn5** and 2) pooling across quarters within an NAREA-year stratum, since both schemes pooled across quarters. However, pooling according to the present method is only applied to about one-third of the cells (Table 4), rather than all cells as in the previous method. Total estimated bycatch of a taxon across all years did turn out not to be greatly different between these two methods. Comparatively, for marine mammals, about the same number of taxa had increased total estimates as a result of the qyn5 scheme as decreased (5 and 6 taxa, respectively). The greatest percentage increase (44%) was from 18 to 26 in the taxon of "dolphin". The most significant difference between the two schemes comes in the distribution of the bycatch across years. In many cases, the years with no or low observed effort, *e.g.*, 1992 (OFS), 1996 and 1998 (NED), which did not have bycatch estimates in the previous scheme, have now acquired estimates, *e.g.*, beaked whale. The situation is very much the same with marine turtles. Four of six taxa had increased estimates, but none greater than 25% of previous estimates. Redistribution across years within a taxon is common.

The choice between N_{min}= 5 or N_{min}= 30 generally does not greatly affect the total estimates for a taxon across the three factors considered (year, quarter, NAREA), but can significantly affect the distribution of estimated bycatch among the levels of each factor (Table 10). We have chosen here to present revised estimates based on N_{min}=5 so as to reduce the smoothing of effects due to the different factors. Although a target observation effort of 5% coverage in some cases may imply a higher N_{min}, observation effort achieved through pooling across strata is not an adequate substitute for raising actual observation effort within a stratum. Ignoring the variability among strata could lead to highly unreliable and/or variable estimates, as demonstrated herein.

While the method of pooling strata, the least significant first, appears promising for estimating bycatch when a minimum observer sample size has not been obtained, it has not been evaluated fully for estimating protected species bycatch. Preliminary examination of the sensitivity of this method to N_{min} and the pooling priority of the three effects (year, quarter, NAREA) indicate that the estimated total bycatch is not greatly disparate in magnitude between the choice of N_{min}= 5 or 30 when pooling priority is held constant, although the higher N_{min} tends to give a higher estimate (Table 10). The choice of pooling priority between the order of quarter-year and of year-quarter, with N_{min} held constant, appears to also have a small effect on the magnitude of the estimated total bycatch in most cases (Table 10). However, both N_{min} and the pooling priority can significantly affect the distribution of the estimated bycatch to a NAREA-year-quarter stratum.

A pooling method discussed herein (**yqn**) does provide estimates of retained catch of commercial species from the U.S. Atlantic pelagic longline fishery that are similar to values reported in the commercial landings reporting system (Brown *et al*., in press). Although most of these species are much more common than marine mammals and turtles, estimates and reported landings for bluefin tuna do match fairly well using the **yqn** scheme, and kept bluefin tuna occur in the fishery at rates similar to pilot whales, but much lower than that of leatherbacks. It should be noted, however, that the bluefin tuna estimates have large variances and point estimates of discarded bluefin tuna are variable depending on N_{min}. Where there is a paucity of actual observations, this method may be an acceptable alternative when applied with a consideration of its limitations. It will be difficult to evaluate for protected species whose capture is a rare event. It is necessary to examine in greater detail the sensitivity of the pooling method to the N_{min} criterion and the soundness of pooling on the year, quarter, and NAREA factors. Pooling may obscure significant differences and trends within and across factors. The lack of independence of sets, which is used as the primary sampling unit, needs to be evaluated as well, and perhaps the analyses should be based on trips and not sets. There are other methods that might be applied: the development of a GLM to be used in the absence of observer data should also be considered as should the evaluation of oceanographic events such as decaying warm core eddies on catch rates. So, too, might logbook data be used if it can be calibrated. The evaluation of different methods, in other words, needs to consider *a priori* knowledge of what and how other factors may influence catch rates of different species. The methodology applied herein is just one of many that might be considered and is our first attempt to estimate bycatch in the absence of observer data. Once methodology is determined the next step would be to evaluate serious injury criteria to determine the total number of deaths likely to arise from the estimated captures and then to assess the impacts of the removal of the animals from their populations.

Summary of assumptions and possible bias in the present analysis and recommendations for further analysis

Bycatch estimates by analytical stratum are assumed independent such that estimated bycatch and the associated variances are summed across strata to produce region-wide annual estimates. It is a reasonable assumption for sampling effort in a time-area stratum, except among multiple, consecutive sets occurring within the same vessel trip in the stratum. The proportion of positive sets (m_c/N) and reported number of hooks (H) are treated as constants within a stratum in the bycatch estimation, and thus assumed to be uncorrelated with bycatch rate. This assumption should hold for extremely rare taxa. The violations of the assumptions may lead to underestimation of the variances (and CVs) of summed region-wide total estimates (i.e. the "totals" in Tables 8 and 9, and all estimates in Table 10), and thus warrant a closer examination. A vessel trip may be a better alternative than a set as an independent unit of observation; a theoretical development to incorporate covariance terms (to account for lack of independence) and variance of proportion of positive sets in computing the variance of bycatch $V(C)$ could reduce the bias and improve the bycatch estimation stratum-wise and region-wise.

The purpose of the GLM analysis in this report is to determine an order of pooling to obtain a minimum amount of sampling effort for estimating bycatch rates. It does not provide the best model for predicting catch rates. The sensitivity of the magnitude of the estimates, and particularly the stratum-wise distribution of the estimates, to N_{min} and pooling order need to be

further tested. There is the concern that the pooling method may obscure significant differences and trends within and across factors. Alternatively, the application of a GLM model to predict catch rates may be more desirable. In that case, other main effects - from oceanography (e.g. warm core rings) and biology (e.g. migration) to vessel characteristics (e.g. power) and management regulations (e.g. closures), would have to be considered in the GLM analysis for each individual taxa. Finally, bycatch rates and bycatch numbers derived from calibrated logbook data may be able to serve as a rough yardstick for evaluating the results from the estimation methods used so far, which are based solely on observed bycatch rates.

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Species Group	Model Effect	Type III Sums of Squares	Probability >F
all marine turtles		R^2=0.14, F=41.28, Pr>F=0.0001	
	Year	83.3374	0.0001
	NAREA	1116.4401	0.0001
	Quarter	13.3703	0.1021
all marine turtle except leatherbacks		R^2=0.13, F=39.50, Pr>F=0.0001	
	Year	98.7134	0.0001
	NAREA	640.9803	0.0001
	Quarter	3.9413	0.3946
leatherback turtles only		R^2=0.06, F=17.18, Pr>F=0.0001	
	Year	26.3117	0.0027
	NAREA	229.2220	0.0001
	Quarter	12.5419	0.0154
all marine mammals		R^2=0.04, F=10.98, Pr>F=0.0001	
	Year	6.7273	0.0971
	NAREA	63.2665	0.0001
	Quarter	4.5023	0.0439

Table 2. Statistical results of general linear model evaluation of the effects of year, area, and quarter on $\log_e$ (catch rate + 0.00001) for NAREAs NED and NEC only. Note that the degrees of freedom for year, NAREA, and quarter are 7, 1, and 3, respectively.

Species Group	Model Effect	Type III Sums of Squares	Probability >F
all marine turtles		R^2=0.17, F=27.31, Pr>F=0.0001	
	Year	195.9264	0.0001
	NAREA	644.9117	0.0001
	Quarter	102.3593	0.0001
all marine turtle except leatherbacks		R^2=0.16, F=26.02, Pr>F=0.0001	
	Year	207.7031	0.0001
	NAREA	389.1257	0.0001
	Quarter	34.8504	0.0025
leatherback turtles only		R^2=0.08, F=12.11, Pr>F=0.0001	
	Year	65.4174	0.0001
	NAREA	132.6619	0.0001
	Quarter	36.0157	0.0005
all marine mammals		R^2=0.03, F=3.81, Pr>F=0.0001	
	Year	17.7286	0.0572
	NAREA	32.1809	0.0001
	Quarter	15.2816	0.0082

Table 3. Statistical results of general linear model evaluation of the effects of year, area, and quarter on $\log_e$ (catch rate + 0.00001) for NAREAs CAR, GOM, OFS, SEC only. Note that the degrees of freedom for year, NAREA, and quarter are 7, 3, and 3, respectively.

Species Group	Model Effect	Type III Sums of Squares	Probability >F
all marine turtles		R^2=0.01, F=2.42, Pr>F=0.0030	
	Year	4.4323	0.8395
	NAREA	21.4776	0.0008
	Quarter	8.8954	0.0741
all marine turtle except leatherbacks		R^2=0.03, F=4.93, Pr>F=0.0001	
	Year	6.3233	0.1852
	NAREA	23.9489	0.0001
	Quarter	7.1190	0.0101
leatherback turtles only		R^2=0.005, F=0.96, Pr>F=0.4840	
	Year	5.3085	0.3796
	NAREA	0.8232	0.7621
	Quarter	2.2297	0.3696
all marine mammals		R^2=0.002, F=0.33, Pr>F=0.9877	
	Year	0.1871	0.9808
	NAREA	0.1662	0.7131
	Quarter	0.0931	0.8574

Table 4. Observed effort (sets) sampled from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area. Zeros indicate no observed effort for that year, quarter, or area; blank cells (.) indicate no reported fishing effort (Table 6). Cells which did not meet N_{min}=5 criteria are shown in bold italics.

		QUARTER				ALL
		1	2	3	4	
NAREA	YEAR					
CAR	1992	***0***	***0***	***0***	11	11
	1993	8	8	***0***	10	26
	1994	32	***0***	***0***	***0***	32
	1995	13	12	10	***1***	36
	1996	***1***	***0***	***0***	***3***	***4***
	1997	8	***0***	***0***	***0***	8
	1998	***0***	***0***	.	10	10
	ALL	62	20	10	35	127
GOM	YEAR					
	1992	***0***	16	8	37	61
	1993	59	80	49	64	252
	1994	28	33	49	47	157
	1995	52	51	49	46	198
	1996	32	19	42	29	122
	1997	47	36	39	32	154
	1998	26	14	21	12	73
	ALL	244	249	257	267	1017

Table 4. (Continued)

		QUARTER				ALL
		1	2	3	4	
NAREA	YEAR					
NEC	1992	*0*	18	26	61	105
	1993	59	39	114	65	277
	1994	23	47	90	78	238
	1995	40	21	94	50	205
	1996	*0*	*0*	20	*1*	21
	1997	*0*	10	66	25	101
	1998	20	16	30	18	84
	ALL	142	151	440	298	1031
NED	YEAR					
	1992	.	9	26	46	81
	1993	.	6	42	27	75
	1994	.	*0*	37	24	61
	1995	*0*	*0*	53	12	65
	1996	.	*0*	*0*	*0*	*0*
	1997	.	*2*	40	*0*	42
	1998	.	*0*	*0*	*0*	*0*
	ALL	0	17	198	109	324

Table 4. (Continued)

		QUARTER				ALL
		1	2	3	4	
NAREA	YEAR					
OFS	1992	*0*	*0*	*0*	*0*	*0*
	1993	49	*0*	*0*	*0*	49
	1994	19	*0*	*0*	*0*	19
	1995	61	22	*0*	*0*	83
	1996	60	*0*	17	*0*	77
	1997	33	12	*0*	*0*	45
	1998	8	*4*	*0*	*0*	12
	ALL	230	38	17	0	285
SEC	YEAR					
	1992	*0*	28	28	15	71
	1993	23	54	35	26	138
	1994	33	49	39	20	141
	1995	20	45	11	12	88
	1996	18	56	16	37	127
	1997	26	17	34	15	92
	1998	24	46	*4*	34	108
	ALL	144	295	167	159	765

Table 5. Observed effort (hooks) sampled from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area. Zeros indicate no observed effort for that year, quarter, or area; blank cells (.) indicate no reported fishing effort (Table 6).

		QUARTER				
		1	2	3	4	ALL
NAREA	YEAR					
CAR	1992	0	0	0	4409	4409
	1993	4280	3075	0	4200	11555
	1994	13772	0	0	0	13772
	1995	5715	5346	5134	350	16545
	1996	318	0	0	1296	1614
	1997	3288	0	0	0	3288
	1998	0	0	.	6057	6057
	ALL	27374	8421	5134	16312	57240
GOM	YEAR					
	1992	0	5794	5853	26538	38185
	1993	45285	63375	41561	54187	204408
	1994	23840	23629	33682	33572	114723
	1995	39615	46413	39191	34273	159492
	1996	18478	10872	33265	22187	84802
	1997	30169	26944	27220	25173	109506
	1998	23546	12210	14965	11760	62481
	ALL	180933	189237	195737	207690	773597

Table 5. (Continued)

		QUARTER				ALL
		1	2	3	4	
NAREA	YEAR					
NEC	1992	0	15231	18455	39019	72705
	1993	28503	28401	75833	44100	176837
	1994	16930	37419	61484	53075	168908
	1995	26204	11860	66326	41423	145813
	1996	0	0	17790	532	18322
	1997	0	5641	53464	22739	81844
	1998	13974	11614	20915	13521	60024
	ALL	85611	110166	314270	214409	724453
NED	YEAR					
	1992	.	5410	18920	39245	63575
	1993	.	3459	29160	23728	56347
	1994	.	0	34288	22311	56599
	1995	0	0	39093	9669	48762
	1996	.	0	0	0	0
	1997	.	2050	35518	0	37568
	1998	.	0	0	0	0
	ALL	0	10919	156979	94953	262851

Table 5. (Continued)

		QUARTER				ALL
		1	2	3	4	
NAREA	YEAR					
OFS	1992	0	0	0	0	0
	1993	31776	0	0	0	31776
	1994	11951	0	0	0	11951
	1995	42837	17501	0	0	60338
	1996	40261	0	12017	0	52278
	1997	23966	8338	0	0	32304
	1998	6548	2958	0	0	9506
	ALL	157339	28797	12017	0	198153
SEC	YEAR					
	1992	0	7709	7481	3855	19045
	1993	12722	20995	11594	8735	54046
	1994	15801	22824	11351	4568	54544
	1995	11787	21774	5121	4197	42879
	1996	8399	32825	4764	16505	62493
	1997	18469	12842	11040	4745	47096
	1998	14184	16489	863	11358	42894
	ALL	81362	135458	52214	53963	322997

Table 6. Reported effort (sets) from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area (unk=unknown). Blank cells (.) indicate no reported effort for that year, quarter, or area.

		QUARTER					
		unk	1	2	3	4	ALL
NAREA	YEAR						
CAR	92	.	542	119	3	180	844
	93	1	531	173	17	212	934
	94	.	465	233	83	273	1054
	95	.	614	270	210	49	1143
	96	.	643	188	96	221	1148
	97	.	543	44	50	108	745
	98	.	345	21	.	54	420
GOM	92	.	1045	1030	943	662	3680
	93	4	712	861	1076	774	3427
	94	8	658	805	793	681	2945
	95	.	780	772	885	658	3095
	96	1	878	1261	1353	903	4396
	97	.	1215	970	1386	675	4246
	98	.	885	860	921	780	3446
NEC	92	.	248	598	1548	910	3304
	93	.	87	457	1914	832	3290
	94	.	140	358	1613	1115	3226
	95	.	141	512	1802	1253	3708
	96	1	21	580	1469	378	2449

Table 6. (Continued)

		QUARTER					ALL
		unk	1	2	3	4	
NAREA	YEAR						
NEC	97	.	17	320	1471	806	2614
	98	.	119	198	1161	792	2270
NED	92	.	.	212	694	256	1162
	93	1	.	137	636	295	1069
	94	.	.	108	574	344	1026
	95	.	4	30	703	197	934
	96	1	.	.	474	222	697
	97	.	.	153	562	12	727
	98	.	.	48	422	133	603
OFS	92	.	367	72	7	95	541
	93	1	495	67	5	130	698
	94	.	388	149	8	257	802
	95	.	803	519	39	34	1395
	96	.	675	458	147	195	1475
	97	1	533	274	39	173	1020
	98	.	374	209	4	82	669
SEC	92	.	768	1042	860	638	3308
	93	3	689	1208	834	615	3349
	94	3	706	1281	793	603	3386

Table 6. (Continued)

		QUARTER					ALL
		unk	1	2	3	4	
NAREA	YEAR						
SEC	95	.	623	1134	553	476	2786
	96	.	716	1462	848	903	3929
	97	.	744	1040	901	536	3221
	98	.	635	1044	508	571	2758
UNK	92	.	168	200	162	145	675
	93	4	164	140	235	83	626
	94	1	14	48	60	40	163
	95	.	46	79	24	37	186
	96	1	32	55	35	59	182
	97	.	43	42	58	21	164
	98	.	36	19	34	20	109

Table 7. Reported effort (hooks) from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area (unk=unknown). Blank cells (.) indicate no reported effort for that year, quarter, or area.

		QUARTER					ALL
		unk	1	2	3	4	
NAREA	YEAR						
CAR	92	.	245395	44550	757	69640	360342
	93	340	212478	67029	6550	81655	368052
	94	.	213084	116322	33704	117183	480293
	95	.	264486	127095	88176	20950	500707
	96	.	332087	101911	44734	118496	597228
	97	.	273988	20700	22263	51874	368825
	98	.	189303	13924	.	33719	236946
GOM	92	.	606472	697129	671351	483310	2458262
	93	1900	529403	591496	739072	527578	2389449
	94	6400	434229	590857	580842	498301	2110629
	95	.	515084	533975	625751	475983	2150793
	96	800	574231	883868	949412	634919	3043230
	97	.	754286	681742	993223	514131	2943382
	98	.	614807	647817	646082	599663	2508369
NEC	92	.	124589	341844	920772	561410	1948615
	93	.	48049	277977	1237740	564667	2128433
	94	.	96061	233047	1139055	828410	2296573
	95	.	94217	375139	1384138	934315	2787809
	96	1000	12493	417138	1088264	251649	1770544

Table 7. (Continued)

		QUARTER					ALL
		unk	1	2	3	4	
NAREA	YEAR						
NEC	97	.	8005	204979	1081444	603193	1897621
	98	.	74280	129090	890364	594785	1688519
NED	92	.	.	133715	467449	179012	780176
	93	600	.	88046	478646	220933	788225
	94	.	.	76508	453969	261711	792188
	95	.	2300	20096	541804	161155	725355
	96	400	.	.	399644	185363	585407
	97	.	.	130843	519467	12109	662419
	98	.	.	41700	347572	100407	489679
OFS	92	.	231050	50434	2225	55251	338960
	93	800	306229	39345	2050	73815	422239
	94	.	224136	98991	4850	171151	499128
	95	.	563096	366542	23494	21904	975036
	96	.	466058	341212	122670	159436	1089376
	97	950	433815	203352	31005	145911	815033
	98	.	303876	159561	2902	55814	522153
SEC	92	.	246276	342757	246171	174607	1009811
	93	2050	220554	432553	262565	180029	1097751
	94	1300	279282	477138	239721	185505	1182946

Table 7. (Continued)

		QUARTER					ALL
		unk	1	2	3	4	
NAREA	YEAR						
SEC	95	.	253514	528068	189866	152671	1124119
	96	.	363123	707620	328714	395187	1794644
	97	.	358342	428253	319084	186106	1291785
	98	.	290016	460390	168196	198386	1116988
UNK	92	.	106729	135560	93776	78752	414817
	93	900	83168	69783	138040	53092	344983
	94	75	9680	33900	39570	25456	108681
	95	.	34555	49062	17600	24740	125957
	96	700	17657	32169	18345	35977	104848
	97	.	31805	19350	28261	13120	92536
	98	.	25885	13906	16804	10310	66905

Table 8a. Estimated bycatch of marine mammals and marine turtles in the U.S. Atlantic longline fishery, stratified by taxon-year-quarter-NAREA (grouped fishing areas). The table is sorted in the order of year, quarter, NAREA. Estimated total bycatch (discard) is the sum of the estimated number of animals dead (dead) and animals alive (alive) upon return to the sea as reported by observers. Estimated coefficients of variation for the catch estimates (cv_c, cv_d, cv_a for total, dead, and alive catches, respectively), and upper and lower 95% lognormal confidence bounds (u_disc, l_disc for total catch; u_dead, l_dead for dead animals; and u_live, l_live for living animals) are also given. Where observer effort is less than 5 sets for a taxon-NAREA-year-quarter stratum, a pooled bycatch rate is estimated by pooling observations across quarters or across quarters and years to achieve the minimum of 5 observed sets (**qyn5**). No listing for a taxon-year-NAREA stratum implies an estimate of 0.

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
BEAKED WHALE	CAR	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN RISSOS	GOM	92	1	44	1	225	9	0	0	0	0	44	1	225	9
COMMON DOLPHIN	NEC	92	1	10	1	51	2	0	0	0	0	10	1	51	2
DOLPHIN	NEC	92	1	7	1	36	1	0	0	0	0	7	1	36	1
DOLPHIN RISSOS	NEC	92	1	31	0.7	107	9	0	0	0	0	16	1	82	3
PILOT WHALE	NEC	92	1	161	0.56	446	58	21	1	107	4	142	0.54	381	53
PILOT WHALE SHORTFIN	NEC	92	1	14	1	72	3	0	0	0	0	14	1	72	3
MARINE MAMMAL	SEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
PILOT WHALE	SEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			1 Total	**272**		**962**	**82**	**21**		**107**	**4**	**238**		**872**	**71**
DOLPHIN	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
			2 Total	**19**		**97**	**4**	**0**		**0**	**0**	**19**		**97**	**4**
PILOT WHALE	NEC	92	3	307	0.73	1111	85	102	1	522	20	205	0.69	699	60
			3 Total	**307**		**1111**	**85**	**102**		**522**	**20**	**205**		**699**	**60**
DOLPHIN RISSOS	GOM	92	4	15	1	77	3	0	0	0	0	15	1	77	3
COMMON DOLPHIN	NEC	92	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
DOLPHIN RISSOS	NEC	92	4	40	0.7	138	12	0	0	0	0	21	1	107	4
PILOT WHALE	NEC	92	4	131	0.38	270	64	0	0	0	0	131	0.38	270	64
PILOT WHALE SHORTFIN	NEC	92	4	18	1	92	4	0	0	0	0	18	1	92	4
			4 Total	**217**		**643**	**86**	**0**		**0**	**0**	**198**		**612**	**78**
		92 Total		**815**		**2813**	**257**	**123**		**629**	**24**	**660**		**2280**	**213**
DOLPHIN RISSOS	GOM	93	1	44	1	225	9	44	1	225	9	0	0	0	0
DOLPHIN BOTTLENOSE	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN PANTROPIC SPOTTED	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
PILOT WHALE	NEC	93	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
			1 Total	**51**		**260**	**10**	**44**		**225**	**9**	**7**		**35**	**1**
PILOT WHALE	NEC	93	2	48	0.5	122	19	0	0	0	0	48	0.5	122	19
PILOT WHALE	SEC	93	2	22	1	112	4	0	0	0	0	22	1	112	4
			2 Total	**70**		**234**	**23**	**0**		**0**	**0**	**70**		**234**	**23**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	NEC	93	3	36	0.73	129	10	0	0	0	0	36	0.73	129	10
PILOT WHALE	NEC	93	3	14	1	72	3	0	0	0	0	14	1	72	3
DOLPHIN BOTTLENOSE	NED	93	3	20	1	102	4	0	0	0	0	20	1	102	4
			3 Total	**70**		**303**	**17**	**0**		**0**	**0**	**70**		**303**	**17**
PILOT WHALE	NEC	93	4	103	0.38	213	50	0	0	0	0	103	0.38	213	50
			4 Total	**103**		**213**	**50**	**0**		**0**	**0**	**103**		**213**	**50**
		93 Total		**294**		**1010**	**100**	**44**		**225**	**9**	**250**		**785**	**91**
PILOT WHALE	NEC	94	1	5	1.01	26	1	0	0	0	0	5	1.01	26	1
			1 Total	**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
BEAKED WHALE	CAR	94	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN PANTROPIC SPOTTED	GOM	94	2	26	1	133	5	0	0	0	0	26	1	133	5
			2 Total	**27**		**138**	**5**	**0**		**0**	**0**	**27**		**138**	**5**
DOLPHIN ATLANTIC SPOTTED	GOM	94	3	15	1	77	3	0	0	0	0	15	1	77	3
DOLPHIN RISSOS	NEC	94	3	67	0.49	167	27	15	1	77	3	52	0.57	148	18
PILOT WHALE	NEC	94	3	202	0.43	450	91	0	0	0	0	202	0.43	450	91
			3 Total	**284**		**694**	**121**	**15**		**77**	**3**	**269**		**675**	**112**
BEAKED WHALE	CAR	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NEC	94	4	49	0.57	139	17	0	0	0	0	49	0.57	139	17
PILOT WHALE	NEC	94	4	17	1	87	3	0	0	0	0	17	1	87	3
			4 Total	**67**		**231**	**20**	**0**		**0**	**0**	**67**		**231**	**20**
		94 Total		**383**		**1089**	**147**	**15**		**77**	**3**	**368**		**1070**	**138**
MARINE MAMMAL	NEC	95	3	24	1	123	5	0	0	0	0	24	1	123	5
DOLPHIN RISSOS	NEC	95	3	87	0.51	223	34	0	0	0	0	87	0.51	223	34
PILOT WHALE	NEC	95	3	177	0.35	343	91	0	0	0	0	177	0.35	343	91
PILOT WHALE SHORTFIN	NEC	95	3	31	1	159	6	0	0	0	0	31	1	159	6
DOLPHIN RISSOS	NED	95	3	18	1	92	4	0	0	0	0	18	1	92	4
			3 Total	**337**		**940**	**140**	**0**		**0**	**0**	**337**		**940**	**140**
PILOT WHALE	NEC	95	4	75	0.6	221	25	0	0	0	0	75	0.6	221	25
PILOT WHALE	SEC	95	4	36	1	184	7	0	0	0	0	36	1	184	7
			4 Total	**111**		**405**	**32**	**0**		**0**	**0**	**111**		**405**	**32**
		95 Total		**448**		**1345**	**172**	**0**		**0**	**0**	**448**		**1345**	**172**
BEAKED WHALE	CAR	96	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
PILOT WHALE	NEC	96	1	1	0.81	4	0	0	0	0	0	1	0.81	4	0
			1 Total	**4**		**19**	**1**	**0**		**0**	**0**	**4**		**19**	**1**
BEAKED WHALE	CAR	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
COMMON DOLPHIN	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN BOTTLENOSE	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN PANTROPIC SPOTTED	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NEC	96	2	12	0.68	40	4	0	0	0	0	11	0.72	39	3
PILOT WHALE	NEC	96	2	35	0.72	125	10	2	0.98	10	0	33	0.72	117	9
PILOT WHALE SHORTFIN	NEC	96	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			2 Total	**54**		**200**	**14**	**2**		**10**	**0**	**51**		**191**	**12**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	GOM	96	3	24	1	123	5	24	1	123	5	0	0	0	0
DOLPHIN RISSOS	NEC	96	3	161	0.72	570	45	0	0	0	0	161	0.72	570	45
MARINE MAMMAL	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN BOTTLENOSE	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN RISSOS	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			3 Total	**190**		**718**	**50**	**24**		**123**	**5**	**166**		**595**	**45**
BEAKED WHALE	CAR	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN BOTTLENOSE	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NEC	96	4	7	0.67	23	2	0	0	0	0	7	0.72	25	2
PILOT WHALE	NEC	96	4	21	0.72	75	6	1	0.98	5	0	20	0.72	71	6
PILOT WHALE SHORTFIN	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN BOTTLENOSE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	SEC	96	4	20	1	102	4	0	0	0	0	20	1	102	4
			4 Total	**54**		**230**	**12**	**1**		**5**	**0**	**53**		**228**	**12**
		96 Total		**302**		**1167**	**77**	**27**		**138**	**5**	**274**		**1033**	**70**
PILOT WHALE	NEC	97	1	1	0.81	4	0	0	0	0	0	1	0.81	4	0
DOLPHIN SHORT-BEAKED SPINNER	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
			1 Total	**14**		**70**	**3**	**0**		**0**	**0**	**14**		**70**	**3**
DOLPHIN BOTTLENOSE	NED	97	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NED	97	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
			2 Total	**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
PILOT WHALE	NEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
			3 Total	**30**		**153**	**6**	**0**		**0**	**0**	**30**		**153**	**6**
		97 Total		**46**		**233**	**9**	**0**		**0**	**0**	**46**		**233**	**9**
BEAKED WHALE	CAR	98	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	GOM	98	1	25	1	128	5	0	0	0	0	25	1	128	5
DOLPHIN BOTTLENOSE	NEC	98	1	4	0.98	20	1	0	0	0	0	4	0.98	20	1
			1 Total	**31**		**158**	**6**	**0**		**0**	**0**	**31**		**158**	**6**
DOLPHIN RISSOS	NEC	98	3	96	0.7	329	28	0	0	0	0	96	0.7	329	28
PILOT WHALE	NEC	98	3	48	1	245	9	0	0	0	0	48	1	245	9
MARINE MAMMAL	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN BOTTLENOSE	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN RISSOS	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
PILOT WHALE	SEC	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
			3 Total	**150**		**604**	**37**	**0**		**0**	**0**	**150**		**604**	**37**
BEAKED WHALE	CAR	98	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
			4 Total	**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
		98 Total		**186**		**788**	**44**	**0**		**0**	**0**	**186**		**788**	**44**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	CAR	92	1	24	0.94	114	5	4	0.98	20	1	20	0.92	93	4
LOGGERHEAD	CAR	92	1	37	0.74	136	10	0	0	0	0	37	0.74	136	10
TURTLE	NEC	92	1	7	1	36	1	0	0	0	0	7	1	36	1
GREEN	NEC	92	1	14	0.68	47	4	0	0	0	0	7	1	36	1
HAWKSBILL	NEC	92	1	11	1	56	2	0	0	0	0	11	1	56	2
LEATHERBACK	NEC	92	1	223	0.57	634	78	0	0	0	0	223	0.57	634	78
LOGGERHEAD	NEC	92	1	16	1	82	3	0	0	0	0	16	1	82	3
TURTLE	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	92	1	11	0.75	41	3	0	0	0	0	11	0.75	41	3
LOGGERHEAD	OFS	92	1	15	0.69	51	4	0	0	0	0	15	0.69	51	4
TURTLE	SEC	92	1	3	0.68	10	1	0	0	0	0	3	0.68	10	1
GREEN	SEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	SEC	92	1	16	0.84	67	4	0	0	0	0	16	0.84	67	4
LOGGERHEAD	SEC	92	1	13	0.89	58	3	0	0	0	0	13	0.88	57	3
			1 Total	**393**		**1347**	**118**	**4**		**20**	**1**	**382**		**1314**	**114**
LEATHERBACK	CAR	92	2	4	0.94	19	1	1	0.98	5	0	4	0.94	19	1
LOGGERHEAD	CAR	92	2	7	0.75	26	2	0	0	0	0	7	0.75	26	2
TURTLE	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
GREEN	NEC	92	2	38	0.68	128	11	0	0	0	0	19	1	97	4
LEATHERBACK	NEC	92	2	68	0.69	232	20	0	0	0	0	68	0.69	232	20
LOGGERHEAD	NEC	92	2	21	1	107	4	0	0	0	0	21	1	107	4
LEATHERBACK	NED	92	2	99	0.4	210	47	0	0	0	0	99	0.4	210	47
LOGGERHEAD	NED	92	2	28	1	143	5	0	0	0	0	28	1	143	5
LEATHERBACK	OFS	92	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	OFS	92	2	3	0.68	10	1	0	0	0	0	3	0.68	10	1
			2 Total	**289**		**979**	**96**	**1**		**5**	**0**	**270**		**948**	**89**
LEATHERBACK	NEC	92	3	148	0.74	544	40	0	0	0	0	148	0.74	544	40
LEATHERBACK	NED	92	3	44	0.69	150	13	0	0	0	0	44	0.69	150	13
LOGGERHEAD	NED	92	3	27	1	138	5	0	0	0	0	27	1	138	5
LEATHERBACK	SEC	92	3	64	0.69	219	19	0	0	0	0	64	0.69	219	19
			3 Total	**283**		**1051**	**77**	**0**		**0**	**0**	**283**		**1051**	**77**
LEATHERBACK	CAR	92	4	17	1	87	3	17	1	87	3	0	0	0	0
LOGGERHEAD	CAR	92	4	33	0.67	109	10	0	0	0	0	33	0.67	109	10
HAWKSBILL	NEC	92	4	15	1	77	3	0	0	0	0	15	1	77	3
LEATHERBACK	NEC	92	4	219	0.28	377	127	0	0	0	0	219	0.28	377	127
LOGGERHEAD	NEC	92	4	11	1	56	2	0	0	0	0	11	1	56	2
GREEN	NED	92	4	37	0.52	96	14	5	1.01	26	1	32	0.53	85	12
LEATHERBACK	OFS	92	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	OFS	92	4	4	0.71	14	1	0	0	0	0	4	0.71	14	1
			4 Total	**338**		**823**	**161**	**22**		**113**	**4**	**316**		**725**	**156**
		92 Total		**1303**		**4200**	**452**	**27**		**138**	**5**	**1251**		**4038**	**436**
LOGGERHEAD	NED	93	0	1	0.61	3	0	0	0	0	0	1	0.61	3	0
			0 Total	**1**		**3**	**0**	**0**		**0**	**0**	**1**		**3**	**0**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LOGGERHEAD	CAR	93	1	17	1	87	3	0	0	0	0	17	1	87	3
GREEN	GOM	93	1	17	1	87	3	0	0	0	0	17	1	87	3
LEATHERBACK	GOM	93	1	104	0.46	247	44	0	0	0	0	104	0.46	247	44
LOGGERHEAD	OFS	93	1	9	1	46	2	0	0	0	0	9	1	46	2
LOGGERHEAD	SEC	93	1	8	1	41	2	8	1	41	2	0	0	0	0
			1 Total	**155**		**508**	**54**	**8**		**41**	**2**	**147**		**467**	**52**
TURTLE	GOM	93	2	9	1	46	2	0	0	0	0	9	1	46	2
LEATHERBACK	GOM	93	2	30	0.49	75	12	0	0	0	0	30	0.49	75	12
LEATHERBACK	NEC	93	2	122	0.3	215	69	0	0	0	0	122	0.3	215	69
LOGGERHEAD	NEC	93	2	32	0.58	92	11	0	0	0	0	32	0.58	92	11
LEATHERBACK	NED	93	2	119	0.54	323	44	0	0	0	0	119	0.54	323	44
LEATHERBACK	OFS	93	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	OFS	93	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LEATHERBACK	SEC	93	2	12	1	61	2	0	0	0	0	12	1	61	2
LOGGERHEAD	SEC	93	2	17	1	87	3	0	0	0	0	17	1	87	3
			2 Total	**345**		**913**	**145**	**0**		**0**	**0**	**345**		**913**	**145**
LEATHERBACK	CAR	93	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LOGGERHEAD	CAR	93	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LEATHERBACK	GOM	93	3	41	1	210	8	0	0	0	0	41	1	210	8
TURTLE	NEC	93	3	18	1	92	4	0	0	0	0	0	0	0	0
LEATHERBACK	NEC	93	3	169	0.42	373	77	0	0	0	0	169	0.42	373	77
LOGGERHEAD	NEC	93	3	31	0.71	108	9	0	0	0	0	31	0.71	108	9
GREEN	NED	93	3	12	1	61	2	0	0	0	0	12	1	61	2
LEATHERBACK	NED	93	3	222	0.35	434	113	0	0	0	0	222	0.35	434	113
LOGGERHEAD	NED	93	3	155	0.37	311	77	0	0	0	0	155	0.37	311	77
LEATHERBACK	SEC	93	3	20	1	102	4	0	0	0	0	20	1	102	4
LOGGERHEAD	SEC	93	3	16	1	82	3	0	0	0	0	16	1	82	3
			3 Total	**686**		**1782**	**297**	**0**		**0**	**0**	**668**		**1690**	**293**
LEATHERBACK	CAR	93	4	20	1	102	4	0	0	0	0	20	1	102	4
LOGGERHEAD	CAR	93	4	40	0.67	131	12	0	0	0	0	40	0.67	131	12
LOGGERHEAD	GOM	93	4	26	1	133	5	0	0	0	0	26	1	133	5
LEATHERBACK	NEC	93	4	44	0.43	99	20	0	0	0	0	44	0.43	99	20
LEATHERBACK	NED	93	4	42	0.47	101	17	0	0	0	0	42	0.47	101	17
LOGGERHEAD	NED	93	4	10	1	51	2	0	0	0	0	10	1	51	2
LEATHERBACK	OFS	93	4	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LOGGERHEAD	OFS	93	4	5	0.69	17	1	0	0	0	0	5	0.69	17	1
LEATHERBACK	SEC	93	4	41	0.69	140	12	0	0	0	0	41	0.69	140	12
LOGGERHEAD	SEC	93	4	22	1	112	4	0	0	0	0	22	1	112	4
			4 Total	**253**		**897**	**78**	**0**		**0**	**0**	**253**		**897**	**78**
		93 Total		**1440**		**4103**	**574**	**8**		**41**	**2**	**1414**		**3970**	**568**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
LOGGERHEAD	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE	GOM	94	1	19	1	97	4	0	0	0	0	19	1	97	4
LEATHERBACK	GOM	94	1	132	0.38	272	64	0	0	0	0	132	0.38	272	64
LEATHERBACK	OFS	94	1	21	1	107	4	0	0	0	0	21	1	107	4
			1 Total	**216**		**700**	**80**	**0**		**0**	**0**	**216**		**700**	**80**
LEATHERBACK	CAR	94	2	11	0.93	52	2	2	0.98	10	0	9	0.92	42	2
LOGGERHEAD	CAR	94	2	17	0.75	63	5	0	0	0	0	17	0.75	63	5
LEATHERBACK	GOM	94	2	104	0.48	254	43	0	0	0	0	104	0.48	254	43
GREEN	NEC	94	2	5	1.01	26	1	0	0	0	0	5	1.01	26	1
LEATHERBACK	NEC	94	2	16	0.7	55	5	0	0	0	0	16	0.7	55	5
LOGGERHEAD	NEC	94	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
GREEN	NED	94	2	2	0.71	7	1	0	0	0	0	2	0.81	8	1
LEATHERBACK	NED	94	2	32	0.56	89	11	0	0	0	0	32	0.56	89	11
LOGGERHEAD	NED	94	2	66	0.53	176	25	0	0	0	0	65	0.53	173	24
LEATHERBACK	OFS	94	2	4	0.76	15	1	0	0	0	0	4	0.76	15	1
LOGGERHEAD	OFS	94	2	6	0.68	20	2	0	0	0	0	6	0.68	20	2
			2 Total	**279**		**815**	**100**	**2**		**10**	**0**	**276**		**803**	**99**
LEATHERBACK	CAR	94	3	3	0.92	14	1	0	0	0	0	3	0.92	14	1
LOGGERHEAD	CAR	94	3	5	0.73	18	1	0	0	0	0	5	0.73	18	1
LEATHERBACK	GOM	94	3	16	1	82	3	0	0	0	0	16	1	82	3
GREEN	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
KEMPS RIDLEY	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
LEATHERBACK	NEC	94	3	79	0.5	198	32	0	0	0	0	79	0.5	198	32
TURTLE	NED	94	3	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LEATHERBACK	NED	94	3	175	0.31	315	97	0	0	0	0	175	0.31	315	97
LOGGERHEAD	NED	94	3	1015	0.17	1403	734	13	0.99	66	3	989	0.17	1371	714
LEATHERBACK	SEC	94	3	39	0.7	134	11	0	0	0	0	39	0.7	134	11
			3 Total	**1389**		**2454**	**890**	**13**		**66**	**3**	**1363**		**2422**	**870**
LEATHERBACK	CAR	94	4	11	0.93	52	2	2	0.98	10	0	9	0.92	42	2
LOGGERHEAD	CAR	94	4	17	0.75	63	5	0	0	0	0	17	0.75	63	5
LEATHERBACK	GOM	94	4	14	1	72	3	0	0	0	0	14	1	72	3
LEATHERBACK	NEC	94	4	67	0.62	206	22	0	0	0	0	67	0.62	206	22
LOGGERHEAD	NEC	94	4	30	0.7	104	9	14	1	72	3	16	1	82	3
LEATHERBACK	NED	94	4	10	1	51	2	0	0	0	0	10	1	51	2
LOGGERHEAD	NED	94	4	95	0.49	234	39	0	0	0	0	95	0.49	234	39
TURTLE	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	94	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	OFS	94	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3
			4 Total	**263**		**852**	**87**	**16**		**82**	**3**	**247**		**820**	**81**
		94 Total		**2147**		**4821**	**1157**	**31**		**158**	**6**	**2102**		**4745**	**1130**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	NEC	95	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LEATHERBACK	NED	95	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	NED	95	1	2	0.49	5	1	0	0	0	0	2	0.49	5	1
LEATHERBACK	OFS	95	1	45	0.57	128	16	0	0	0	0	45	0.57	128	16
LOGGERHEAD	OFS	95	1	42	0.57	119	15	0	0	0	0	42	0.57	119	15
TURTLE	SEC	95	1	66	0.69	225	19	0	0	0	0	66	0.69	225	19
LOGGERHEAD	SEC	95	1	31	1	159	6	0	0	0	0	31	1	159	6
			1 Total	**189**		**649**	**57**	**0**		**0**	**0**	**189**		**649**	**57**
LEATHERBACK	GOM	95	2	40	0.49	100	16	0	0	0	0	40	0.49	100	16
LEATHERBACK	NEC	95	2	36	1	184	7	0	0	0	0	36	1	184	7
LOGGERHEAD	NEC	95	2	170	0.42	374	77	0	0	0	0	170	0.42	374	77
GREEN	NED	95	2	1	0.81	4	0	0	0	0	0	0	0	0	0
LEATHERBACK	NED	95	2	8	0.55	22	3	0	0	0	0	8	0.55	22	3
LOGGERHEAD	NED	95	2	17	0.53	45	6	0	0	0	0	17	0.53	45	6
LEATHERBACK	OFS	95	2	67	0.73	241	19	0	0	0	0	67	0.73	241	19
TURTLE	SEC	95	2	69	0.7	239	20	0	0	0	0	69	0.7	239	20
LEATHERBACK	SEC	95	2	45	0.74	165	12	0	0	0	0	45	0.74	165	12
LOGGERHEAD	SEC	95	2	86	0.64	272	27	0	0	0	0	86	0.64	272	27
			2 Total	**539**		**1646**	**187**	**0**		**0**	**0**	**538**		**1642**	**187**
LEATHERBACK	NEC	95	3	34	0.7	118	10	0	0	0	0	34	0.7	118	10
LOGGERHEAD	NEC	95	3	204	0.36	406	102	0	0	0	0	204	0.36	406	102
LEATHERBACK	NED	95	3	564	0.17	788	404	0	0	0	0	564	0.17	788	404
LOGGERHEAD	NED	95	3	1373	0.2	2028	930	0	0	0	0	1373	0.2	2028	930
LEATHERBACK	OFS	95	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LOGGERHEAD	OFS	95	3	1	0.61	3	0	0	0	0	0	1	0.61	3	0
GREEN	SEC	95	3	34	1	174	7	0	0	0	0	34	1	174	7
			3 Total	**2211**		**3521**	**1453**	**0**		**0**	**0**	**2211**		**3521**	**1453**
LEATHERBACK	CAR	95	4	2	0.9	9	0	0	0	0	0	2	0.9	9	0
LOGGERHEAD	CAR	95	4	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LEATHERBACK	GOM	95	4	11	1	56	2	0	0	0	0	11	1	56	2
LOGGERHEAD	NEC	95	4	108	0.43	242	48	0	0	0	0	108	0.43	242	48
LEATHERBACK	NED	95	4	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	NED	95	4	195	0.44	446	85	0	0	0	0	195	0.44	446	85
LEATHERBACK	OFS	95	4	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LOGGERHEAD	OFS	95	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
			4 Total	**338**		**858**	**139**	**0**		**0**	**0**	**338**		**858**	**139**
		95 Total		**3277**		**6674**	**1836**	**0**		**0**	**0**	**3276**		**6670**	**1836**
LEATHERBACK	CAR	96	1	31	0.94	147	7	5	1.01	26	1	26	0.92	121	6
LOGGERHEAD	CAR	96	1	47	0.75	173	13	0	0	0	0	47	0.75	173	13
LEATHERBACK	NEC	96	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	NEC	96	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	OFS	96	1	66	0.45	153	29	0	0	0	0	66	0.45	153	29
LOGGERHEAD	SEC	96	1	33	1	169	6	0	0	0	0	33	1	169	6
			1 Total	**179**		**648**	**55**	**5**		**26**	**1**	**174**		**622**	**54**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	CAR	96	2	9	0.94	43	2	1	0.98	5	0	8	0.92	37	2
LOGGERHEAD	CAR	96	2	15	0.74	55	4	0	0	0	0	15	0.74	55	4
TURTLE	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
GREEN	NEC	96	2	2	0.9	9	0	0	0	0	0	1	0.98	5	0
HAWKSBILL	NEC	96	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
KEMPS RIDLEY	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	NEC	96	2	40	0.64	127	13	0	0	0	0	40	0.64	127	13
LOGGERHEAD	NEC	96	2	31	0.62	95	10	1	0.98	5	0	30	0.64	95	9
TURTLE	OFS	96	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
KEMPS RIDLEY	OFS	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	96	2	15	0.76	56	4	0	0	0	0	15	0.76	56	4
LOGGERHEAD	OFS	96	2	21	0.69	71	6	0	0	0	0	21	0.69	71	6
LEATHERBACK	SEC	96	2	36	1	184	7	0	0	0	0	36	1	184	7
LOGGERHEAD	SEC	96	2	52	0.6	153	18	0	0	0	0	52	0.6	153	18
			2 Total	**228**		**828**	**64**	**2**		**10**	**0**	**225**		**818**	**63**
LEATHERBACK	CAR	96	3	4	0.94	19	1	1	0.98	5	0	3	0.92	14	1
LOGGERHEAD	CAR	96	3	6	0.74	22	2	0	0	0	0	6	0.74	22	2
LEATHERBACK	GOM	96	3	97	0.62	297	32	0	0	0	0	97	0.62	297	32
LEATHERBACK	NEC	96	3	165	0.55	452	60	0	0	0	0	165	0.55	452	60
LOGGERHEAD	NEC	96	3	119	0.69	404	35	0	0	0	0	119	0.69	404	35
TURTLE	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
GREEN	NED	96	3	11	0.75	41	3	1	0.98	5	0	10	0.77	38	3
LEATHERBACK	NED	96	3	163	0.56	455	58	0	0	0	0	163	0.56	455	58
LOGGERHEAD	NED	96	3	338	0.53	901	127	1	0.98	5	0	336	0.53	896	126
			3 Total	**904**		**2596**	**318**	**3**		**15**	**0**	**900**		**2583**	**317**
LEATHERBACK	CAR	96	4	11	0.93	52	2	2	0.98	10	0	9	0.92	42	2
LOGGERHEAD	CAR	96	4	17	0.75	63	5	0	0	0	0	17	0.75	63	5
LEATHERBACK	GOM	96	4	28	1	143	5	0	0	0	0	28	1	143	5
TURTLE	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
GREEN	NEC	96	4	1	0.81	4	0	0	0	0	0	1	0.98	5	0
HAWKSBILL	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	NEC	96	4	24	0.64	76	8	0	0	0	0	24	0.64	76	8
LOGGERHEAD	NEC	96	4	19	0.62	58	6	1	0.98	5	0	18	0.64	57	6
TURTLE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
GREEN	NED	96	4	5	0.77	19	1	1	0.98	5	0	5	0.77	19	1
LEATHERBACK	NED	96	4	77	0.56	215	28	0	0	0	0	77	0.56	215	28
LOGGERHEAD	NED	96	4	159	0.53	424	60	1	0.98	5	0	158	0.53	421	59
TURTLE	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	96	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	OFS	96	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	SEC	96	4	18	1	92	4	0	0	0	0	18	1	92	4
LOGGERHEAD	SEC	96	4	23	1	118	4	0	0	0	0	23	1	118	4
			4 Total	**404**		**1349**	**128**	**5**		**25**	**0**	**400**		**1336**	**127**
		96 Total		**1715**		**5421**	**565**	**15**		**76**	**1**	**1699**		**5359**	**561**
LEATHERBACK	CAR	97	1	77	1	394	15	0	0	0	0	77	1	394	15
TURTLE	GOM	97	1	21	1	107	4	0	0	0	0	21	1	107	4
LEATHERBACK	GOM	97	1	79	1	404	15	0	0	0	0	79	1	404	15
LOGGERHEAD	GOM	97	1	17	1	87	3	0	0	0	0	17	1	87	3
LEATHERBACK	NEC	97	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	NEC	97	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE	OFS	97	1	19	1	97	4	0	0	0	0	19	1	97	4
KEMPS RIDLEY	OFS	97	1	17	1	87	3	0	0	0	0	17	1	87	3
LEATHERBACK	OFS	97	1	36	0.69	123	10	0	0	0	0	36	0.69	123	10
LOGGERHEAD	OFS	97	1	56	0.74	204	15	0	0	0	0	56	0.74	204	15
HAWKSBILL	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LOGGERHEAD	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
			1 Total	**350**		**1641**	**75**	**0**		**0**	**0**	**350**		**1641**	**75**
LEATHERBACK	CAR	97	2	2	0.9	9	0	0	0	0	0	2	0.9	9	0
LOGGERHEAD	CAR	97	2	3	0.74	11	1	0	0	0	0	3	0.74	11	1
GREEN	NED	97	2	4	0.76	15	1	0	0	0	0	3	0.74	11	1
LEATHERBACK	NED	97	2	54	0.56	151	19	0	0	0	0	54	0.56	151	19
LOGGERHEAD	NED	97	2	111	0.53	296	42	0	0	0	0	111	0.53	296	42
LOGGERHEAD	SEC	97	2	24	1	123	5	0	0	0	0	24	1	123	5
			2 Total	**198**		**605**	**68**	**0**		**0**	**0**	**197**		**601**	**68**
LEATHERBACK	CAR	97	3	2	0.9	9	0	0	0	0	0	2	0.9	9	0
LOGGERHEAD	CAR	97	3	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LOGGERHEAD	NEC	97	3	93	0.43	210	41	0	0	0	0	93	0.43	210	41
LEATHERBACK	NED	97	3	15	1	77	3	0	0	0	0	15	1	77	3
LOGGERHEAD	NED	97	3	61	0.63	188	20	0	0	0	0	61	0.63	188	20
LEATHERBACK	OFS	97	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LOGGERHEAD	OFS	97	3	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LEATHERBACK	SEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
			3 Total	**207**		**659**	**72**	**0**		**0**	**0**	**207**		**659**	**72**
LEATHERBACK	CAR	97	4	5	0.95	24	1	1	0.98	5	0	4	0.94	19	1
LOGGERHEAD	CAR	97	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	NEC	97	4	51	0.69	174	15	0	0	0	0	51	0.69	174	15
LEATHERBACK	NED	97	4	5	0.56	14	2	0	0	0	0	5	0.56	14	2
LOGGERHEAD	NED	97	4	10	0.54	27	4	0	0	0	0	10	0.54	27	4
TURTLE	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	97	4	6	0.74	22	2	0	0	0	0	6	0.74	22	2
LOGGERHEAD	OFS	97	4	9	0.7	31	3	0	0	0	0	9	0.7	31	3
			4 Total	**95**		**328**	**29**	**1**		**5**	**0**	**94**		**323**	**29**
		97 Total		**850**		**3233**	**244**	**1**		**5**	**0**	**848**		**3224**	**244**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	CAR	98	1	18	0.93	85	4	3	0.98	15	1	15	0.92	70	3
LOGGERHEAD	CAR	98	1	27	0.75	100	7	0	0	0	0	27	0.75	100	7
HAWKSBILL	NEC	98	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LEATHERBACK	SEC	98	1	72	0.72	256	20	0	0	0	0	72	0.72	256	20
LOGGERHEAD	SEC	98	1	35	1	179	7	0	0	0	0	35	1	179	7
			1 Total	**165**		**686**	**41**	**3**		**15**	**1**	**162**		**671**	**40**
LEATHERBACK	CAR	98	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LOGGERHEAD	CAR	98	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
GREEN	NED	98	2	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LEATHERBACK	NED	98	2	17	0.56	47	6	0	0	0	0	17	0.56	47	6
LOGGERHEAD	NED	98	2	35	0.53	93	13	0	0	0	0	35	0.53	93	13
TURTLE	OFS	98	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	98	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	98	2	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	OFS	98	2	10	0.69	34	3	0	0	0	0	10	0.69	34	3
			2 Total	**75**		**226**	**25**	**0**		**0**	**0**	**75**		**226**	**25**
LEATHERBACK	NEC	98	3	84	1	430	16	0	0	0	0	84	1	430	16
LOGGERHEAD	NEC	98	3	298	0.47	711	125	0	0	0	0	298	0.47	711	125
TURTLE	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
GREEN	NED	98	3	10	0.75	37	3	1	0.98	5	0	8	0.76	30	2
LEATHERBACK	NED	98	3	142	0.56	396	51	0	0	0	0	142	0.56	396	51
LOGGERHEAD	NED	98	3	295	0.53	787	111	1	0.98	5	0	293	0.53	781	110
TURTLE	SEC	98	3	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LEATHERBACK	SEC	98	3	10	0.84	42	2	0	0	0	0	10	0.84	42	2
LOGGERHEAD	SEC	98	3	9	0.89	40	2	0	0	0	0	8	0.87	35	2
			3 Total	**851**		**2455**	**311**	**2**		**10**	**0**	**846**		**2437**	**309**
LOGGERHEAD	CAR	98	4	11	0.66	36	3	0	0	0	0	11	0.66	36	3
LOGGERHEAD	NEC	98	4	150	0.74	549	41	0	0	0	0	150	0.74	549	41
GREEN	NED	98	4	3	0.74	11	1	0	0	0	0	2	0.81	8	1
LEATHERBACK	NED	98	4	41	0.56	114	15	0	0	0	0	41	0.56	114	15
LOGGERHEAD	NED	98	4	85	0.53	227	32	0	0	0	0	84	0.53	224	31
LEATHERBACK	OFS	98	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	OFS	98	4	3	0.68	10	1	0	0	0	0	3	0.68	10	1
LOGGERHEAD	SEC	98	4	27	0.7	93	8	0	0	0	0	27	0.7	93	8
			4 Total	**322**		**1047**	**102**	**0**		**0**	**0**	**320**		**1041**	**101**
		98 Total		**1413**		**4414**	**479**	**5**		**25**	**1**	**1403**		**4375**	**475**

Table 8b. Estimated bycatch of marine mammals and marine turtles in the U.S. Atlantic longline fishery, stratified by taxon-year-quarter-NAREA (grouped fishing areas). The table is sorted in the order of year, quarter, NAREA. Estimated total bycatch (discard) is the sum of the estimated number of animals dead (dead) and animals alive (alive) upon return to the sea as reported by observers. Estimated coefficients of variation for the catch estimates (cv_c, cv_d, cv_a for total, dead, and alive catches, respectively), and upper and lower 95% lognormal confidence bounds (u_disc, l_disc for total catch; u_dead, l_dead for dead animals; and u_live, l_live for living animals) are also given. Where observer effort is less than 5 sets for a species-NAREA-year-quarter stratum, a pooled bycatch rate is estimated by pooling observations across years or across years and quarters to achieve the minimum of 5 observed sets (**yqn5**). No listing for a species-year-NAREA stratum implies an estimate of 0.

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN BOTTLENOSE	GOM	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
DOLPHIN RISSOS	GOM	92	1	8	1	41	2	8	1	41	2	0	0	0	0
DOLPHIN BOTTLENOSE	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
DOLPHIN PANTROPIC SPOTTED	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
PILOT WHALE	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
DOLPHIN SHORT-BEAKED SPINNER+A74	SEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			1 Total	**20**		**101**	**5**	**8**		**41**	**2**	**12**		**60**	**3**
DOLPHIN	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
			2 Total	**19**		**97**	**4**	**0**		**0**	**0**	**19**		**97**	**4**
PILOT WHALE	NEC	92	3	307	0.73	1111	85	102	1	522	20	205	0.69	699	60
			3 Total	**307**		**1111**	**85**	**102**		**522**	**20**	**205**		**699**	**60**
DOLPHIN RISSOS	GOM	92	4	15	1	77	3	0	0	0	0	15	1	77	3
COMMON DOLPHIN	NEC	92	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
DOLPHIN RISSOS	NEC	92	4	40	0.7	138	12	0	0	0	0	21	1	107	4
PILOT WHALE	NEC	92	4	131	0.38	270	64	0	0	0	0	131	0.38	270	64
PILOT WHALE SHORTFIN	NEC	92	4	18	1	92	4	0	0	0	0	18	1	92	4
			4 Total	**217**		**643**	**86**	**0**		**0**	**0**	**198**		**612**	**78**
		92 Total		**563**		**1952**	**180**	**110**		**563**	**22**	**434**		**1468**	**145**
DOLPHIN RISSOS	GOM	93	1	44	1	225	9	44	1	225	9	0	0	0	0
DOLPHIN BOTTLENOSE	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN PANTROPIC SPOTTED	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
PILOT WHALE	NEC	93	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
			1 Total	**51**		**260**	**10**	**44**		**225**	**9**	**7**		**35**	**1**
PILOT WHALE	NEC	93	2	48	0.5	122	19	0	0	0	0	48	0.5	122	19
PILOT WHALE	SEC	93	2	22	1	112	4	0	0	0	0	22	1	112	4
			2 Total	**70**		**234**	**23**	**0**		**0**	**0**	**70**		**234**	**23**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	NEC	93	3	36	0.73	129	10	0	0	0	0	36	0.73	129	10
PILOT WHALE	NEC	93	3	14	1	72	3	0	0	0	0	14	1	72	3
DOLPHIN BOTTLENOSE	NED	93	3	20	1	102	4	0	0	0	0	20	1	102	4
			3 Total	**70**		**303**	**17**	**0**		**0**	**0**	**70**		**303**	**17**
PILOT WHALE	NEC	93	4	103	0.38	213	50	0	0	0	0	103	0.38	213	50
			4 Total	**103**		**213**	**50**	**0**		**0**	**0**	**103**		**213**	**50**
		93 Total		**294**		**1010**	**100**	**44**		**225**	**9**	**250**		**785**	**91**
PILOT WHALE	NEC	94	1	5	1.01	26	1	0	0	0	0	5	1.01	26	1
			1 Total	**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
DOLPHIN PANTROPIC SPOTTED	GOM	94	2	26	1	133	5	0	0	0	0	26	1	133	5
			2 Total	**26**		**133**	**5**	**0**		**0**	**0**	**26**		**133**	**5**
DOLPHIN ATLANTIC SPOTTED	GOM	94	3	15	1	77	3	0	0	0	0	15	1	77	3
DOLPHIN RISSOS	NEC	94	3	67	0.49	167	27	15	1	77	3	52	0.57	148	18
PILOT WHALE	NEC	94	3	202	0.43	450	91	0	0	0	0	202	0.43	450	91
			3 Total	**284**		**694**	**121**	**15**		**77**	**3**	**269**		**675**	**112**
BEAKED WHALE	CAR	94	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
DOLPHIN RISSOS	NEC	94	4	49	0.57	139	17	0	0	0	0	49	0.57	139	17
PILOT WHALE	NEC	94	4	17	1	87	3	0	0	0	0	17	1	87	3
			4 Total	**71**		**252**	**21**	**0**		**0**	**0**	**71**		**252**	**21**
		94 Total		**386**		**1105**	**148**	**15**		**77**	**3**	**371**		**1086**	**139**
MARINE MAMMAL	NEC	95	3	24	1	123	5	0	0	0	0	24	1	123	5
DOLPHIN RISSOS	NEC	95	3	87	0.51	223	34	0	0	0	0	87	0.51	223	34
PILOT WHALE	NEC	95	3	177	0.35	343	91	0	0	0	0	177	0.35	343	91
PILOT WHALE SHORTFIN	NEC	95	3	31	1	159	6	0	0	0	0	31	1	159	6
DOLPHIN RISSOS	NED	95	3	18	1	92	4	0	0	0	0	18	1	92	4
			3 Total	**337**		**940**	**140**	**0**		**0**	**0**	**337**		**940**	**140**
BEAKED WHALE	CAR	95	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
PILOT WHALE	NEC	95	4	75	0.6	221	25	0	0	0	0	75	0.6	221	25
PILOT WHALE	SEC	95	4	36	1	184	7	0	0	0	0	36	1	184	7
			4 Total	**112**		**410**	**32**	**0**		**0**	**0**	**112**		**410**	**32**
		95 Total		**449**		**1350**	**172**	**0**		**0**	**0**	**449**		**1350**	**172**
DOLPHIN	NEC	96	2	3	0.98	15	1	0	0	0	0	3	0.98	15	1
PILOT WHALE	NEC	96	2	19	0.5	48	7	0	0	0	0	19	0.5	48	7
			2 Total	**22**		**63**	**8**	**0**		**0**	**0**	**22**		**63**	**8**
DOLPHIN RISSOS	GOM	96	3	24	1	123	5	24	1	123	5	0	0	0	0
DOLPHIN RISSOS	NEC	96	3	161	0.72	570	45	0	0	0	0	161	0.72	570	45
MARINE MAMMAL	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	NED	96	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
DOLPHIN RISSOS	NED	96	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
			3 Total	**193**		**733**	**52**	**24**		**123**	**5**	**169**		**610**	**47**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
BEAKED WHALE	CAR	96	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
COMMON DOLPHIN	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NEC	96	4	8	0.76	30	2	0	0	0	0	6	0.87	26	1
PILOT WHALE	NEC	96	4	24	0.59	70	8	0	0	0	0	24	0.59	70	8
PILOT WHALE SHORTFIN	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	SEC	96	4	20	1	102	4	0	0	0	0	20	1	102	4
			4 Total	**59**		**238**	**15**	**0**		**0**	**0**	**57**		**234**	**14**
		96 Total		**274**		**1034**	**75**	**24**		**123**	**5**	**248**		**907**	**69**
DOLPHIN SHORT-BEAKED SPINNER	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
			1 Total	**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
PILOT WHALE	NEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
			3 Total	**30**		**153**	**6**	**0**		**0**	**0**	**30**		**153**	**6**
BEAKED WHALE	CAR	97	4	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			4 Total	**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
		97 Total		**45**		**229**	**9**	**0**		**0**	**0**	**45**		**229**	**9**
DOLPHIN BOTTLENOSE	GOM	98	1	25	1	128	5	0	0	0	0	25	1	128	5
DOLPHIN BOTTLENOSE	NEC	98	1	4	0.98	20	1	0	0	0	0	4	0.98	20	1
			1 Total	**29**		**148**	**6**	**0**		**0**	**0**	**29**		**148**	**6**
DOLPHIN RISSOS	NEC	98	3	96	0.7	329	28	0	0	0	0	96	0.7	329	28
PILOT WHALE	NEC	98	3	48	1	245	9	0	0	0	0	48	1	245	9
MARINE MAMMAL	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	NED	98	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
DOLPHIN RISSOS	NED	98	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
			3 Total	**152**		**614**	**39**	**0**		**0**	**0**	**152**		**614**	**39**
BEAKED WHALE	CAR	98	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
			4 Total	**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
		98 Total		**186**		**788**	**46**	**0**		**0**	**0**	**186**		**788**	**46**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	CAR	92	1	21	0.89	94	5	0	0	0	0	21	0.89	94	5
LOGGERHEAD	CAR	92	1	29	0.82	119	7	0	0	0	0	29	0.82	119	7
TURTLE	GOM	92	1	9	1	46	2	0	0	0	0	9	1	46	2
GREEN	GOM	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
LEATHERBACK	GOM	92	1	50	0.62	152	16	0	0	0	0	50	0.62	152	16
LOGGERHEAD	GOM	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
HAWKSBILL	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
LEATHERBACK	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	92	1	9	0.76	34	2	0	0	0	0	9	0.76	34	2
LOGGERHEAD	OFS	92	1	18	0.69	61	5	0	0	0	0	18	0.69	61	5
TURTLE	SEC	92	1	8	0.69	27	2	0	0	0	0	8	0.69	27	2
HAWKSBILL	SEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LEATHERBACK	SEC	92	1	16	0.7	55	5	0	0	0	0	16	0.7	55	5
LOGGERHEA D	SEC	92	1	14	1	72	3	2	0.98	10	0	12	1	61	2
			1 Total	**188**		**730**	**50**	**2**		**10**	**0**	**186**		**719**	**49**
TURTLE	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
GREEN	NEC	92	2	38	0.68	128	11	0	0	0	0	19	1	97	4
LEATHERBACK	NEC	92	2	68	0.69	232	20	0	0	0	0	68	0.69	232	20
LOGGERHEAD	NEC	92	2	21	1	107	4	0	0	0	0	21	1	107	4
LEATHERBACK	NED	92	2	99	0.4	210	47	0	0	0	0	99	0.4	210	47
LOGGERHEAD	NED	92	2	28	1	143	5	0	0	0	0	28	1	143	5
LEATHERBACK	OFS	92	2	6	0.74	22	2	0	0	0	0	6	0.74	22	2
			2 Total	**279**		**939**	**93**	**0**		**0**	**0**	**260**		**908**	**86**
LEATHERBACK	NEC	92	3	148	0.74	544	40	0	0	0	0	148	0.74	544	40
LEATHERBACK	NED	92	3	44	0.69	150	13	0	0	0	0	44	0.69	150	13
LOGGERHEAD	NED	92	3	27	1	138	5	0	0	0	0	27	1	138	5
LEATHERBACK	SEC	92	3	64	0.69	219	19	0	0	0	0	64	0.69	219	19
			3 Total	**283**		**1051**	**77**	**0**		**0**	**0**	**283**		**1051**	**77**
LEATHERBACK	CAR	92	4	17	1	87	3	17	1	87	3	0	0	0	0
LOGGERHEAD	CAR	92	4	33	0.67	109	10	0	0	0	0	33	0.67	109	10
HAWKSBILL	NEC	92	4	15	1	77	3	0	0	0	0	15	1	77	3
LEATHERBACK	NEC	92	4	219	0.28	377	127	0	0	0	0	219	0.28	377	127
LOGGERHEAD	NEC	92	4	11	1	56	2	0	0	0	0	11	1	56	2
GREEN	NED	92	4	37	0.52	96	14	5	1.01	26	1	32	0.53	85	12
LEATHERBACK	OFS	92	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	OFS	92	4	4	0.71	14	1	0	0	0	0	4	0.71	14	1
			4 Total	**338**		**823**	**161**	**22**		**113**	**4**	**316**		**725**	**156**
		92 Total		**1088**		**3543**	**381**	**24**		**123**	**4**	**1045**		**3403**	**368**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LOGGERHEAD	NED	93	0	1	0.61	3	0	0	0	0	0	1	0.61	3	0
			0 Total	**1**		**3**	**0**	**0**		**0**	**0**	**1**		**3**	**0**
LOGGERHEAD	CAR	93	1	17	1	87	3	0	0	0	0	17	1	87	3
GREEN	GOM	93	1	17	1	87	3	0	0	0	0	17	1	87	3
LEATHERBACK	GOM	93	1	104	0.46	247	44	0	0	0	0	104	0.46	247	44
LOGGERHEAD	OFS	93	1	9	1	46	2	0	0	0	0	9	1	46	2
LOGGERHEAD	SEC	93	1	8	1	41	2	8	1	41	2	0	0	0	0
			1 Total	**155**		**508**	**54**	**8**		**41**	**2**	**147**		**467**	**52**
TURTLE	GOM	93	2	9	1	46	2	0	0	0	0	9	1	46	2
LEATHERBACK	GOM	93	2	30	0.49	75	12	0	0	0	0	30	0.49	75	12
LEATHERBACK	NEC	93	2	122	0.3	215	69	0	0	0	0	122	0.3	215	69
LOGGERHEAD	NEC	93	2	32	0.58	92	11	0	0	0	0	32	0.58	92	11
LEATHERBACK	NED	93	2	119	0.54	323	44	0	0	0	0	119	0.54	323	44
LEATHERBACK	OFS	93	2	4	0.71	14	1	0	0	0	0	4	0.71	14	1
LEATHERBACK	SEC	93	2	12	1	61	2	0	0	0	0	12	1	61	2
LOGGERHEAD	SEC	93	2	17	1	87	3	0	0	0	0	17	1	87	3
			2 Total	**345**		**913**	**144**	**0**		**0**	**0**	**345**		**913**	**144**
LEATHERBACK	GOM	93	3	41	1	210	8	0	0	0	0	41	1	210	8
TURTLE	NEC	93	3	18	1	92	4	0	0	0	0	0	0	0	0
LEATHERBACK	NEC	93	3	169	0.42	373	77	0	0	0	0	169	0.42	373	77
LOGGERHEAD	NEC	93	3	31	0.71	108	9	0	0	0	0	31	0.71	108	9
GREEN	NED	93	3	12	1	61	2	0	0	0	0	12	1	61	2
LEATHERBACK	NED	93	3	222	0.35	434	113	0	0	0	0	222	0.35	434	113
LOGGERHEAD	NED	93	3	155	0.37	311	77	0	0	0	0	155	0.37	311	77
LEATHERBACK	SEC	93	3	20	1	102	4	0	0	0	0	20	1	102	4
LOGGERHEAD	SEC	93	3	16	1	82	3	0	0	0	0	16	1	82	3
			3 Total	**684**		**1773**	**297**	**0**		**0**	**0**	**666**		**1681**	**293**
LEATHERBACK	CAR	93	4	20	1	102	4	0	0	0	0	20	1	102	4
LOGGERHEAD	CAR	93	4	40	0.67	131	12	0	0	0	0	40	0.67	131	12
LOGGERHEAD	GOM	93	4	26	1	133	5	0	0	0	0	26	1	133	5
LEATHERBACK	NEC	93	4	44	0.43	99	20	0	0	0	0	44	0.43	99	20
LEATHERBACK	NED	93	4	42	0.47	101	17	0	0	0	0	42	0.47	101	17
LOGGERHEAD	NED	93	4	10	1	51	2	0	0	0	0	10	1	51	2
LEATHERBACK	OFS	93	4	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LOGGERHEAD	OFS	93	4	5	0.69	17	1	0	0	0	0	5	0.69	17	1
LEATHERBACK	SEC	93	4	41	0.69	140	12	0	0	0	0	41	0.69	140	12
LOGGERHEAD	SEC	93	4	22	1	112	4	0	0	0	0	22	1	112	4
			4 Total	**253**		**897**	**78**	**0**		**0**	**0**	**253**		**897**	**78**
		93 Total		**1438**		**4094**	**573**	**8**		**41**	**2**	**1412**		**3961**	**567**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
LOGGERHEAD	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE	GOM	94	1	19	1	97	4	0	0	0	0	19	1	97	4
LEATHERBACK	GOM	94	1	132	0.38	272	64	0	0	0	0	132	0.38	272	64
LEATHERBACK	OFS	94	1	21	1	107	4	0	0	0	0	21	1	107	4
			1 Total	**216**		**700**	**80**	**0**		**0**	**0**	**216**		**700**	**80**
LEATHERBACK	GOM	94	2	104	0.48	254	43	0	0	0	0	104	0.48	254	43
GREEN	NEC	94	2	5	1.01	26	1	0	0	0	0	5	1.01	26	1
LEATHERBACK	NEC	94	2	16	0.7	55	5	0	0	0	0	16	0.7	55	5
LOGGERHEAD	NEC	94	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
LEATHERBACK	NED	94	2	38	0.48	93	16	0	0	0	0	38	0.48	93	16
LOGGERHEAD	NED	94	2	42	0.67	139	13	0	0	0	0	42	0.67	139	13
LEATHERBACK	OFS	94	2	10	0.73	36	3	0	0	0	0	10	0.73	36	3
			2 Total	**231**		**661**	**85**	**0**		**0**	**0**	**231**		**661**	**85**
LEATHERBACK	GOM	94	3	16	1	82	3	0	0	0	0	16	1	82	3
GREEN	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
KEMPS RIDLEY	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
LEATHERBACK	NEC	94	3	79	0.5	198	32	0	0	0	0	79	0.5	198	32
TURTLE	NED	94	3	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LEATHERBACK	NED	94	3	175	0.31	315	97	0	0	0	0	175	0.31	315	97
LOGGERHEAD	NED	94	3	1015	0.17	1403	734	13	0.99	66	3	989	0.17	1371	714
LEATHERBACK	SEC	94	3	39	0.7	134	11	0	0	0	0	39	0.7	134	11
			3 Total	**1381**		**2422**	**888**	**13**		**66**	**3**	**1355**		**2390**	**868**
LEATHERBACK	CAR	94	4	24	1	123	5	8	1	41	2	16	1	82	3
LOGGERHEAD	CAR	94	4	44	0.67	145	13	0	0	0	0	44	0.67	145	13
LEATHERBACK	GOM	94	4	14	1	72	3	0	0	0	0	14	1	72	3
LEATHERBACK	NEC	94	4	67	0.62	206	22	0	0	0	0	67	0.62	206	22
LOGGERHEAD	NEC	94	4	30	0.7	104	9	14	1	72	3	16	1	82	3
LEATHERBACK	NED	94	4	10	1	51	2	0	0	0	0	10	1	51	2
LOGGERHEAD	NED	94	4	95	0.49	234	39	0	0	0	0	95	0.49	234	39
TURTLE	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	94	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	OFS	94	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3
			4 Total	**303**		**1005**	**98**	**22**		**113**	**5**	**281**		**942**	**90**
		94 Total		**2131**		**4788**	**1151**	**35**		**179**	**8**	**2083**		**4693**	**1123**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	NEC	95	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LEATHERBACK	NED	95	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	NED	95	1	2	0.49	5	1	0	0	0	0	2	0.49	5	1
LEATHERBACK	OFS	95	1	45	0.57	128	16	0	0	0	0	45	0.57	128	16
LOGGERHEAD	OFS	95	1	42	0.57	119	15	0	0	0	0	42	0.57	119	15
TURTLE	SEC	95	1	66	0.69	225	19	0	0	0	0	66	0.69	225	19
LOGGERHEAD	SEC	95	1	31	1	159	6	0	0	0	0	31	1	159	6
			1 Total	**189**		**649**	**57**	**0**		**0**	**0**	**189**		**649**	**57**
LEATHERBACK	GOM	95	2	40	0.49	100	16	0	0	0	0	40	0.49	100	16
LEATHERBACK	NEC	95	2	36	1	184	7	0	0	0	0	36	1	184	7
LOGGERHEAD	NEC	95	2	170	0.42	374	77	0	0	0	0	170	0.42	374	77
LEATHERBACK	NED	95	2	10	0.47	24	4	0	0	0	0	10	0.47	24	4
LOGGERHEAD	NED	95	2	11	0.66	36	3	0	0	0	0	11	0.66	36	3
LEATHERBACK	OFS	95	2	67	0.73	241	19	0	0	0	0	67	0.73	241	19
TURTLE	SEC	95	2	69	0.7	239	20	0	0	0	0	69	0.7	239	20
LEATHERBACK	SEC	95	2	45	0.74	165	12	0	0	0	0	45	0.74	165	12
LOGGERHEAD	SEC	95	2	86	0.64	272	27	0	0	0	0	86	0.64	272	27
			2 Total	**534**		**1635**	**185**	**0**		**0**	**0**	**534**		**1635**	**185**
LEATHERBACK	NEC	95	3	34	0.7	118	10	0	0	0	0	34	0.7	118	10
LOGGERHEAD	NEC	95	3	204	0.36	406	102	0	0	0	0	204	0.36	406	102
LEATHERBACK	NED	95	3	564	0.17	788	404	0	0	0	0	564	0.17	788	404
LOGGERHEAD	NED	95	3	1373	0.2	2028	930	0	0	0	0	1373	0.2	2028	930
GREEN	SEC	95	3	34	1	174	7	0	0	0	0	34	1	174	7
			3 Total	**2209**		**3514**	**1453**	**0**		**0**	**0**	**2209**		**3514**	**1453**
LEATHERBACK	CAR	95	4	4	0.98	20	1	2	0.98	10	0	3	0.98	15	1
LOGGERHEAD	CAR	95	4	8	0.66	26	2	0	0	0	0	8	0.66	26	2
LEATHERBACK	GOM	95	4	11	1	56	2	0	0	0	0	11	1	56	2
LOGGERHEAD	NEC	95	4	108	0.43	242	48	0	0	0	0	108	0.43	242	48
LEATHERBACK	NED	95	4	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	NED	95	4	195	0.44	446	85	0	0	0	0	195	0.44	446	85
LEATHERBACK	OFS	95	4	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LOGGERHEAD	OFS	95	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
			4 Total	**345**		**884**	**141**	**2**		**10**	**0**	**344**		**879**	**141**
		95 Total		**3277**		**6682**	**1836**	**2**		**10**	**0**	**3276**		**6677**	**1836**
LEATHERBACK	CAR	96	1	27	0.89	121	6	0	0	0	0	27	0.89	121	6
LOGGERHEAD	CAR	96	1	36	0.83	148	9	0	0	0	0	36	0.83	148	9
LOGGERHEAD	OFS	96	1	66	0.45	153	29	0	0	0	0	66	0.45	153	29
LOGGERHEAD	SEC	96	1	33	1	169	6	0	0	0	0	33	1	169	6
			1 Total	**162**		**591**	**50**	**0**		**0**	**0**	**162**		**591**	**50**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE	NEC	96	2	3	0.98	15	1	0	0	0	0	3	0.98	15	1
GREEN	NEC	96	2	9	0.85	38	2	0	0	0	0	6	1.01	31	1
LEATHERBACK	NEC	96	2	72	0.67	238	22	0	0	0	0	72	0.67	238	22
LOGGERHEAD	NEC	96	2	49	0.68	164	15	0	0	0	0	49	0.68	164	15
LEATHERBACK	OFS	96	2	35	0.73	126	10	0	0	0	0	35	0.73	126	10
LEATHERBACK	SEC	96	2	36	1	184	7	0	0	0	0	36	1	184	7
LOGGERHEAD	SEC	96	2	52	0.6	153	18	0	0	0	0	52	0.6	153	18
			2 Total	**256**		**918**	**75**	**0**		**0**	**0**	**253**		**911**	**74**
LEATHERBACK	GOM	96	3	97	0.62	297	32	0	0	0	0	97	0.62	297	32
LEATHERBACK	NEC	96	3	165	0.55	452	60	0	0	0	0	165	0.55	452	60
LOGGERHEAD	NEC	96	3	119	0.69	404	35	0	0	0	0	119	0.69	404	35
TURTLE	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
GREEN	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LEATHERBACK	NED	96	3	227	0.47	546	94	0	0	0	0	227	0.47	546	94
LOGGERHEAD	NED	96	3	488	0.43	1099	217	2	0.98	10	0	484	0.43	1091	215
			3 Total	**1100**		**2818**	**438**	**2**		**10**	**0**	**1096**		**2810**	**436**
LEATHERBACK	CAR	96	4	25	1	128	5	9	1	46	2	16	1	82	3
LOGGERHEAD	CAR	96	4	45	0.67	148	14	0	0	0	0	45	0.67	148	14
LEATHERBACK	GOM	96	4	28	1	143	5	0	0	0	0	28	1	143	5
TURTLE	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
HAWKSBILL	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	NEC	96	4	33	0.51	84	13	0	0	0	0	33	0.51	84	13
LOGGERHEAD	NEC	96	4	22	0.66	71	7	2	0.98	10	0	20	0.71	70	6
GREEN	NED	96	4	16	0.52	42	6	2	0.98	10	0	14	0.53	37	5
LEATHERBACK	NED	96	4	12	0.82	49	3	0	0	0	0	12	0.82	49	3
LOGGERHEAD	NED	96	4	43	0.64	136	14	0	0	0	0	43	0.64	136	14
TURTLE	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	96	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	OFS	96	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3
LEATHERBACK	SEC	96	4	18	1	92	4	0	0	0	0	18	1	92	4
LOGGERHEAD	SEC	96	4	23	1	118	4	0	0	0	0	23	1	118	4
			4 Total	**286**		**1091**	**80**	**13**		**66**	**2**	**273**		**1039**	**76**
		96 Total		**1804**		**5418**	**643**	**15**		**76**	**2**	**1784**		**5351**	**636**
LEATHERBACK	CAR	97	1	77	1	394	15	0	0	0	0	77	1	394	15
TURTLE	GOM	97	1	21	1	107	4	0	0	0	0	21	1	107	4
LEATHERBACK	GOM	97	1	79	1	404	15	0	0	0	0	79	1	404	15
LOGGERHEAD	GOM	97	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE	OFS	97	1	19	1	97	4	0	0	0	0	19	1	97	4
KEMPS RIDLEY	OFS	97	1	17	1	87	3	0	0	0	0	17	1	87	3

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	OFS	97	1	36	0.69	123	10	0	0	0	0	36	0.69	123	10
LOGGERHEAD	OFS	97	1	56	0.74	204	15	0	0	0	0	56	0.74	204	15
HAWKSBILL	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LOGGERHEAD	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
			1 Total	**348**		**1635**	**75**	**0**		**0**	**0**	**348**		**1635**	**75**
LEATHERBACK	NED	97	2	64	0.48	157	26	0	0	0	0	64	0.48	157	26
LOGGERHEAD	NED	97	2	71	0.67	235	21	0	0	0	0	71	0.67	235	21
LOGGERHEAD	SEC	97	2	24	1	123	5	0	0	0	0	24	1	123	5
			2 Total	**159**		**515**	**52**	**0**		**0**	**0**	**159**		**515**	**52**
LOGGERHEAD	NEC	97	3	93	0.43	210	41	0	0	0	0	93	0.43	210	41
LEATHERBACK	NED	97	3	15	1	77	3	0	0	0	0	15	1	77	3
LOGGERHEAD	NED	97	3	61	0.63	188	20	0	0	0	0	61	0.63	188	20
LEATHERBACK	SEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
			3 Total	**199**		**628**	**70**	**0**		**0**	**0**	**199**		**628**	**70**
LEATHERBACK	CAR	97	4	11	1	56	2	4	0.98	20	1	7	1	36	1
LOGGERHEAD	CAR	97	4	19	0.67	63	**6**	0	0	0	0	19	0.67	63	6
LOGGERHEAD	NEC	97	4	51	0.69	174	15	0	0	0	0	51	0.69	174	15
GREEN	NED	97	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LEATHERBACK	NED	97	4	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LOGGERHEAD	NED	97	4	3	0.61	9	1	0	0	0	0	3	0.61	9	1
TURTLE	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	OFS	97	4	6	0.74	22	2	0	0	0	0	6	0.74	22	2
LOGGERHEAD	OFS	97	4	9	0.7	31	3	0	0	0	0	9	0.7	31	3
			4 Total	**103**		**372**	**29**	**4**		**20**	**1**	**99**		**352**	**28**
		97 Total		**809**		**3150**	**226**	**4**		**20**	**1**	**805**		**3130**	**225**
LEATHERBACK	CAR	98	1	16	0.9	72	4	0	0	0	0	16	0.9	72	4
LOGGERHEAD	CAR	98	1	21	0.82	86	5	0	0	0	0	21	0.82	86	5
HAWKSBILL	NEC	98	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LEATHERBACK	SEC	98	1	72	0.72	256	20	0	0	0	0	72	0.72	256	20
LOGGERHEAD	SEC	98	1	35	1	179	7	0	0	0	0	35	1	179	7
			1 Total	**157**		**659**	**39**	**0**		**0**	**0**	**157**		**659**	**39**
LEATHERBACK	NED	98	2	20	0.48	49	8	0	0	0	0	20	0.48	49	8
LOGGERHEAD	NED	98	2	23	0.67	76	7	0	0	0	0	23	0.67	76	7
LEATHERBACK	OFS	98	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
			2 Total	**59**		**183**	**19**	**0**		**0**	**0**	**59**		**183**	**19**
LEATHERBACK	NEC	98	3	84	1	430	16	0	0	0	0	84	1	430	16
LOGGERHEAD	NEC	98	3	298	0.47	711	125	0	0	0	0	298	0.47	711	125
TURTLE	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
GREEN	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	NED	98	3	198	0.47	476	82	0	0	0	0	198	0.47	476	82
LOGGERHEAD	NED	98	3	425	0.43	958	189	2	0.98	10	0	421	0.43	949	187
GREEN	SEC	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LEATHERBACK	SEC	98	3	20	0.88	88	5	0	0	0	0	20	0.88	88	5
LOGGERHEAD	SEC	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			3 Total	**1033**		**2703**	**417**	**2**		**10**	**0**	**1029**		**2694**	**415**
LOGGERHEAD	CAR	98	4	11	0.66	36	3	0	0	0	0	11	0.66	36	3
LOGGERHEAD	NEC	98	4	150	0.74	549	41	0	0	0	0	150	0.74	549	41
GREEN	NED	98	4	8	0.52	21	3	1	0.98	5	0	7	0.54	19	3
LEATHERBACK	NED	98	4	7	0.83	29	2	0	0	0	0	7	0.83	29	2
LOGGERHEAD	NED	98	4	23	0.64	73	7	0	0	0	0	23	0.64	73	7
LEATHERBACK	OFS	98	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	OFS	98	4	3	0.68	10	1	0	0	0	0	3	0.68	10	1
LOGGERHEAD	SEC	98	4	27	0.7	93	8	0	0	0	0	27	0.7	93	8
			4 Total	**231**		**818**	**66**	**1**		**5**	**0**	**230**		**816**	**66**
		98 Total		**1480**		**4363**	**541**	**3**		**15**	**0**	**1475**		**4352**	**539**

Table 9a. Estimated bycatch of marine mammals and marine turtles in the U.S. Atlantic longline fishery, stratified by taxon-year-quarter-NAREA (grouped fishing areas). This table is Table 8a sorted in the order of taxon, year, quarter. Estimated total bycatch (discard) is the sum of the estimated number of animals dead (dead) and animals alive (alive) upon return to the sea as reported by observers. Estimated coefficients of variation for the catch estimates (cv_c, cv_d, cv_a for total, dead, and alive catches, respectively), and upper and lower 95% lognormal confidence bounds (u_disc, l_disc for total catch; u_dead, l_dead for dead animals; and u_live, l_live for living animals) are also given. Where observer effort is less than 5 sets for a taxon-NAREA-year-quarter stratum, a pooled bycatch rate is estimated by pooling observations across quarters or across quarters and years to achieve the minimum of 5 observed sets (**qyn5**). No listing for a species-year-NAREA stratum implies an estimate of 0.

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
MARINE MAMMAL	SEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		92 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
MARINE MAMMAL	NEC	95	3	24	1	123	5	0	0	0	0	24	1	123	5
		95 Total		**24**		**123**	**5**	**0**		**0**	**0**	**24**		**123**	**5**
MARINE MAMMAL	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	SEC	96	4	20	1	102	4	0	0	0	0	20	1	102	4
		96 Total		**23**		**117**	**4**	**0**		**0**	**0**	**23**		**117**	**4**
MARINE MAMMAL	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		98 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
BEAKED WHALE	CAR	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		92 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
BEAKED WHALE	CAR	94	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
BEAKED WHALE	CAR	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		94 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
BEAKED WHALE	CAR	96	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
BEAKED WHALE	CAR	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
BEAKED WHALE	CAR	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**5**		**25**	**1**	**0**		**0**	**0**	**5**		**25**	**1**
BEAKED WHALE	CAR	98	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
BEAKED WHALE	CAR	98	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
		98 Total		**7**		**36**	**1**	**0**		**0**	**0**	**7**		**36**	**1**
COMMON DOLPHIN	NEC	92	1	10	1	51	2	0	0	0	0	10	1	51	2
COMMON DOLPHIN	NEC	92	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		92 Total		**23**		**117**	**5**	**0**		**0**	**0**	**23**		**117**	**5**
COMMON DOLPHIN	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
DOLPHIN	NEC	92	1	7	1	36	1	0	0	0	0	7	1	36	1
DOLPHIN	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
		92 Total		**26**		**133**	**5**	**0**		**0**	**0**	**26**		**133**	**5**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN ATLANTIC SPOTTED	GOM	94	3	15	1	77	3	0	0	0	0	15	1	77	3
		94 Total		**15**		**77**	**3**	**0**		**0**	**0**	**15**		**77**	**3**
DOLPHIN BOTTLENOSE	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	NED	93	3	20	1	102	4	0	0	0	0	20	1	102	4
		93 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
DOLPHIN BOTTLENOSE	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN BOTTLENOSE	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN BOTTLENOSE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**5**		**25**	**0**	**0**		**0**	**0**	**5**		**25**	**0**
DOLPHIN BOTTLENOSE	NED	97	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		97 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
DOLPHIN BOTTLENOSE	GOM	98	1	25	1	128	5	0	0	0	0	25	1	128	5
DOLPHIN BOTTLENOSE	NEC	98	1	4	0.98	20	1	0	0	0	0	4	0.98	20	1
DOLPHIN BOTTLENOSE	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		98 Total		**31**		**158**	**6**	**0**		**0**	**0**	**31**		**158**	**6**
DOLPHIN PANTROPIC SPOTTED	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		93 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
DOLPHIN PANTROPIC SPOTTED	GOM	94	2	26	1	133	5	0	0	0	0	26	1	133	5
		94 Total		**26**		**133**	**5**	**0**		**0**	**0**	**26**		**133**	**5**
DOLPHIN PANTROPIC SPOTTED	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
DOLPHIN RISSOS	GOM	92	1	44	1	225	9	0	0	0	0	44	1	225	9
DOLPHIN RISSOS	NEC	92	1	31	0.7	107	9	0	0	0	0	16	1	82	3
DOLPHIN RISSOS	GOM	92	4	15	1	77	3	0	0	0	0	15	1	77	3
DOLPHIN RISSOS	NEC	92	4	40	0.7	138	12	0	0	0	0	21	1	107	4
		92 Total		**130**		**547**	**33**	**0**		**0**	**0**	**96**		**491**	**19**
DOLPHIN RISSOS	GOM	93	1	44	1	225	9	44	1	225	9	0	0	0	0
DOLPHIN RISSOS	NEC	93	3	36	0.73	129	10	0	0	0	0	36	0.73	129	10
		93 Total		**80**		**354**	**19**	**44**		**225**	**9**	**36**		**129**	**10**
DOLPHIN RISSOS	NEC	94	3	67	0.49	167	27	15	1	77	3	52	0.57	148	18
DOLPHIN RISSOS	NEC	94	4	49	0.57	139	17	0	0	0	0	49	0.57	139	17
		94 Total		**116**		**306**	**44**	**15**		**77**	**3**	**101**		**287**	**35**
DOLPHIN RISSOS	NEC	95	3	87	0.51	223	34	0	0	0	0	87	0.51	223	34
DOLPHIN RISSOS	NED	95	3	18	1	92	4	0	0	0	0	18	1	92	4
		95 Total		**105**		**315**	**38**	**0**		**0**	**0**	**105**		**315**	**38**
DOLPHIN RISSOS	NEC	96	2	12	0.68	40	4	0	0	0	0	11	0.72	39	3
DOLPHIN RISSOS	GOM	96	3	24	1	123	5	24	1	123	5	0	0	0	0
DOLPHIN RISSOS	NEC	96	3	161	0.72	570	45	0	0	0	0	161	0.72	570	45
DOLPHIN RISSOS	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN RISSOS	NEC	96	4	7	0.67	23	2	0	0	0	0	7	0.72	25	2
DOLPHIN RISSOS	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**207**		**771**	**56**	**24**		**123**	**5**	**182**		**649**	**50**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	NED	97	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		97 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
DOLPHIN RISSOS	NEC	98	3	96	0.7	329	28	0	0	0	0	96	0.7	329	28
DOLPHIN RISSOS	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		98 Total		**98**		**339**	**28**	**0**		**0**	**0**	**98**		**339**	**28**
DOLPHIN SHORT-BEAKED SPINNER	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		97 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
PILOT WHALE	NEC	92	1	161	0.56	446	58	21	1	107	4	142	0.54	381	53
PILOT WHALE	SEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
PILOT WHALE	NEC	92	3	307	0.73	1111	85	102	1	522	20	205	0.69	699	60
PILOT WHALE	NEC	92	4	131	0.38	270	64	0	0	0	0	131	0.38	270	64
		92 Total		**601**		**1837**	**207**	**123**		**629**	**24**	**480**		**1360**	**177**
PILOT WHALE	NEC	93	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
PILOT WHALE	NEC	93	2	48	0.5	122	19	0	0	0	0	48	0.5	122	19
PILOT WHALE	SEC	93	2	22	1	112	4	0	0	0	0	22	1	112	4
PILOT WHALE	NEC	93	3	14	1	72	3	0	0	0	0	14	1	72	3
PILOT WHALE	NEC	93	4	103	0.38	213	50	0	0	0	0	103	0.38	213	50
		93 Total		**190**		**534**	**77**	**0**		**0**	**0**	**190**		**534**	**77**
PILOT WHALE	NEC	94	1	5	1.01	26	1	0	0	0	0	5	1.01	26	1
PILOT WHALE	NEC	94	3	202	0.43	450	91	0	0	0	0	202	0.43	450	91
PILOT WHALE	NEC	94	4	17	1	87	3	0	0	0	0	17	1	87	3
		94 Total		**224**		**563**	**95**	**0**		**0**	**0**	**224**		**563**	**95**
PILOT WHALE	NEC	95	3	177	0.35	343	91	0	0	0	0	177	0.35	343	91
PILOT WHALE	NEC	95	4	75	0.6	221	25	0	0	0	0	75	0.6	221	25
PILOT WHALE	SEC	95	4	36	1	184	7	0	0	0	0	36	1	184	7
		95 Total		**288**		**748**	**123**	**0**		**0**	**0**	**288**		**748**	**123**
PILOT WHALE	NEC	96	1	1	0.81	4	0	0	0	0	0	1	0.81	4	0
PILOT WHALE	NEC	96	2	35	0.72	125	10	2	0.98	10	0	33	0.72	117	9
PILOT WHALE	NEC	96	4	21	0.72	75	6	1	0.98	5	0	20	0.72	71	6
		96 Total		**57**		**204**	**16**	**3**		**15**	**0**	**54**		**192**	**15**
PILOT WHALE	NEC	97	1	1	0.81	4	0	0	0	0	0	1	0.81	4	0
PILOT WHALE	NEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
		97 Total		**31**		**157**	**6**	**0**		**0**	**0**	**31**		**157**	**6**
PILOT WHALE	NEC	98	3	48	1	245	9	0	0	0	0	48	1	245	9
PILOT WHALE	SEC	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		98 Total		**49**		**250**	**9**	**0**		**0**	**0**	**49**		**250**	**9**
PILOT WHALE SHORTFIN	NEC	92	1	14	1	72	3	0	0	0	0	14	1	72	3
PILOT WHALE SHORTFIN	NEC	92	4	18	1	92	4	0	0	0	0	18	1	92	4
		92 Total		**32**		**164**	**7**	**0**		**0**	**0**	**32**		**164**	**7**
PILOT WHALE SHORTFIN	NEC	95	3	31	1	159	6	0	0	0	0	31	1	159	6
		95 Total		**31**		**159**	**6**	**0**		**0**	**0**	**31**		**159**	**6**
PILOT WHALE SHORTFIN	NEC	96	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
PILOT WHALE SHORTFIN	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**3**		**15**	**0**	**0**		**0**	**0**	**3**		**15**	**0**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE	NEC	92	1	7	1	36	1	0	0	0	0	7	1	36	1
TURTLE	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	SEC	92	1	3	0.68	10	1	0	0	0	0	3	0.68	10	1
TURTLE	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
		92 Total		**30**		**148**	**6**	**0**		**0**	**0**	**30**		**148**	**6**
TURTLE	GOM	93	2	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE	NEC	93	3	18	1	92	4	0	0	0	0	0	0	0	0
		93 Total		**27**		**138**	**6**	**0**		**0**	**0**	**9**		**46**	**2**
TURTLE	GOM	94	1	19	1	97	4	0	0	0	0	19	1	97	4
TURTLE	NED	94	3	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		94 Total		**33**		**168**	**7**	**0**		**0**	**0**	**33**		**168**	**7**
TURTLE	SEC	95	1	66	0.69	225	19	0	0	0	0	66	0.69	225	19
TURTLE	SEC	95	2	69	0.7	239	20	0	0	0	0	69	0.7	239	20
		95 Total		**135**		**464**	**39**	**0**		**0**	**0**	**135**		**464**	**39**
TURTLE	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	OFS	96	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**7**		**35**	**0**	**0**		**0**	**0**	**7**		**35**	**0**
TURTLE	GOM	97	1	21	1	107	4	0	0	0	0	21	1	107	4
TURTLE	OFS	97	1	19	1	97	4	0	0	0	0	19	1	97	4
TURTLE	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		97 Total		**41**		**209**	**8**	**0**		**0**	**0**	**41**		**209**	**8**
TURTLE	OFS	98	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	SEC	98	3	2	0.71	7	1	0	0	0	0	2	0.71	7	1
		98 Total		**4**		**17**	**1**	**0**		**0**	**0**	**4**		**17**	**1**
GREEN	NEC	92	1	14	0.68	47	4	0	0	0	0	7	1	36	1
GREEN	SEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
GREEN	NEC	92	2	38	0.68	128	11	0	0	0	0	19	1	97	4
GREEN	NED	92	4	37	0.52	96	14	5	1.01	26	1	32	0.53	85	12
		92 Total		**90**		**276**	**29**	**5**		**26**	**1**	**59**		**223**	**17**
GREEN	GOM	93	1	17	1	87	3	0	0	0	0	17	1	87	3
GREEN	NED	93	3	12	1	61	2	0	0	0	0	12	1	61	2
		93 Total		**29**		**148**	**5**	**0**		**0**	**0**	**29**		**148**	**5**
GREEN	NEC	94	2	5	1.01	26	1	0	0	0	0	5	1.01	26	1
GREEN	NED	94	2	2	0.71	7	1	0	0	0	0	2	0.81	8	1
GREEN	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
		94 Total		**29**		**145**	**6**	**0**		**0**	**0**	**29**		**146**	**6**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
GREEN	NED	95	2	1	0.81	4	0	0	0	0	0	0	0	0	0
GREEN	SEC	95	3	34	1	174	7	0	0	0	0	34	1	174	7
		95 Total		**35**		**178**	**7**	**0**		**0**	**0**	**34**		**174**	**7**
GREEN	NEC	96	2	2	0.9	9	0	0	0	0	0	1	0.98	5	0
GREEN	NED	96	3	11	0.75	41	3	1	0.98	5	0	10	0.77	38	3
GREEN	NEC	96	4	1	0.81	4	0	0	0	0	0	1	0.98	5	0
GREEN	NED	96	4	5	0.77	19	1	1	0.98	5	0	5	0.77	19	1
		96 Total		**19**		**73**	**4**	**2**		**10**	**0**	**17**		**67**	**4**
GREEN	NED	97	2	4	0.76	15	1	0	0	0	0	3	0.74	11	1
		97 Total		**4**		**15**	**1**	**0**		**0**	**0**	**3**		**11**	**1**
GREEN	NED	98	2	1	0.81	4	0	0	0	0	0	1	0.81	4	0
GREEN	NED	98	3	10	0.75	37	3	1	0.98	5	0	8	0.76	30	2
GREEN	NED	98	4	3	0.74	11	1	0	0	0	0	2	0.81	8	1
		98 Total		**14**		**52**	**4**	**1**		**5**	**0**	**11**		**42**	**3**
HAWKSBILL	NEC	92	1	11	1	56	2	0	0	0	0	11	1	56	2
HAWKSBILL	NEC	92	4	15	1	77	3	0	0	0	0	15	1	77	3
		92 Total		**26**		**133**	**5**	**0**		**0**	**0**	**26**		**133**	**5**
HAWKSBILL	NEC	96	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
HAWKSBILL	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**3**		**15**	**0**	**0**		**0**	**0**	**3**		**15**	**0**
HAWKSBILL	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		97 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
HAWKSBILL	NEC	98	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		98 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
KEMPS RIDLEY	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		92 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
KEMPS RIDLEY	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
KEMPS RIDLEY	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		94 Total		**23**		**117**	**4**	**0**		**0**	**0**	**23**		**117**	**4**
KEMPS RIDLEY	NEC	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	96	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**3**		**15**	**0**	**0**		**0**	**0**	**3**		**15**	**0**
KEMPS RIDLEY	OFS	97	1	17	1	87	3	0	0	0	0	17	1	87	3
KEMPS RIDLEY	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		97 Total		**18**		**92**	**3**	**0**		**0**	**0**	**18**		**92**	**3**
KEMPS RIDLEY	OFS	98	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		98 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
LEATHERBACK	CAR	92	1	24	0.94	114	5	4	0.98	20	1	20	0.92	93	4
LEATHERBACK	NEC	92	1	223	0.57	634	78	0	0	0	0	223	0.57	634	78
LEATHERBACK	OFS	92	1	11	0.75	41	3	0	0	0	0	11	0.75	41	3
LEATHERBACK	SEC	92	1	16	0.84	67	4	0	0	0	0	16	0.84	67	4
LEATHERBACK	CAR	92	2	4	0.94	19	1	1	0.98	5	0	4	0.94	19	1
LEATHERBACK	NEC	92	2	68	0.69	232	20	0	0	0	0	68	0.69	232	20

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	NED	92	2	99	0.4	210	47	0	0	0	0	99	0.4	210	47
LEATHERBACK	OFS	92	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LEATHERBACK	NEC	92	3	148	0.74	544	40	0	0	0	0	148	0.74	544	40
LEATHERBACK	NED	92	3	44	0.69	150	13	0	0	0	0	44	0.69	150	13
LEATHERBACK	SEC	92	3	64	0.69	219	19	0	0	0	0	64	0.69	219	19
LEATHERBACK	CAR	92	4	17	1	87	3	17	1	87	3	0	0	0	0
LEATHERBACK	NEC	92	4	219	0.28	377	127	0	0	0	0	219	0.28	377	127
LEATHERBACK	OFS	92	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
		92 Total		**941**		**2708**	**362**	**22**		**112**	**4**	**920**		**2600**	**358**
LEATHERBACK	GOM	93	1	104	0.46	247	44	0	0	0	0	104	0.46	247	44
LEATHERBACK	GOM	93	2	30	0.49	75	12	0	0	0	0	30	0.49	75	12
LEATHERBACK	NEC	93	2	122	0.3	215	69	0	0	0	0	122	0.3	215	69
LEATHERBACK	NED	93	2	119	0.54	323	44	0	0	0	0	119	0.54	323	44
LEATHERBACK	OFS	93	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LEATHERBACK	SEC	93	2	12	1	61	2	0	0	0	0	12	1	61	2
LEATHERBACK	CAR	93	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	GOM	93	3	41	1	210	8	0	0	0	0	41	1	210	8
LEATHERBACK	NEC	93	3	169	0.42	373	77	0	0	0	0	169	0.42	373	77
LEATHERBACK	NED	93	3	222	0.35	434	113	0	0	0	0	222	0.35	434	113
LEATHERBACK	SEC	93	3	20	1	102	4	0	0	0	0	20	1	102	4
LEATHERBACK	CAR	93	4	20	1	102	4	0	0	0	0	20	1	102	4
LEATHERBACK	NEC	93	4	44	0.43	99	20	0	0	0	0	44	0.43	99	20
LEATHERBACK	NED	93	4	42	0.47	101	17	0	0	0	0	42	0.47	101	17
LEATHERBACK	OFS	93	4	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LEATHERBACK	SEC	93	4	41	0.69	140	12	0	0	0	0	41	0.69	140	12
		93 Total		**992**		**2505**	**428**	**0**		**0**	**0**	**992**		**2505**	**428**
LEATHERBACK	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
LEATHERBACK	GOM	94	1	132	0.38	272	64	0	0	0	0	132	0.38	272	64
LEATHERBACK	OFS	94	1	21	1	107	4	0	0	0	0	21	1	107	4
LEATHERBACK	CAR	94	2	11	0.93	52	2	2	0.98	10	0	9	0.92	42	2
LEATHERBACK	GOM	94	2	104	0.48	254	43	0	0	0	0	104	0.48	254	43
LEATHERBACK	NEC	94	2	16	0.7	55	5	0	0	0	0	16	0.7	55	5
LEATHERBACK	NED	94	2	32	0.56	89	11	0	0	0	0	32	0.56	89	11
LEATHERBACK	OFS	94	2	4	0.76	15	1	0	0	0	0	4	0.76	15	1
LEATHERBACK	CAR	94	3	3	0.92	14	1	0	0	0	0	3	0.92	14	1
LEATHERBACK	GOM	94	3	16	1	82	3	0	0	0	0	16	1	82	3
LEATHERBACK	NEC	94	3	79	0.5	198	32	0	0	0	0	79	0.5	198	32
LEATHERBACK	NED	94	3	175	0.31	315	97	0	0	0	0	175	0.31	315	97
LEATHERBACK	SEC	94	3	39	0.7	134	11	0	0	0	0	39	0.7	134	11
LEATHERBACK	CAR	94	4	11	0.93	52	2	2	0.98	10	0	9	0.92	42	2
LEATHERBACK	GOM	94	4	14	1	72	3	0	0	0	0	14	1	72	3

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	NEC	94	4	67	0.62	206	22	0	0	0	0	67	0.62	206	22
LEATHERBACK	NED	94	4	10	1	51	2	0	0	0	0	10	1	51	2
LEATHERBACK	OFS	94	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
		94 Total		**763**		**2106**	**309**	**4**		**20**	**0**	**759**		**2086**	**309**
LEATHERBACK	NEC	95	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LEATHERBACK	NED	95	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LEATHERBACK	OFS	95	1	45	0.57	128	16	0	0	0	0	45	0.57	128	16
LEATHERBACK	GOM	95	2	40	0.49	100	16	0	0	0	0	40	0.49	100	16
LEATHERBACK	NEC	95	2	36	1	184	7	0	0	0	0	36	1	184	7
LEATHERBACK	NED	95	2	8	0.55	22	3	0	0	0	0	8	0.55	22	3
LEATHERBACK	OFS	95	2	67	0.73	241	19	0	0	0	0	67	0.73	241	19
LEATHERBACK	SEC	95	2	45	0.74	165	12	0	0	0	0	45	0.74	165	12
LEATHERBACK	NEC	95	3	34	0.7	118	10	0	0	0	0	34	0.7	118	10
LEATHERBACK	NED	95	3	564	0.17	788	404	0	0	0	0	564	0.17	788	404
LEATHERBACK	OFS	95	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LEATHERBACK	CAR	95	4	2	0.9	9	0	0	0	0	0	2	0.9	9	0
LEATHERBACK	GOM	95	4	11	1	56	2	0	0	0	0	11	1	56	2
LEATHERBACK	NED	95	4	17	1	87	3	0	0	0	0	17	1	87	3
LEATHERBACK	OFS	95	4	1	0.81	4	0	0	0	0	0	1	0.81	4	0
		95 Total		**874**		**1919**	**492**	**0**		**0**	**0**	**874**		**1919**	**492**
LEATHERBACK	CAR	96	1	31	0.94	147	7	5	1.01	26	1	26	0.92	121	6
LEATHERBACK	NEC	96	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LEATHERBACK	CAR	96	2	9	0.94	43	2	1	0.98	5	0	8	0.92	37	2
LEATHERBACK	NEC	96	2	40	0.64	127	13	0	0	0	0	40	0.64	127	13
LEATHERBACK	OFS	96	2	15	0.76	56	4	0	0	0	0	15	0.76	56	4
LEATHERBACK	SEC	96	2	36	1	184	7	0	0	0	0	36	1	184	7
LEATHERBACK	CAR	96	3	4	0.94	19	1	1	0.98	5	0	3	0.92	14	1
LEATHERBACK	GOM	96	3	97	0.62	297	32	0	0	0	0	97	0.62	297	32
LEATHERBACK	NEC	96	3	165	0.55	452	60	0	0	0	0	165	0.55	452	60
LEATHERBACK	NED	96	3	163	0.56	455	58	0	0	0	0	163	0.56	455	58
LEATHERBACK	CAR	96	4	11	0.93	52	2	2	0.98	10	0	9	0.92	42	2
LEATHERBACK	GOM	96	4	28	1	143	5	0	0	0	0	28	1	143	5
LEATHERBACK	NEC	96	4	24	0.64	76	8	0	0	0	0	24	0.64	76	8
LEATHERBACK	NED	96	4	77	0.56	215	28	0	0	0	0	77	0.56	215	28
LEATHERBACK	OFS	96	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LEATHERBACK	SEC	96	4	18	1	92	4	0	0	0	0	18	1	92	4
		96 Total		**726**		**2387**	**233**	**9**		**46**	**1**	**717**		**2340**	**232**
LEATHERBACK	CAR	97	1	77	1	394	15	0	0	0	0	77	1	394	15
LEATHERBACK	GOM	97	1	79	1	404	15	0	0	0	0	79	1	404	15
LEATHERBACK	NEC	97	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LEATHERBACK	OFS	97	1	36	0.69	123	10	0	0	0	0	36	0.69	123	10
LEATHERBACK	CAR	97	2	2	0.9	9	0	0	0	0	0	2	0.9	9	0
LEATHERBACK	NED	97	2	54	0.56	151	19	0	0	0	0	54	0.56	151	19
LEATHERBACK	CAR	97	3	2	0.9	9	0	0	0	0	0	2	0.9	9	0

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	NED	97	3	15	1	77	3	0	0	0	0	15	1	77	3
LEATHERBACK	OFS	97	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LEATHERBACK	SEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
LEATHERBACK	CAR	97	4	5	0.95	24	1	1	0.98	5	0	4	0.94	19	1
LEATHERBACK	NED	97	4	5	0.56	14	2	0	0	0	0	5	0.56	14	2
LEATHERBACK	OFS	97	4	6	0.74	22	2	0	0	0	0	6	0.74	22	2
		97 Total		**313**		**1387**	**73**	**1**		**5**	**0**	**312**		**1382**	**73**
LEATHERBACK	CAR	98	1	18	0.93	85	4	3	0.98	15	1	15	0.92	70	3
LEATHERBACK	SEC	98	1	72	0.72	256	20	0	0	0	0	72	0.72	256	20
LEATHERBACK	CAR	98	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	NED	98	2	17	0.56	47	6	0	0	0	0	17	0.56	47	6
LEATHERBACK	OFS	98	2	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LEATHERBACK	NEC	98	3	84	1	430	16	0	0	0	0	84	1	430	16
LEATHERBACK	NED	98	3	142	0.56	396	51	0	0	0	0	142	0.56	396	51
LEATHERBACK	SEC	98	3	10	0.84	42	2	0	0	0	0	10	0.84	42	2
LEATHERBACK	NED	98	4	41	0.56	114	15	0	0	0	0	41	0.56	114	15
LEATHERBACK	OFS	98	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
		98 Total		**394**		**1408**	**117**	**3**		**15**	**1**	**391**		**1393**	**116**
LOGGERHEAD	CAR	92	1	37	0.74	136	10	0	0	0	0	37	0.74	136	10
LOGGERHEAD	NEC	92	1	16	1	82	3	0	0	0	0	16	1	82	3
LOGGERHEAD	OFS	92	1	15	0.69	51	4	0	0	0	0	15	0.69	51	4
LOGGERHEAD	SEC	92	1	13	0.89	58	3	0	0	0	0	13	0.88	57	3
LOGGERHEAD	CAR	92	2	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	NEC	92	2	21	1	107	4	0	0	0	0	21	1	107	4
LOGGERHEAD	NED	92	2	28	1	143	5	0	0	0	0	28	1	143	5
LOGGERHEAD	OFS	92	2	3	0.68	10	1	0	0	0	0	3	0.68	10	1
LOGGERHEAD	NED	92	3	27	1	138	5	0	0	0	0	27	1	138	5
LOGGERHEAD	CAR	92	4	33	0.67	109	10	0	0	0	0	33	0.67	109	10
LOGGERHEAD	NEC	92	4	11	1	56	2	0	0	0	0	11	1	56	2
LOGGERHEAD	OFS	92	4	4	0.71	14	1	0	0	0	0	4	0.71	14	1
		92 Total		**215**		**930**	**50**	**0**		**0**	**0**	**215**		**929**	**50**
LOGGERHEAD	NED	93	0	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	CAR	93	1	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	OFS	93	1	9	1	46	2	0	0	0	0	9	1	46	2
LOGGERHEAD	SEC	93	1	8	1	41	2	8	1	41	2	0	0	0	0
LOGGERHEAD	NEC	93	2	32	0.58	92	11	0	0	0	0	32	0.58	92	11
LOGGERHEAD	OFS	93	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	SEC	93	2	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	CAR	93	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LOGGERHEAD	NEC	93	3	31	0.71	108	9	0	0	0	0	31	0.71	108	9
LOGGERHEAD	NED	93	3	155	0.37	311	77	0	0	0	0	155	0.37	311	77
LOGGERHEAD	SEC	93	3	16	1	82	3	0	0	0	0	16	1	82	3
LOGGERHEAD	CAR	93	4	40	0.67	131	12	0	0	0	0	40	0.67	131	12
LOGGERHEAD	GOM	93	4	26	1	133	5	0	0	0	0	26	1	133	5

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LOGGERHEAD	NED	93	4	10	1	51	2	0	0	0	0	10	1	51	2
LOGGERHEAD	OFS	93	4	5	0.69	17	1	0	0	0	0	5	0.69	17	1
LOGGERHEAD	SEC	93	4	22	1	112	4	0	0	0	0	22	1	112	4
		93 Total		**392**		**1312**	**135**	**8**		**41**	**2**	**384**		**1271**	**133**
LOGGERHEAD	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
LOGGERHEAD	CAR	94	2	17	0.75	63	5	0	0	0	0	17	0.75	63	5
LOGGERHEAD	NEC	94	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
LOGGERHEAD	NED	94	2	66	0.53	176	25	0	0	0	0	65	0.53	173	24
LOGGERHEAD	OFS	94	2	6	0.68	20	2	0	0	0	0	6	0.68	20	2
LOGGERHEAD	CAR	94	3	5	0.73	18	1	0	0	0	0	5	0.73	18	1
LOGGERHEAD	NED	94	3	1015	0.17	1403	734	13	0.99	66	3	989	0.17	1371	714
LOGGERHEAD	CAR	94	4	17	0.75	63	5	0	0	0	0	17	0.75	63	5
LOGGERHEAD	NEC	94	4	30	0.7	104	9	14	1	72	3	16	1	82	3
LOGGERHEAD	NED	94	4	95	0.49	234	39	0	0	0	0	95	0.49	234	39
LOGGERHEAD	OFS	94	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3
		94 Total		**1299**		**2285**	**831**	**27**		**138**	**6**	**1258**		**2228**	**804**
LOGGERHEAD	NED	95	1	2	0.49	5	1	0	0	0	0	2	0.49	5	1
LOGGERHEAD	OFS	95	1	42	0.57	119	15	0	0	0	0	42	0.57	119	15
LOGGERHEAD	SEC	95	1	31	1	159	6	0	0	0	0	31	1	159	6
LOGGERHEAD	NEC	95	2	170	0.42	374	77	0	0	0	0	170	0.42	374	77
LOGGERHEAD	NED	95	2	17	0.53	45	6	0	0	0	0	17	0.53	45	6
LOGGERHEAD	SEC	95	2	86	0.64	272	27	0	0	0	0	86	0.64	272	27
LOGGERHEAD	NEC	95	3	204	0.36	406	102	0	0	0	0	204	0.36	406	102
LOGGERHEAD	NED	95	3	1373	0.2	2028	930	0	0	0	0	1373	0.2	2028	930
LOGGERHEAD	OFS	95	3	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	CAR	95	4	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LOGGERHEAD	NEC	95	4	108	0.43	242	48	0	0	0	0	108	0.43	242	48
LOGGERHEAD	NED	95	4	195	0.44	446	85	0	0	0	0	195	0.44	446	85
LOGGERHEAD	OFS	95	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
		95 Total		**2233**		**4113**	**1298**	**0**		**0**	**0**	**2233**		**4113**	**1298**
LOGGERHEAD	CAR	96	1	47	0.75	173	13	0	0	0	0	47	0.75	173	13
LOGGERHEAD	NEC	96	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	OFS	96	1	66	0.45	153	29	0	0	0	0	66	0.45	153	29
LOGGERHEAD	SEC	96	1	33	1	169	6	0	0	0	0	33	1	169	6
LOGGERHEAD	CAR	96	2	15	0.74	55	4	0	0	0	0	15	0.74	55	4
LOGGERHEAD	NEC	96	2	31	0.62	95	10	1	0.98	5	0	30	0.64	95	9
LOGGERHEAD	OFS	96	2	21	0.69	71	6	0	0	0	0	21	0.69	71	6
LOGGERHEAD	SEC	96	2	52	0.6	153	18	0	0	0	0	52	0.6	153	18
LOGGERHEAD	CAR	96	3	6	0.74	22	2	0	0	0	0	6	0.74	22	2
LOGGERHEAD	NEC	96	3	119	0.69	404	35	0	0	0	0	119	0.69	404	35
LOGGERHEAD	NED	96	3	338	0.53	901	127	1	0.98	5	0	336	0.53	896	126
LOGGERHEAD	CAR	96	4	17	0.75	63	5	0	0	0	0	17	0.75	63	5
LOGGERHEAD	NEC	96	4	19	0.62	58	6	1	0.98	5	0	18	0.64	57	6
LOGGERHEAD	NED	96	4	159	0.53	424	60	1	0.98	5	0	158	0.53	421	59

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LOGGERHEAD	OFS	96	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3
LOGGERHEAD	SEC	96	4	23	1	118	4	0	0	0	0	23	1	118	4
		96 Total		**957**		**2896**	**328**	**4**		**20**	**0**	**952**		**2887**	**325**
LOGGERHEAD	GOM	97	1	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	NEC	97	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	OFS	97	1	56	0.74	204	15	0	0	0	0	56	0.74	204	15
LOGGERHEAD	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LOGGERHEAD	CAR	97	2	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LOGGERHEAD	NED	97	2	111	0.53	296	42	0	0	0	0	111	0.53	296	42
LOGGERHEAD	SEC	97	2	24	1	123	5	0	0	0	0	24	1	123	5
LOGGERHEAD	CAR	97	3	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LOGGERHEAD	NEC	97	3	93	0.43	210	41	0	0	0	0	93	0.43	210	41
LOGGERHEAD	NED	97	3	61	0.63	188	20	0	0	0	0	61	0.63	188	20
LOGGERHEAD	OFS	97	3	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	CAR	97	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LOGGERHEAD	NEC	97	4	51	0.69	174	15	0	0	0	0	51	0.69	174	15
LOGGERHEAD	NED	97	4	10	0.54	27	4	0	0	0	0	10	0.54	27	4
LOGGERHEAD	OFS	97	4	9	0.7	31	3	0	0	0	0	9	0.7	31	3
		97 Total		**461**		**1464**	**156**	**0**		**0**	**0**	**461**		**1464**	**156**
LOGGERHEAD	CAR	98	1	27	0.75	100	7	0	0	0	0	27	0.75	100	7
LOGGERHEAD	SEC	98	1	35	1	179	7	0	0	0	0	35	1	179	7
LOGGERHEAD	CAR	98	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LOGGERHEAD	NED	98	2	35	0.53	93	13	0	0	0	0	35	0.53	93	13
LOGGERHEAD	OFS	98	2	10	0.69	34	3	0	0	0	0	10	0.69	34	3
LOGGERHEAD	NEC	98	3	298	0.47	711	125	0	0	0	0	298	0.47	711	125
LOGGERHEAD	NED	98	3	295	0.53	787	111	1	0.98	5	0	293	0.53	781	110
LOGGERHEAD	SEC	98	3	9	0.89	40	2	0	0	0	0	8	0.87	35	2
LOGGERHEAD	CAR	98	4	11	0.66	36	3	0	0	0	0	11	0.66	36	3
LOGGERHEAD	NEC	98	4	150	0.74	549	41	0	0	0	0	150	0.74	549	41
LOGGERHEAD	NED	98	4	85	0.53	227	32	0	0	0	0	84	0.53	224	31
LOGGERHEAD	OFS	98	4	3	0.68	10	1	0	0	0	0	3	0.68	10	1
LOGGERHEAD	SEC	98	4	27	0.7	93	8	0	0	0	0	27	0.7	93	8
		98 Total		**987**		**2866**	**354**	**1**		**5**	**0**	**983**		**2852**	**352**

Table 9b. Estimated bycatch of marine mammals and marine turtles in the U.S. Atlantic longline fishery, stratified by taxon-NAREA (grouped fishing areas)-year-quarter. This table is Table 8b sorted in the order of taxon, year, quarter. Estimated total bycatch (discard) is the sum of the estimated number of animals dead (dead) and animals alive (alive) upon return to the sea as reported by observers. Estimated coefficients of variation for the catch estimates (cv_c, cv_d, cv_a for total, dead, and alive catches, respectively), and upper and lower 95% lognormal confidence bounds (u_disc, l_disc for total catch; u_dead, l_dead for dead animals; and u_live, l_live for living animals) are also given. Where observer effort is less than 5 sets for a taxon-NAREA-year-quarter stratum, a pooled bycatch rate is estimated by pooling observations across years or across years and quarters to achieve the minimum of 5 observed sets (**yqn5**). No listing for a taxon-year-NAREA stratum implies an estimate of 0.

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
MARINE MAMMAL	NEC	95	3	24	1	123	5	0	0	0	0	24	1	123	5
		95 Total		**24**		**123**	**5**	**0**		**0**	**0**	**24**		**123**	**5**
MARINE MAMMAL	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
MARINE MAMMAL	SEC	96	4	20	1	102	4	0	0	0	0	20	1	102	4
		96 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
MARINE MAMMAL	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		98 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
BEAKED WHALE	CAR	94	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
		94 Total		**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
BEAKED WHALE	CAR	95	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		95 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
BEAKED WHALE	CAR	96	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
		96 Total		**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
BEAKED WHALE	CAR	97	4	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		97 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
BEAKED WHALE	CAR	98	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
		98 Total		**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
COMMON DOLPHIN	NEC	92	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		92 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
COMMON DOLPHIN	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
DOLPHIN	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
		92 Total		**19**		**97**	**4**	**0**		**0**	**0**	**19**		**97**	**4**
DOLPHIN	NEC	96	2	3	0.98	15	1	0	0	0	0	3	0.98	15	1
		96 Total		**3**		**15**	**1**	**0**		**0**	**0**	**3**		**15**	**1**
DOLPHIN ATLANTIC SPOTTED	GOM	94	3	15	1	77	3	0	0	0	0	15	1	77	3
		94 Total		**15**		**77**	**3**	**0**		**0**	**0**	**15**		**77**	**3**
DOLPHIN BOTTLENOSE	GOM	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
DOLPHIN BOTTLENOSE	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
		92 Total		**6**		**30**	**2**	**0**		**0**	**0**	**6**		**30**	**2**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN BOTTLENOSE	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	NED	93	3	20	1	102	4	0	0	0	0	20	1	102	4
		93 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
DOLPHIN BOTTLENOSE	NED	96	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
		96 Total		**3**		**15**	**1**	**0**		**0**	**0**	**3**		**15**	**1**
DOLPHIN BOTTLENOSE	GOM	98	1	25	1	128	5	0	0	0	0	25	1	128	5
DOLPHIN BOTTLENOSE	NEC	98	1	4	0.98	20	1	0	0	0	0	4	0.98	20	1
DOLPHIN BOTTLENOSE	NED	98	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
		98 Total		**32**		**163**	**7**	**0**		**0**	**0**	**32**		**163**	**7**
DOLPHIN PANTROPIC SPOTTED	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		92 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
DOLPHIN PANTROPIC SPOTTED	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		93 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
DOLPHIN PANTROPIC SPOTTED	GOM	94	2	26	1	133	5	0	0	0	0	26	1	133	5
		94 Total		**26**		**133**	**5**	**0**		**0**	**0**	**26**		**133**	**5**
DOLPHIN RISSOS	GOM	92	1	8	1	41	2	8	1	41	2	0	0	0	0
DOLPHIN RISSOS	GOM	92	4	15	1	77	3	0	0	0	0	15	1	77	3
DOLPHIN RISSOS	NEC	92	4	40	0.7	138	12	0	0	0	0	21	1	107	4
		92 Total		**63**		**256**	**17**	**8**		**41**	**2**	**36**		**184**	**7**
DOLPHIN RISSOS	GOM	93	1	44	1	225	9	44	1	225	9	0	0	0	0
DOLPHIN RISSOS	NEC	93	3	36	0.73	129	10	0	0	0	0	36	0.73	129	10
		93 Total		**80**		**354**	**19**	**44**		**225**	**9**	**36**		**129**	**10**
DOLPHIN RISSOS	NEC	94	3	67	0.49	167	27	15	1	77	3	52	0.57	148	18
DOLPHIN RISSOS	NEC	94	4	49	0.57	139	17	0	0	0	0	49	0.57	139	17
		94 Total		**116**		**306**	**44**	**15**		**77**	**3**	**101**		**287**	**35**
DOLPHIN RISSOS	NEC	95	3	87	0.51	223	34	0	0	0	0	87	0.51	223	34
DOLPHIN RISSOS	NED	95	3	18	1	92	4	0	0	0	0	18	1	92	4
		95 Total		**105**		**315**	**38**	**0**		**0**	**0**	**105**		**315**	**38**
DOLPHIN RISSOS	GOM	96	3	24	1	123	5	24	1	123	5	0	0	0	0
DOLPHIN RISSOS	NEC	96	3	161	0.72	570	45	0	0	0	0	161	0.72	570	45
DOLPHIN RISSOS	NEC	96	4	8	0.76	30	2	0	0	0	0	6	0.87	26	1
DOLPHIN RISSOS	NED	96	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
		96 Total		**196**		**738**	**53**	**24**		**123**	**5**	**170**		**611**	**47**
DOLPHIN RISSOS	NEC	98	3	96	0.7	329	28	0	0	0	0	96	0.7	329	28
DOLPHIN RISSOS	NED	98	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
		98 Total		**99**		**344**	**29**	**0**		**0**	**0**	**99**		**344**	**29**
DOLPHIN SHORT-BEAKED SPINNER	SEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		92 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
DOLPHIN SHORT-BEAKED SPINNER	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		97 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**

taxon	NAREA	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
PILOT WHALE	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
PILOT WHALE	NEC	92	3	307	0.73	1111	85	102	1	522	20	205	0.69	699	60
PILOT WHALE	NEC	92	4	131	0.38	270	64	0	0	0	0	131	0.38	270	64
		92 Total		**441**		**1396**	**150**	**102**		**522**	**20**	**339**		**984**	**125**
PILOT WHALE	NEC	93	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
PILOT WHALE	NEC	93	2	48	0.5	122	19	0	0	0	0	48	0.5	122	19
PILOT WHALE	NEC	93	3	14	1	72	3	0	0	0	0	14	1	72	3
PILOT WHALE	NEC	93	4	103	0.38	213	50	0	0	0	0	103	0.38	213	50
PILOT WHALE	SEC	93	2	22	1	112	4	0	0	0	0	22	1	112	4
		93 Total		**190**		**534**	**77**	**0**		**0**	**0**	**190**		**534**	**77**
PILOT WHALE	NEC	94	1	5	1.01	26	1	0	0	0	0	5	1.01	26	1
PILOT WHALE	NEC	94	3	202	0.43	450	91	0	0	0	0	202	0.43	450	91
PILOT WHALE	NEC	94	4	17	1	87	3	0	0	0	0	17	1	87	3
		94 Total		**224**		**563**	**95**	**0**		**0**	**0**	**224**		**563**	**95**
PILOT WHALE	NEC	95	3	177	0.35	343	91	0	0	0	0	177	0.35	343	91
PILOT WHALE	NEC	95	4	75	0.6	221	25	0	0	0	0	75	0.6	221	25
PILOT WHALE	SEC	95	4	36	1	184	7	0	0	0	0	36	1	184	7
		95 Total		**288**		**748**	**123**	**0**		**0**	**0**	**288**		**748**	**123**
PILOT WHALE	NEC	96	2	19	0.5	48	7	0	0	0	0	19	0.5	48	7
PILOT WHALE	NEC	96	4	24	0.59	70	8	0	0	0	0	24	0.59	70	8
		96 Total		**43**		**118**	**15**	**0**		**0**	**0**	**43**		**118**	**15**
PILOT WHALE	NEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
		97 Total		**30**		**153**	**6**	**0**		**0**	**0**	**30**		**153**	**6**
PILOT WHALE	NEC	98	3	48	1	245	9	0	0	0	0	48	1	245	9
		98 Total		**48**		**245**	**9**	**0**		**0**	**0**	**48**		**245**	**9**
PILOT WHALE SHORTFIN	NEC	92	4	18	1	92	4	0	0	0	0	18	1	92	4
		92 Total		**18**		**92**	**4**	**0**		**0**	**0**	**18**		**92**	**4**
PILOT WHALE SHORTFIN	NEC	95	3	31	1	159	6	0	0	0	0	31	1	159	6
		95 Total		**31**		**159**	**6**	**0**		**0**	**0**	**31**		**159**	**6**
PILOT WHALE SHORTFIN	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**

taxon	area	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE	GOM	92	1	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE	NEC	92	2	19	1	97	4	0	0	0	0	19	1	97	4
TURTLE	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	SEC	92	1	8	0.69	27	2	0	0	0	0	8	0.69	27	2
		92 Total		**37**		**175**	**8**	**0**		**0**	**0**	**37**		**175**	**8**
TURTLE	GOM	93	2	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE	NEC	93	3	18	1	92	4	0	0	0	0	0	0	0	0
		93 Total		**27**		**138**	**6**	**0**		**0**	**0**	**9**		**46**	**2**
TURTLE	GOM	94	1	19	1	97	4	0	0	0	0	19	1	97	4
TURTLE	NED	94	3	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		94 Total		**33**		**168**	**7**	**0**		**0**	**0**	**33**		**168**	**7**
TURTLE	SEC	95	1	66	0.69	225	19	0	0	0	0	66	0.69	225	19
TURTLE	SEC	95	2	69	0.7	239	20	0	0	0	0	69	0.7	239	20
		95 Total		**135**		**464**	**39**	**0**		**0**	**0**	**135**		**464**	**39**
TURTLE	NEC	96	2	3	0.98	15	1	0	0	0	0	3	0.98	15	1
TURTLE	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**7**		**35**	**1**	**0**		**0**	**0**	**7**		**35**	**1**
TURTLE	GOM	97	1	21	1	107	4	0	0	0	0	21	1	107	4
TURTLE	OFS	97	1	19	1	97	4	0	0	0	0	19	1	97	4
TURTLE	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		97 Total		**41**		**209**	**8**	**0**		**0**	**0**	**41**		**209**	**8**
TURTLE	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		98 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
GREEN	GOM	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
GREEN	NEC	92	2	38	0.68	128	11	0	0	0	0	19	1	97	4
GREEN	NED	92	4	37	0.52	96	14	5	1.01	26	1	32	0.53	85	12
		92 Total		**78**		**239**	**26**	**5**		**26**	**1**	**54**		**197**	**17**
GREEN	GOM	93	1	17	1	87	3	0	0	0	0	17	1	87	3
GREEN	NED	93	3	12	1	61	2	0	0	0	0	12	1	61	2
		93 Total		**29**		**148**	**5**	**0**		**0**	**0**	**29**		**148**	**5**
GREEN	NEC	94	2	5	1.01	26	1	0	0	0	0	5	1.01	26	1
GREEN	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
		94 Total		**27**		**138**	**5**	**0**		**0**	**0**	**27**		**138**	**5**
GREEN	SEC	95	3	34	1	174	7	0	0	0	0	34	1	174	7
		95 Total		**34**		**174**	**7**	**0**		**0**	**0**	**34**		**174**	**7**
GREEN	NEC	96	2	9	0.85	38	2	0	0	0	0	6	1.01	31	1
GREEN	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
GREEN	NED	96	4	16	0.52	42	6	2	0.98	10	0	14	0.53	37	5
		96 Total		**27**		**90**	**8**	**2**		**10**	**0**	**22**		**78**	**6**

taxon	area	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
GREEN	NED	97	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
		97 Total		**1**		**3**	**0**	**0**		**0**	**0**	**1**		**3**	**0**
GREEN	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
GREEN	NED	98	4	8	0.52	21	3	1	0.98	5	0	7	0.54	19	3
GREEN	SEC	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		98 Total		**12**		**41**	**3**	**1**		**5**	**0**	**11**		**39**	**3**
HAWKSBILL	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
HAWKSBILL	NEC	92	4	15	1	77	3	0	0	0	0	15	1	77	3
HAWKSBILL	SEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		92 Total		**20**		**102**	**4**	**0**		**0**	**0**	**20**		**102**	**4**
HAWKSBILL	NEC	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
HAWKSBILL	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		97 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
HAWKSBILL	NEC	98	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		98 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
KEMPS RIDLEY	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		92 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
KEMPS RIDLEY	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
KEMPS RIDLEY	OFS	94	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		94 Total		**23**		**117**	**4**	**0**		**0**	**0**	**23**		**117**	**4**
KEMPS RIDLEY	OFS	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
KEMPS RIDLEY	OFS	97	1	17	1	87	3	0	0	0	0	17	1	87	3
KEMPS RIDLEY	OFS	97	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		97 Total		**18**		**92**	**3**	**0**		**0**	**0**	**18**		**92**	**3**
LEATHERBACK	CAR	92	1	21	0.89	94	5	0	0	0	0	21	0.89	94	5
LEATHERBACK	CAR	92	4	17	1	87	3	17	1	87	3	0	0	0	0
LEATHERBACK	GOM	92	1	50	0.62	152	16	0	0	0	0	50	0.62	152	16
LEATHERBACK	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
LEATHERBACK	NEC	92	2	68	0.69	232	20	0	0	0	0	68	0.69	232	20
LEATHERBACK	NEC	92	3	148	0.74	544	40	0	0	0	0	148	0.74	544	40
LEATHERBACK	NEC	92	4	219	0.28	377	127	0	0	0	0	219	0.28	377	127
LEATHERBACK	NED	92	2	99	0.4	210	47	0	0	0	0	99	0.4	210	47
LEATHERBACK	NED	92	3	44	0.69	150	13	0	0	0	0	44	0.69	150	13
LEATHERBACK	OFS	92	1	9	0.76	34	2	0	0	0	0	9	0.76	34	2
LEATHERBACK	OFS	92	2	6	0.74	22	2	0	0	0	0	6	0.74	22	2
LEATHERBACK	OFS	92	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LEATHERBACK	SEC	92	1	16	0.7	55	5	0	0	0	0	16	0.7	55	5
LEATHERBACK	SEC	92	3	64	0.69	219	19	0	0	0	0	64	0.69	219	19
		92 Total		**764**		**2188**	**300**	**17**		**87**	**3**	**747**		**2101**	**297**
LEATHERBACK	CAR	93	4	20	1	102	4	0	0	0	0	20	1	102	4
LEATHERBACK	GOM	93	1	104	0.46	247	44	0	0	0	0	104	0.46	247	44

taxon	area	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	GOM	93	2	30	0.49	75	12	0	0	0	0	30	0.49	75	12
LEATHERBACK	GOM	93	3	41	1	210	8	0	0	0	0	41	1	210	8
LEATHERBACK	NEC	93	2	122	0.3	215	69	0	0	0	0	122	0.3	215	69
LEATHERBACK	NEC	93	3	169	0.42	373	77	0	0	0	0	169	0.42	373	77
LEATHERBACK	NEC	93	4	44	0.43	99	20	0	0	0	0	44	0.43	99	20
LEATHERBACK	NED	93	2	119	0.54	323	44	0	0	0	0	119	0.54	323	44
LEATHERBACK	NED	93	3	222	0.35	434	113	0	0	0	0	222	0.35	434	113
LEATHERBACK	NED	93	4	42	0.47	101	17	0	0	0	0	42	0.47	101	17
LEATHERBACK	OFS	93	2	4	0.71	14	1	0	0	0	0	4	0.71	14	1
LEATHERBACK	OFS	93	4	3	0.74	11	1	0	0	0	0	3	0.74	11	1
LEATHERBACK	SEC	93	2	12	1	61	2	0	0	0	0	12	1	61	2
LEATHERBACK	SEC	93	3	20	1	102	4	0	0	0	0	20	1	102	4
LEATHERBACK	SEC	93	4	41	0.69	140	12	0	0	0	0	41	0.69	140	12
		93 Total		**993**		**2507**	**428**	**0**		**0**	**0**	**993**		**2507**	**428**
LEATHERBACK	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
LEATHERBACK	CAR	94	4	24	1	123	5	8	1	41	2	16	1	82	3
LEATHERBACK	GOM	94	1	132	0.38	272	64	0	0	0	0	132	0.38	272	64
LEATHERBACK	GOM	94	2	104	0.48	254	43	0	0	0	0	104	0.48	254	43
LEATHERBACK	GOM	94	3	16	1	82	3	0	0	0	0	16	1	82	3
LEATHERBACK	GOM	94	4	14	1	72	3	0	0	0	0	14	1	72	3
LEATHERBACK	NEC	94	2	16	0.7	55	5	0	0	0	0	16	0.7	55	5
LEATHERBACK	NEC	94	3	79	0.5	198	32	0	0	0	0	79	0.5	198	32
LEATHERBACK	NEC	94	4	67	0.62	206	22	0	0	0	0	67	0.62	206	22
LEATHERBACK	NED	94	2	38	0.48	93	16	0	0	0	0	38	0.48	93	16
LEATHERBACK	NED	94	3	175	0.31	315	97	0	0	0	0	175	0.31	315	97
LEATHERBACK	NED	94	4	10	1	51	2	0	0	0	0	10	1	51	2
LEATHERBACK	OFS	94	1	21	1	107	4	0	0	0	0	21	1	107	4
LEATHERBACK	OFS	94	2	10	0.73	36	3	0	0	0	0	10	0.73	36	3
LEATHERBACK	OFS	94	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LEATHERBACK	SEC	94	3	39	0.7	134	11	0	0	0	0	39	0.7	134	11
		94 Total		**774**		**2136**	**316**	**8**		**41**	**2**	**766**		**2095**	**314**
LEATHERBACK	CAR	95	4	4	0.98	20	1	2	0.98	10	0	3	0.98	15	1
LEATHERBACK	GOM	95	2	40	0.49	100	16	0	0	0	0	40	0.49	100	16
LEATHERBACK	GOM	95	4	11	1	56	2	0	0	0	0	11	1	56	2
LEATHERBACK	NEC	95	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LEATHERBACK	NEC	95	2	36	1	184	7	0	0	0	0	36	1	184	7
LEATHERBACK	NEC	95	3	34	0.7	118	10	0	0	0	0	34	0.7	118	10
LEATHERBACK	NED	95	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LEATHERBACK	NED	95	2	10	0.47	24	4	0	0	0	0	10	0.47	24	4
LEATHERBACK	NED	95	3	564	0.17	788	404	0	0	0	0	564	0.17	788	404
LEATHERBACK	NED	95	4	17	1	87	3	0	0	0	0	17	1	87	3
LEATHERBACK	OFS	95	1	45	0.57	128	16	0	0	0	0	45	0.57	128	16
LEATHERBACK	OFS	95	2	67	0.73	241	19	0	0	0	0	67	0.73	241	19

taxon	area	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LEATHERBACK	OFS	95	4	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LEATHERBACK	SEC	95	2	45	0.74	165	12	0	0	0	0	45	0.74	165	12
		95 Total		**877**		**1928**	**494**	**2**		**10**	**0**	**876**		**1923**	**494**
LEATHERBACK	CAR	96	1	27	0.89	121	6	0	0	0	0	27	0.89	121	6
LEATHERBACK	CAR	96	4	25	1	128	5	9	1	46	2	16	1	82	3
LEATHERBACK	GOM	96	3	97	0.62	297	32	0	0	0	0	97	0.62	297	32
LEATHERBACK	GOM	96	4	28	1	143	5	0	0	0	0	28	1	143	5
LEATHERBACK	NEC	96	2	72	0.67	238	22	0	0	0	0	72	0.67	238	22
LEATHERBACK	NEC	96	3	165	0.55	452	60	0	0	0	0	165	0.55	452	60
LEATHERBACK	NEC	96	4	33	0.51	84	13	0	0	0	0	33	0.51	84	13
LEATHERBACK	NED	96	3	227	0.47	546	94	0	0	0	0	227	0.47	546	94
LEATHERBACK	NED	96	4	12	0.82	49	3	0	0	0	0	12	0.82	49	3
LEATHERBACK	OFS	96	2	35	0.73	126	10	0	0	0	0	35	0.73	126	10
LEATHERBACK	OFS	96	4	7	0.75	26	2	0	0	0	0	7	0.75	26	2
LEATHERBACK	SEC	96	2	36	1	184	7	0	0	0	0	36	1	184	7
LEATHERBACK	SEC	96	4	18	1	92	4	0	0	0	0	18	1	92	4
		96 Total		**782**		**2486**	**263**	**9**		**46**	**2**	**773**		**2440**	**261**
LEATHERBACK	CAR	97	1	77	1	394	15	0	0	0	0	77	1	394	15
LEATHERBACK	CAR	97	4	11	1	56	2	4	0.98	20	1	7	1	36	1
LEATHERBACK	GOM	97	1	79	1	404	15	0	0	0	0	79	1	404	15
LEATHERBACK	NED	97	2	64	0.48	157	26	0	0	0	0	64	0.48	157	26
LEATHERBACK	NED	97	3	15	1	77	3	0	0	0	0	15	1	77	3
LEATHERBACK	NED	97	4	1	0.81	4	0	0	0	0	0	1	0.81	4	0
LEATHERBACK	OFS	97	1	36	0.69	123	10	0	0	0	0	36	0.69	123	10
LEATHERBACK	OFS	97	4	6	0.74	22	2	0	0	0	0	6	0.74	22	2
LEATHERBACK	SEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
		97 Total		**319**		**1390**	**79**	**4**		**20**	**1**	**315**		**1370**	**78**
LEATHERBACK	CAR	98	1	16	0.9	72	4	0	0	0	0	16	0.9	72	4
LEATHERBACK	NEC	98	3	84	1	430	16	0	0	0	0	84	1	430	16
LEATHERBACK	NED	98	2	20	0.48	49	8	0	0	0	0	20	0.48	49	8
LEATHERBACK	NED	98	3	198	0.47	476	82	0	0	0	0	198	0.47	476	82
LEATHERBACK	NED	98	4	7	0.83	29	2	0	0	0	0	7	0.83	29	2
LEATHERBACK	OFS	98	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
LEATHERBACK	OFS	98	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
LEATHERBACK	SEC	98	1	72	0.72	256	20	0	0	0	0	72	0.72	256	20
LEATHERBACK	SEC	98	3	20	0.88	88	5	0	0	0	0	20	0.88	88	5
		98 Total		**435**		**1465**	**142**	**0**		**0**	**0**	**435**		**1465**	**142**
LOGGERHEAD	CAR	92	1	29	0.82	119	7	0	0	0	0	29	0.82	119	7
LOGGERHEAD	CAR	92	4	33	0.67	109	10	0	0	0	0	33	0.67	109	10
LOGGERHEAD	GOM	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
LOGGERHEAD	NEC	92	2	21	1	107	4	0	0	0	0	21	1	107	4
LOGGERHEAD	NEC	92	4	11	1	56	2	0	0	0	0	11	1	56	2
LOGGERHEAD	NED	92	2	28	1	143	5	0	0	0	0	28	1	143	5

taxon	area	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LOGGERHEAD	NED	92	3	27	1	138	5	0	0	0	0	27	1	138	5
LOGGERHEAD	OFS	92	1	18	0.69	61	5	0	0	0	0	18	0.69	61	5
LOGGERHEAD	OFS	92	4	4	0.71	14	1	0	0	0	0	4	0.71	14	1
LOGGERHEAD	SEC	92	1	14	1	72	3	2	0.98	10	0	12	1	61	2
		92 Total		**188**		**834**	**43**	**2**		**10**	**0**	**186**		**823**	**42**
LOGGERHEAD	CAR	93	1	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	CAR	93	4	40	0.67	131	12	0	0	0	0	40	0.67	131	12
LOGGERHEAD	GOM	93	4	26	1	133	5	0	0	0	0	26	1	133	5
LOGGERHEAD	NEC	93	2	32	0.58	92	11	0	0	0	0	32	0.58	92	11
LOGGERHEAD	NEC	93	3	31	0.71	108	9	0	0	0	0	31	0.71	108	9
LOGGERHEAD	NED	93	0	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	NED	93	3	155	0.37	311	77	0	0	0	0	155	0.37	311	77
LOGGERHEAD	NED	93	4	10	1	51	2	0	0	0	0	10	1	51	2
LOGGERHEAD	OFS	93	1	9	1	46	2	0	0	0	0	9	1	46	2
LOGGERHEAD	OFS	93	4	5	0.69	17	1	0	0	0	0	5	0.69	17	1
LOGGERHEAD	SEC	93	1	8	1	41	2	8	1	41	2	0	0	0	0
LOGGERHEAD	SEC	93	2	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	SEC	93	3	16	1	82	3	0	0	0	0	16	1	82	3
LOGGERHEAD	SEC	93	4	22	1	112	4	0	0	0	0	22	1	112	4
		93 Total		**389**		**1301**	**134**	**8**		**41**	**2**	**381**		**1260**	**132**
LOGGERHEAD	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
LOGGERHEAD	CAR	94	4	44	0.67	145	13	0	0	0	0	44	0.67	145	13
LOGGERHEAD	NEC	94	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
LOGGERHEAD	NEC	94	4	30	0.7	104	9	14	1	72	3	16	1	82	3
LOGGERHEAD	NED	94	2	42	0.67	139	13	0	0	0	0	42	0.67	139	13
LOGGERHEAD	NED	94	3	1015	0.17	1403	734	13	0.99	66	3	989	0.17	1371	714
LOGGERHEAD	NED	94	4	95	0.49	234	39	0	0	0	0	95	0.49	234	39
LOGGERHEAD	OFS	94	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3
		94 Total		**1274**		**2229**	**819**	**27**		**138**	**6**	**1234**		**2175**	**793**
LOGGERHEAD	CAR	95	4	8	0.66	26	2	0	0	0	0	8	0.66	26	2
LOGGERHEAD	NEC	95	2	170	0.42	374	77	0	0	0	0	170	0.42	374	77
LOGGERHEAD	NEC	95	3	204	0.36	406	102	0	0	0	0	204	0.36	406	102
LOGGERHEAD	NEC	95	4	108	0.43	242	48	0	0	0	0	108	0.43	242	48
LOGGERHEAD	NED	95	1	2	0.49	5	1	0	0	0	0	2	0.49	5	1
LOGGERHEAD	NED	95	2	11	0.66	36	3	0	0	0	0	11	0.66	36	3
LOGGERHEAD	NED	95	3	1373	0.2	2028	930	0	0	0	0	1373	0.2	2028	930
LOGGERHEAD	NED	95	4	195	0.44	446	85	0	0	0	0	195	0.44	446	85
LOGGERHEAD	OFS	95	1	42	0.57	119	15	0	0	0	0	42	0.57	119	15
LOGGERHEAD	OFS	95	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
LOGGERHEAD	SEC	95	1	31	1	159	6	0	0	0	0	31	1	159	6
LOGGERHEAD	SEC	95	2	86	0.64	272	27	0	0	0	0	86	0.64	272	27
		95 Total		**2231**		**4116**	**1296**	**0**		**0**	**0**	**2231**		**4116**	**1296**

taxon	area	yr	qtr	discards	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
LOGGERHEAD	CAR	96	1	36	0.83	148	9	0	0	0	0	36	0.83	148	9
LOGGERHEAD	CAR	96	4	45	0.67	148	14	0	0	0	0	45	0.67	148	14
LOGGERHEAD	NEC	96	2	49	0.68	164	15	0	0	0	0	49	0.68	164	15
LOGGERHEAD	NEC	96	3	119	0.69	404	35	0	0	0	0	119	0.69	404	35
LOGGERHEAD	NEC	96	4	22	0.66	71	7	2	0.98	10	0	20	0.71	70	6
LOGGERHEAD	NED	96	3	488	0.43	1099	217	2	0.98	10	0	484	0.43	1091	215
LOGGERHEAD	NED	96	4	43	0.64	136	14	0	0	0	0	43	0.64	136	14
LOGGERHEAD	OFS	96	1	66	0.45	153	29	0	0	0	0	66	0.45	153	29
LOGGERHEAD	OFS	96	4	10	0.69	34	3	0	0	0	0	10	0.69	34	3
LOGGERHEAD	SEC	96	1	33	1	169	6	0	0	0	0	33	1	169	6
LOGGERHEAD	SEC	96	2	52	0.6	153	18	0	0	0	0	52	0.6	153	18
LOGGERHEAD	SEC	96	4	23	1	118	4	0	0	0	0	23	1	118	4
		96 Total		**986**		**2797**	**371**	**4**		**20**	**0**	**980**		**2788**	**368**
LOGGERHEAD	CAR	97	4	19	0.67	63	6	0	0	0	0	19	0.67	63	6
LOGGERHEAD	GOM	97	1	17	1	87	3	0	0	0	0	17	1	87	3
LOGGERHEAD	NEC	97	3	93	0.43	210	41	0	0	0	0	93	0.43	210	41
LOGGERHEAD	NEC	97	4	51	0.69	174	15	0	0	0	0	51	0.69	174	15
LOGGERHEAD	NED	97	2	71	0.67	235	21	0	0	0	0	71	0.67	235	21
LOGGERHEAD	NED	97	3	61	0.63	188	20	0	0	0	0	61	0.63	188	20
LOGGERHEAD	NED	97	4	3	0.61	9	1	0	0	0	0	3	0.61	9	1
LOGGERHEAD	OFS	97	1	56	0.74	204	15	0	0	0	0	56	0.74	204	15
LOGGERHEAD	OFS	97	4	9	0.7	31	3	0	0	0	0	9	0.7	31	3
LOGGERHEAD	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
LOGGERHEAD	SEC	97	2	24	1	123	5	0	0	0	0	24	1	123	5
		97 Total		**417**		**1390**	**133**	**0**		**0**	**0**	**417**		**1390**	**133**
LOGGERHEAD	CAR	98	1	21	0.82	86	5	0	0	0	0	21	0.82	86	5
LOGGERHEAD	CAR	98	4	11	0.66	36	3	0	0	0	0	11	0.66	36	3
LOGGERHEAD	NEC	98	3	298	0.47	711	125	0	0	0	0	298	0.47	711	125
LOGGERHEAD	NEC	98	4	150	0.74	549	41	0	0	0	0	150	0.74	549	41
LOGGERHEAD	NED	98	2	23	0.67	76	7	0	0	0	0	23	0.67	76	7
LOGGERHEAD	NED	98	3	425	0.43	958	189	2	0.98	10	0	421	0.43	949	187
LOGGERHEAD	NED	98	4	23	0.64	73	7	0	0	0	0	23	0.64	73	7
LOGGERHEAD	OFS	98	4	3	0.68	10	1	0	0	0	0	3	0.68	10	1
LOGGERHEAD	SEC	98	1	35	1	179	7	0	0	0	0	35	1	179	7
LOGGERHEAD	SEC	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
LOGGERHEAD	SEC	98	4	27	0.7	93	8	0	0	0	0	27	0.7	93	8
		98 Total		**1018**		**2781**	**393**	**2**		**10**	**0**	**1014**		**2772**	**391**

Table 10. Comparison of the revised estimates of total bycatch by taxon and year using two pooling orders: qyn and yqn, (q=quarter, y=year, n=NAREA: the order from left to right represents the pooling priority), crossed with two criteria of minimum observed sets (N_{min}): 5 and 30 (qyn5 is discussed in this report). These revised estimates are compared with previous estimates from three different levels of pooling with no N_{min} criterion as reported in Johnson *et al*. (1999) (J) for 1992-97 turtles, Yeung (1999*a)* (Y*a*) for 1992-97 mammals, and Yeung (1999*b)* (Y*b*) for 1998 turtles and mammals: 1) c1=no pooling; 2) c2=pooling across quarters with an NAREA-year stratum; 3) c3=pooling across quarters and NAREAs with an MAREA-year stratum. The upper(u_*) and lower (l_*) 95% confidence limits for the estimates are given. In the case of the previous estimates, the source report in code (J, Y*a*, Y*b*) and source table number (t*) are indicated. The qyn5 and c2 estimates (shaded) represent the closest pooling schemes between the present and previous reports.

		this report t9a						this report t9b						J t9,Y*a* t6,Y*b* t5 ?A A A A ? ?A A A A ?			J t11,Y*a* t7,Y*b* t6 2) pooled with quarters			J t12,Y*a* t8,Y*b* t7 3) pooled across quarters and NAREAs		
taxon	**yr**	**qyn5**	**u_qyn5**	**l_qyn5**	**qyn30**	**u_qyn30**	**l_qyn30**	**yqn5**	**u_yqn5**	**l_yqn5**	**yqn30**	**u_yqn30**	**l_yqn30**	**c1**	**u_c1**	**l_c1**	**c2**	**u_c2**	**l_c2**	**c3**	**u_c3**	**l_c3**
MARINE MAMMALS																						
MARINE MAMMAL	92	1	5	0	6	25	0				7	25	1									
	93				1	0	0				2	10	0									
	94				1	0	0				2	10	0									
	95	24	123	5	26	133	5	24	123	5	26	133	5	24	123	5	22	114	4	22	112	4
	96	23	117	4	27	127	4	22	112	4	26	122	5	20	102	4	26	133	5	43	220	8
	97				3	15	0				2	10	0									
	98	1	5	0	3	10	0	2	10	0	2	0	0									
	Total	**49**	**250**	**9**	**67**	**310**	**9**	**48**	**245**	**9**	**67**	**310**	**11**	**44**	**225**	**9**	**48**	**247**	**9**	**65**	**332**	**12**
BEAKED WHALE	92	2	10	0							3	0	0									
	93				4	0	0				5	0	0									
	94	2	10	0	2	0	0	5	26	1	6	0	0									
	95				4	0	0	1	5	0	3	0	0									
	96	5	25	1	5	0	0	5	26	1	6	0	0									
	97				2	0	0	2	10	0	2	0	0									
	98	7	36	1	2	0	0	5	26	1	1	0	0	5	26	1	37	189	7	88	450	17
	Total	**16**	**81**	**2**	**19**	**0**	**0**	**18**	**93**	**3**	**26**	**0**	**0**	**5**	**26**	**1**	**37**	**189**	**7**	**88**	**450**	**17**
COMMON DOLPHIN	92	23	117	5	14	71	3	13	66	3	13	66	3	13	66	3	27	138	5	24	123	5
	93																					
	94																					
	95																					
	96	1	5	0	2	10	0	1	5	0	1	5	0									
	97				1	5	0				3	15	1									
	98				1	5	0				3	15	1									
	Total	**24**	**122**	**5**	**18**	**91**	**3**	**14**	**71**	**3**	**20**	**101**	**5**	**13**	**66**	**3**	**27**	**138**	**5**	**24**	**123**	**5**

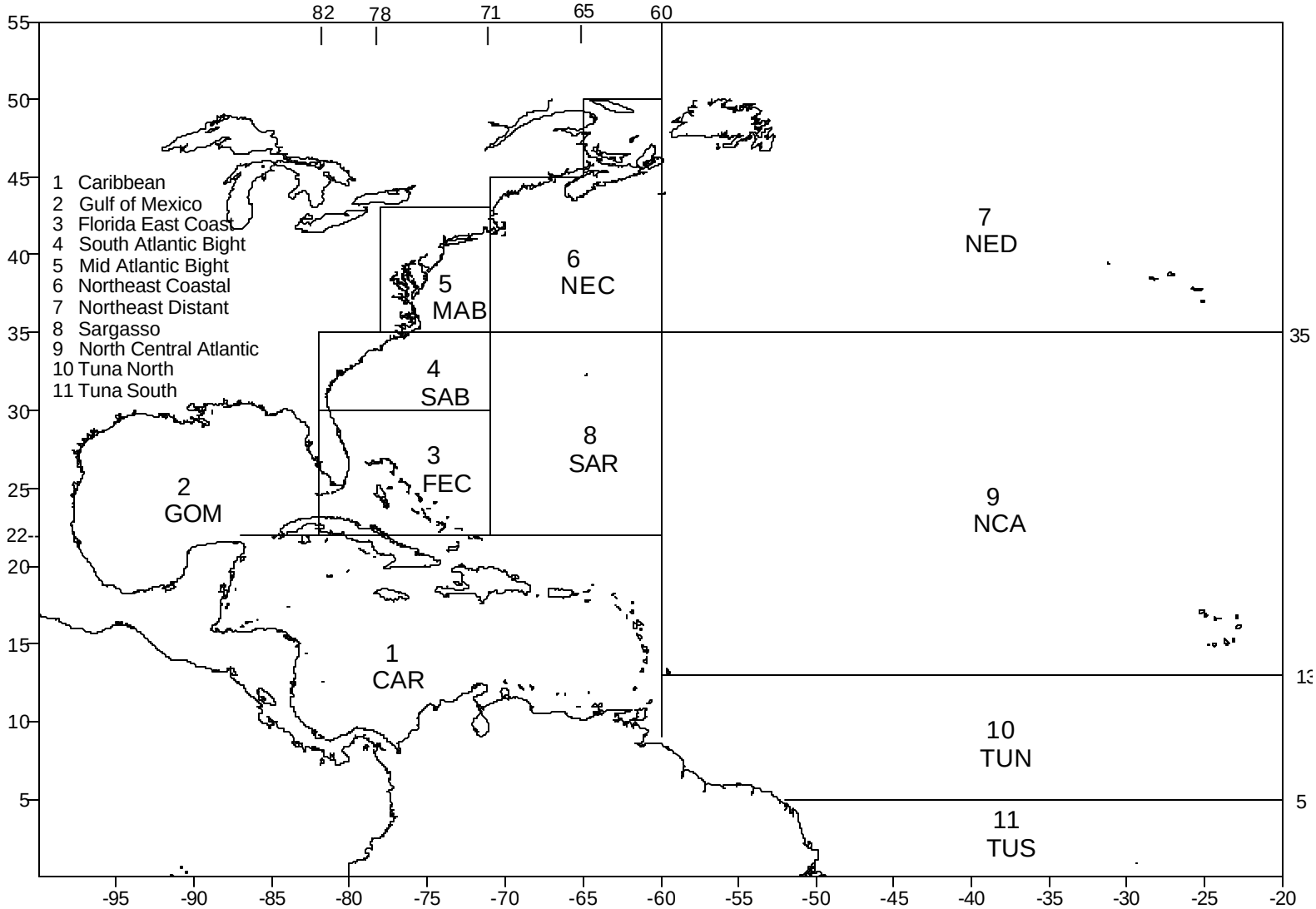
		this report t9a						this report t9b						J t9,Y*a* t6,Y*b* t5 1) no pooling			J t11,Y*a* t7,Y*b* t6 2) pooled with quarters			J t12,Y*a* t8,Y*b* t7 3) pooled across quarters and NAREAs		
taxon	**yr**	**qyn5**	**u_qyn5**	**l_qyn5**	**qyn30**	**u_qyn30**	**l_qyn30**	**yqn5**	**u_yqn5**	**l_yqn5**	**yqn30**	**u_yqn30**	**l_yqn30**	**c1**	**u_c1**	**l_c1**	**c2**	**u_c2**	**l_c2**	**c3**	**u_c3**	**l_c3**
MARINE MAMMALS																						
DOLPHIN	92	26	133	5	1	0	0	19	97	4	2	0	0	25	128	5	18	92	4	17	87	3
	93																					
	94																					
	95										3	0	0									
	96				1	0	0	3	15	1	3	0	0									
	97				1	0	0				1	0	0									
	98				1	0	0				1	0	0									
	Total	**26**	**133**	**5**	**4**	**0**	**0**	**22**	**112**	**5**	**10**	**0**	**0**	**25**	**128**	**5**	**18**	**92**	**4**	**17**	**87**	**3**
ATLANTIC	92				3	15	0				3	15	1									
SPOTTED	93																					
DOLPHIN	94							15	77	3	15	77	3	15	77	3	17	87	3	17	87	3
	95	15	77	3	15	77	3															
	96																					
	97				1	5	0															
	98				4	20	0				3	15	1									
	Total	**15**	**77**	**3**	**23**	**117**	**3**	**15**	**77**	**3**	**21**	**107**	**5**	**15**	**77**	**3**	**17**	**87**	**3**	**17**	**87**	**3**
BOTTLENOSE	92				9	30	0	6	30	2	10	35	2									
DOLPHIN	93	22	112	4	23	117	4	22	112	4	22	112	4	26	133	5	31	158	7	29	148	6
	94				1	5	0				4	10	0									
	95				2	10	0															
	96	5	25	0	9	40	1	3	15	1	3	15	1									
	97	1	5	0	4	20	0															
	98	31	158	6	7	15	0	32	163	7	6	20	1	26	132	5	54	277	10	46	236	9
	Total	**59**	**300**	**10**	**55**	**237**	**5**	**63**	**320**	**14**	**45**	**192**	**8**	**52**	**265**	**10**	**85**	**435**	**17**	**75**	**384**	**15**
PANTROPIC	92				4	20	0	1	5	0	5	25	1									
SPOTTED	93	2	10	0	2	10	0	2	10	0	2	10	0	2	10	0	12	61	2	11	56	2
DOLPHIN	94	26	133	5	27	138	5	26	133	5	27	138	5	26	133	5	20	102	4	20	102	4
	95																					
	96	1	5	0	3	15	0				4	20	1									
	97				1	5	0															
	98				5	25	0				4	20	1									
	Total	**29**	**148**	**5**	**42**	**213**	**5**	**29**	**148**	**5**	**42**	**213**	**8**	**28**	**143**	**5**	**32**	**163**	**6**	**31**	**158**	**6**
DOLPHIN	92	130	547	33	108	399	31	63	256	17	112	417	33	54	212	14	129	524	33	121	497	30
RISSOS	93	80	354	19	81	359	19	80	354	19	80	354	19	83	366	20	63	281	15	62	277	14
	94	116	306	44	122	330	45	116	306	44	122	337	45	103	273	39	88	179	43	87	178	43
	95	105	315	38	117	353	42	105	315	38	105	315	38	112	351	39	100	308	35	101	311	35
	96	207	771	56	81	309	22	196	738	53	83	307	25	176	661	47	265	980	73	99	395	25
	97	1	5	2	24	75	8				18	56	6									
	98	98	339	28	133	469	40	99	344	29	129	461	37	96	329	28	72	249	21	47	163	14
	Total	**737**	**2637**	**220**	**666**	**2294**	**207**	**659**	**2313**	**200**	**649**	**2247**	**203**	**624**	**2192**	**187**	**717**	**2521**	**220**	**517**	**1821**	**161**

		this report t9a						this report t9b						J t9,Y*a* t6,Y*b* t5 1) no pooling			J t11,Y*a* t7,Y*b* t6 2) pooled with quarters			J t12,Y*a* t8,Y*b* t7 3) pooled across quarters and NAREAs		
taxon	**yr**	**qyn5**	**u_qyn5**	**l_qyn5**	**qyn30**	**u_qyn30**	**l_qyn30**	**yqn5**	**u_yqn5**	**l_yqn5**	**yqn30**	**u_yqn30**	**l_yqn30**	**c1**	**u_c1**	**l_c1**	**c2**	**u_c2**	**l_c2**	**c3**	**u_c3**	**l_c3**
MARINE MAMMALS																						
SHORT-BEAKED SPINNER DOLPHIN	92							2	10	0	2	0	0									
	93																					
	94																					
	95										1	0	0									
	96										2	0	0									
	97	13	66	3	11			13	66	3	2	0	0	13	66	3	13	66	3	16	82	3
	98										2	0	0									
	Total	**13**	**66**	**3**	**11**	**0**	**0**	**15**	**76**	**3**	**9**	**0**	**0**	**13**	**66**	**3**	**13**	**66**	**3**	**16**	**82**	**3**
PILOT WHALE	92	601	1837	207	261	728	100	441	1396	150	257	719	99	369	1096	136	465	881	246	420	803	220
	93	190	534	77	191	539	77	190	534	77	193	534	77	180	516	72	200	414	108	193	330	113
	94	224	563	95	228	569	96	224	563	95	224	547	94	144	456	50	168	482	64	161	328	79
	95	288	748	123	288	693	125	288	748	123	271	607	123	282	727	118	251	581	126	252	444	143
	96	57	204	16	153	531	44	43	118	15	158	547	46									
	97	31	157	6	106	423	28	30	153	6	103	362	31	30	153	6	34	174	7	29	148	6
	98	49	250	9	118	490	29	48	245	9	112	434	30	48	245	9	36	184	7	24	123	5
	Total	**1440**	**4293**	**533**	**1345**	**3973**	**499**	**1264**	**3757**	**475**	**1318**	**3750**	**500**	**1053**	**3193**	**391**	**1154**	**2716**	**558**	**1079**	**2176**	**566**
SHORTFIN PILOT WHALE	92	32	164	7	23	117	5	18	92	4	22	112	5									
	93																					
	94																					
	95	31	159	6	32	164	6	31	159	6	31	159	6	63	218	18	58	202	17	58	202	17
	96	3	15	0	7	35	1	1	5	0	6	31	1									
	97				3	15	0				3	15	1									
	98				2	10	0				3	15	1									
	Total	**66**	**338**	**13**	**67**	**341**	**12**	**50**	**256**	**10**	**65**	**332**	**14**	**63**	**218**	**18**	**58**	**202**	**17**	**58**	**202**	**17**

		this report t9a						this report t9a						J t9,Ya t6,Yb t5 1) no pooling			J t11,Ya t7,Yb t6 2) pooled with quarters			J t12,Ya t8,Yb t7 3) pooled across quarters and NAREAs		
species	**yr**	**qyn5**	**u_qyn5**	**l_qyn5**	**qyn30**	**u_qyn30**	**l_qyn30**	**yqn5**	**u_yqn5**	**l_yqn5**	**yqn30**	**u_yqn30**	**l_yqn30**	**c1**	**u_c1**	**l_c1**	**c2**	**u_c2**	**l_c2**	**c3**	**u_c3**	**l_c3**
MARINE TURTLES																						
TURTLE	92	30	148	6	30	129	8	37	175	8	34	112	6	25	128	5	18	92	4	17	87	3
	93	27	138	6	30	150	7	27	138	6	27	138	6	28	143	6	27	138	6	26	132	6
	94	33	168	7	20	98	4	33	168	7	21	107	4	46	235	9	29	149	6	31	159	6
	95	135	464	39	79	278	23	135	464	39	80	239	20	243	801	74	165	412	66	160	404	63
	96	7	35	0	25	111	4	7	35	1	26	55	2									
	97	41	209	8	58	274	12	41	209	8	62	233	10	38	194	8	43	220	9	45	230	9
	98	4	17	1	23	106	6	2	10	0	30	91	3									
	Total	**277**	**1179**	**67**	**265**	**1146**	**64**	**282**	**1199**	**69**	**280**	**975**	**51**	**380**	**1501**	**102**	**282**	**1011**	**91**	**279**	**1012**	**87**
GREEN	92	90	276	29	67	210	19	78	239	26	56	177	17	87	268	29	129	370	46	186	518	68
	93	29	148	5	38	181	8	29	148	5	48	197	12	32	164	6	25	128	5	24	123	5
	94	29	145	6	36	171	8	27	138	5	51	205	13	25	128	5	24	86	7	24	86	7
	95	35	178	7	8	29	1	34	174	7	23	75	7	37	189	7	31	159	6	30	153	6
	96	19	73	4	27	106	5	27	90	8	35	118	9									
	97	4	15	1	10	35	2	1	3	0	5	23	1									
	98	14	52	4	23	92	5	12	41	3	18	61	5									
	Total	**220**	**887**	**56**	**209**	**824**	**48**	**208**	**833**	**54**	**236**	**856**	**64**	**181**	**749**	**47**	**209**	**743**	**64**	**264**	**880**	**86**
HAWKSBILL	92	26	133	5	23	118	4	20	102	4	20	77	3	15	77	3	30	153	6	28	143	5
	93																					
	94										3	0	0									
	95				2	10	0				1	0	0									
	96	3	15	0	8	41	1	1	5	0	3	5	0									
	97	13	66	3	4	20	1	13	66	3	5	15	1	13	66	3	13	66	3	16	82	3
	98	13	66	3	4	20	1	13	66	3	7	15	1	13	66	3	77	394	15	51	261	10
	Total	**55**	**280**	**11**	**41**	**209**	**7**	**47**	**239**	**10**	**39**	**112**	**5**	**41**	**209**	**9**	**120**	**613**	**24**	**95**	**486**	**18**
KEMPS RIDLEY	92	1	5	0	4	20	0	1	5	0	4	20	1									
	93																					
	94	23	117	4	24	122	4	23	117	4	24	122	4	19	97	4	15	77	3	15	77	3
	95				3	15	0															
	96	3	15	0	6	30	0	1	5	0	6	30	1									
	97	18	92	3	20	102	3	18	92	3	18	92	3	17	87	3	23	118	4	24	123	5
	98	1	5	0	3	15	0				2	10	0									
	Total	**46**	**234**	**7**	**60**	**304**	**7**	**43**	**219**	**7**	**54**	**274**	**9**	**36**	**184**	**7**	**38**	**195**	**7**	**39**	**200**	**8**
LEATHERBACK	92	941	2708	362	811	2225	332	764	2188	300	925	2157	344	648	1770	273	871	1948	455	848	1439	505
	93	992	2505	428	945	2367	415	993	2507	428	880	1994	357	1014	2569	433	889	1620	512	840	1379	515
	94	763	2106	309	755	2094	301	774	2136	316	693	1715	239	607	1735	238	700	1683	334	723	1302	402
	95	874	1919	492	953	2103	525	877	1928	494	959	1886	500	996	2062	573	925	1650	570	903	1447	586
	96	726	2387	233	747	2469	246	782	2486	263	815	2275	249	419	1585	121	674	2446	203	378	1122	137
	97	313	1387	73	405	1608	108	319	1390	79	453	1299	94	274	1016	74	357	1331	98	248	751	89
	98	394	1408	117	532	1826	169	435	1465	142	609	1738	186	187	962	35	169	864	32	167	698	41
	Total	**5003**	**14420**	**2014**	**5148**	**14692**	**2096**	**4944**	**14100**	**2022**	**5334**	**13064**	**1969**	**4145**	**11699**	**1747**	**4585**	**11542**	**2204**	**4107**	**8138**	**2275**

		this report t9a						this report t9a						J t9,Ya t6,Yb t5 1) no pooling			J t11,Ya t7,Yb t6 2) pooled with quarters			J t12,Ya t8,Yb t7 3) pooled across quarters and NAREAs		
species	**yr**	**qyn5**	**u_qyn5**	**l_qyn5**	**qyn30**	**u_qyn30**	**l_qyn30**	**yqn5**	**u_yqn5**	**l_yqn5**	**yqn30**	**u_yqn30**	**l_yqn30**	**c1**	**u_c1**	**l_c1**	**c2**	**u_c2**	**l_c2**	**c3**	**u_c3**	**l_c3**
MARINE TURTLES																						
LOGGERHEAD	92	215	930	50	790	2017	348	188	834	43	932	1993	379	116	460	30	247	829	73	177	488	65
	93	392	1312	135	635	1758	268	389	1301	134	483	1171	125	404	1321	141	374	984	156	365	773	188
	94	1299	2285	831	1460	2603	923	1274	2229	819	1296	1960	767	1500	2474	968	1279	2032	874	1509	2234	1032
	95	2233	4113	1298	2124	4022	1241	2231	4116	1296	2005	3657	1155	1748	3435	986	2169	3490	1390	2100	3194	1380
	96	957	2896	328	933	2501	391	986	2797	371	965	2257	380	287	977	90	410	1148	152	476	1048	217
	97	461	1464	156	534	1652	192	417	1390	133	500	1414	127	321	1168	94	329	931	123	336	764	154
	98	987	2866	354	902	2217	395	1018	2781	393	954	2201	392	516	1551	182	472	1152	200	510	1250	225
	Total	**6544**	**15866**	**3152**	**7378**	**16770**	**3758**	**6503**	**15448**	**3189**	**7135**	**14653**	**3325**	**4892**	**11386**	**2491**	**5280**	**10566**	**2968**	**5473**	**9751**	**3261**

Figure 1. The geographical zones used to classify observed and reported U.S. Atlantic pelagic longline fishing effort. For the purpose of estimation, several strata were combined. The Southeast Coastal (SEC) stratum was defined as areas 3 and 4; the Northeast Coastal (NEC) stratum was defined as areas 5 and 6; and the Offshore South (OFS) was defined as areas 8, 9, 10, and 11. Larger regions were also defined as those generally within the US Atlantic EEZ (USATL: SEC, NEC), other Atlantic waters (OTHATL: OFS, areas 1 and 7); and the Gulf of Mexico (GOM: area 2).



New Method

Tables and Figure

August 2000

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1=Loss of/damage to appendage/jaw 2=Inability to use appendage(s)
3=Asymmetry in body shape 4=Rupture/puncture of eyeball
5=Inability to swim or dive 6=Ingestion of gear
7=Mouth is bound by the gear 8=Cetacean is hooked internally (e.g., in the mouth)
9=Animal is anchored 10=Line/net entangling the animal is likely to further entangle the animal
11=Visible blood flow. 12=Swelling or hemorrhage. 13=Laceration.
14=Listlessness/inability to defend itself. 15=Equilibrium imbalance.

A '?' beside the code number indicates that such injury was probably sustained. Animals with injuries matching at least one of criteria 1-10 are considered to be seriously injured (S.I. = 'Y') and may be assumed to have died. Other injuries are not considered serious (S.I. = 'N') and the animal is assumed to have survived. D=dead upon retrieval.....52

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Table 1. Statistical results of general linear model evaluation of the effects of year, area, and quarter on $\log_e$ (catch rate+0.00001) for all NAREAs. Note that the degrees of freedom for year, NAREA, and quarter are 7, 5, and 3, respectively.

Species Group	Model Effect	Type III Sums of Squares	Probability >F
all marine turtles		R^2=0.14, F=41.28, Pr>F=0.0001	
	Year	83.3374	0.0001
	NAREA	1116.4401	0.0001
	Quarter	13.3703	0.1021
all marine turtle except leatherbacks		R^2=0.13, F=39.50, Pr>F=0.0001	
	Year	98.7134	0.0001
	NAREA	640.9803	0.0001
	Quarter	3.9413	0.3946
leatherback turtles only		R^2=0.06, F=17.18, Pr>F=0.0001	
	Year	26.3117	0.0027
	NAREA	229.2220	0.0001
	Quarter	12.5419	0.0154
all marine mammals		R^2=0.04, F=10.98, Pr>F=0.0001	
	Year	6.7273	0.0971
	NAREA	63.2665	0.0001
	Quarter	4.5023	0.0439

Table 2. Statistical results of general linear model evaluation of the effects of year, area, and quarter on $\log_e$ (catch rate + 0.00001) for NAREAs NED and NEC only. Note that the degrees of freedom for year, NAREA, and quarter are 7, 1, and 3, respectively.

Species Group	Model Effect	Type III Sums of Squares	Probability >F
all marine turtles		R^2=0.17, F=27.31, Pr>F=0.0001	
	Year	195.9264	0.0001
	NAREA	644.9117	0.0001
	Quarter	102.3593	0.0001
all marine turtle except leatherbacks		R^2=0.16, F=26.02, Pr>F=0.0001	
	Year	207.7031	0.0001
	NAREA	389.1257	0.0001
	Quarter	34.8504	0.0025
leatherback turtles only		R^2=0.08, F=12.11, Pr>F=0.0001	
	Year	65.4174	0.0001
	NAREA	132.6619	0.0001
	Quarter	36.0157	0.0005
all marine mammals		R^2=0.03, F=3.81, Pr>F=0.0001	
	Year	17.7286	0.0572
	NAREA	32.1809	0.0001
	Quarter	15.2816	0.0082

Table 3. Statistical results of general linear model evaluation of the effects of year, area, and quarter on $\log_e$ (catch rate + 0.00001) for NAREAs CAR, GOM, OFS, SEC only. Note that the degrees of freedom for year, NAREA, and quarter are 7, 3, and 3, respectively.

Species Group	Model Effect	Type III Sums of Squares	Probability >F
all marine turtles		R^2=0.01, F=2.42, Pr>F=0.0030	
	Year	4.4323	0.8395
	NAREA	21.4776	0.0008
	Quarter	8.8954	0.0741
all marine turtle except leatherbacks		R^2=0.03, F=4.93, Pr>F=0.0001	
	Year	6.3233	0.1852
	NAREA	23.9489	0.0001
	Quarter	7.1190	0.0101
leatherback turtles only		R^2=0.005, F=0.96, Pr>F=0.4840	
	Year	5.3085	0.3796
	NAREA	0.8232	0.7621
	Quarter	2.2297	0.3696
all marine mammals		R^2=0.002, F=0.33, Pr>F=0.9877	
	Year	0.1871	0.9808
	NAREA	0.1662	0.7131
	Quarter	0.0931	0.8574

Table 4. Observed effort (sets) sampled from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area. Zeros indicate no observed effort for that year, quarter, or area; blank cells (.) indicate no reported fishing effort (Table 6). Cells which did not meet N_{min}=5 criteria are shown in bold italics.

		quarter				
NAREA	year	1	2	3	4	Grand Total
CAR	92	0	1	0	11	12
	93	21	9	0	10	40
	94	35	0	0	0	35
	95	23	12	12	1	48
	96	3	0	0	3	6
	97	9	0	0	0	9
	98	0	0	.	10	10
	99	17	0	0	0	17
CAR Total		108	22	12	35	177
GOM	92	0	16	8	37	61
	93	43	79	49	64	235
	94	25	33	49	47	154
	95	43	58	47	49	197
	96	30	19	43	32	124
	97	44	42	39	32	157
	98	25	14	21	12	72
	99	47	42	35	53	177
GOM Total		257	303	291	326	1177
NEC	92	0	17	26	61	104
	93	45	40	114	65	264
	94	25	47	89	78	239
	95	39	18	93	50	200
	96	0	0	21	1	22
	97	0	9	66	25	100
	98	20	8	30	18	76
	99	6	4	25	27	62
NEC Total		135	143	464	325	1067
NED	92	.	9	26	46	81
	93	.	6	42	27	75
	94	.	0	37	24	61
	95	0	0	53	12	65
	96	.	.	0	0	0
	97	.	2	40	0	42
	98	.	0	0	0	0
	99	0	23	17	0	40
NED Total		0	40	215	109	364
OFS	93	52	0	0	0	52
	94	19	0	0	0	19
	95	61	22	0	0	83
	96	60	0	17	0	77
	97	33	12	0	0	45
	98	8	4	0	0	12
	99	17	0	0	0	17
OFS Total		250	38	17	0	305

		quarter				
NAREA	year	1	2	3	4	Grand Total
SEC	92	0	28	28	15	71
	93	37	53	35	26	151
	94	33	49	36	20	138
	95	21	48	12	12	93
	96	18	56	16	37	127
	97	28	18	34	15	95
	98	25	53	4	34	116
	99	13	60	17	17	107
SEC Total		175	365	182	176	898

Table 5. Observed effort (hooks) sampled from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area. Zeros indicate no observed effort for that year, quarter, or area; blank cells (.) indicate no reported fishing effort (Table 6).

		quarter				
NAREA	year	1	2	3	4	Grand Total
CAR	92	0	830	0	4409	5239
	93	9840	3525	0	4200	17565
	94	14922	0	0	0	14922
	95	9747	5346	5974	350	21417
	96	879	0	0	1296	2175
	97	3688	0	0	0	3688
	98	0	0	.	6057	6057
	99	12236	0	0	0	12236
CAR Total		51312	9701	5974	16312	83299
GOM	92	0	5794	5853	26538	38185
	93	38395	62925	41454	54187	196961
	94	22666	23561	33639	33231	113097
	95	36925	53530	38340	36856	165651
	96	17900	10865	34105	24341	87211
	97	29101	30911	27220	25173	112405
	98	23096	12210	14964	11760	62030
	99	33717	30885	29578	40147	134327
GOM Total		201800	230681	225153	252233	909867
NEC	92	0	14401	18455	39019	71875
	93	23913	29101	75833	44100	172947
	94	17920	37419	61459	53075	169873
	95	25804	10600	65735	41423	143562
	96	0	0	18670	532	19202
	97	0	4627	53464	22739	80830
	98	13974	5462	20915	13521	53872
	99	2327	3050	18775	21192	45344
NEC Total		83938	104660	333306	235601	757505
NED	92	.	5410	18920	39245	63575
	93	.	3459	29160	23728	56347
	94	.	0	34288	22311	56599
	95	0	0	39093	9669	48762
	96	.	.	0	0	0
	97	.	2050	35518	0	37568
	99	0	18425	13812	0	32237
NED Total		0	29344	170791	94953	295088
OFS	93	33106	0	0	0	33106
	94	11951	0	0	0	11951
	95	42837	17501	0	0	60338
	96	40261	0	12017	0	52278
	97	23966	8338	0	0	32304
	98	6548	2958	0	0	9506
	99	13071	0	0	0	13071
OFS Total		171740	28797	12017	0	212554

		quarter				
NAREA	year	1	2	3	4	Grand Total
SEC	92	0	7709	7481	3855	19045
	93	17312	20295	11594	8735	57936
	94	15801	22824	11174	4568	54367
	95	12187	23034	5712	4197	45130
	96	8399	32825	4764	16505	62493
	97	19137	13856	11040	4745	48778
	98	14634	22605	863	11358	49460
	99	7700	34657	5635	5986	53978
SEC Total		95170	177805	58263	59949	391187

Table 6. Reported effort (sets) from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area. Blank cells (.) indicate no reported effort for that year, quarter, or area.

		quarter					
NAREA	year	unknown	1	2	3	4	Grand Total
unknown	92	.	149	183	162	141	635
	93	4	161	139	235	83	622
	94	1	14	48	59	40	162
	95	.	46	78	23	34	181
	96	1	32	55	35	59	182
	97	.	43	42	58	21	164
	98	.	36	19	34	20	109
	99	.	14	31	22	14	81
CAR	92	.	542	119	3	180	844
	93	1	531	173	17	212	934
	94	.	465	233	83	273	1054
	95	.	614	270	210	49	1143
	96	.	643	188	96	221	1148
	97	.	532	44	50	108	734
	98	.	345	21	.	54	420
	99	.	146	15	1	6	168
GOM	92	.	1070	1050	944	666	3730
	93	4	716	862	1076	774	3432
	94	8	660	807	795	681	2951
	95	.	787	773	890	672	3122
	96	1	877	1262	1352	904	4396
	97	.	1215	970	1386	675	4246
	98	.	886	868	929	805	3488
	99	.	1027	1154	927	854	3962
NEC	92	.	248	600	1549	910	3307
	93	.	87	457	1914	832	3290
	94	.	140	358	1613	1115	3226
	95	.	141	512	1802	1253	3708
	96	1	21	580	1471	372	2445
	97	.	17	320	1471	806	2614
	98	.	119	201	1162	820	2302
	99	.	80	288	1040	657	2065
NED	92	.	.	212	694	256	1162
	93	1	.	137	636	295	1069
	94	.	.	108	574	344	1026
	95	.	4	30	702	197	933
	96	1	.	.	470	222	693
	97	.	.	153	562	12	727
	98	.	.	48	422	133	603
	99	.	4	69	228	108	409
OFS	92	.	366	70	7	95	538
	93	1	494	67	5	130	697
	94	.	386	146	7	257	796
	95	.	796	519	36	23	1374
	96	.	674	457	144	195	1470
	97	1	533	274	39	173	1020
	98	.	374	209	4	82	669
	99	.	195	154	31	66	446

		quarter					
NAREA	year	unknown	1	2	3	4	Grand Total
SEC	92	.	769	1042	860	638	3309
	93	3	689	1208	834	615	3349
	94	3	706	1282	793	603	3387
	95	.	623	1134	553	475	2785
	96	.	716	1462	848	902	3928
	97	.	742	1040	901	536	3219
	98	.	635	1044	507	572	2758
	99	.	770	1051	619	516	2956

Table 7. Reported effort (hooks) from the pelagic longline fishery in the U.S. Atlantic by year, 1992-1998, quarter, and fishing area. Blank cells (.) indicate no reported effort for that year, quarter, or area.

		quarter					
NAREA	year	unknown	1	2	3	4	Grand Total
unknown	92	.	92929	123660	93776	75552	385917
	93	900	84134	69775	138040	53092	345941
	94	75	9680	33900	38610	25456	107721
	95	.	34555	48342	16800	21620	121317
	96	700	17657	32169	18345	35977	104848
	97	.	31805	19350	28261	13120	92536
	98	.	25885	13906	16804	10310	66905
	99	.	5280	12793	4800	4133	27006
CAR	92	.	245395	44550	757	69640	360342
	93	340	212478	67029	6550	81655	368052
	94	.	213084	116322	33704	117183	480293
	95	.	264486	127095	88176	20950	500707
	96	.	332087	101911	44734	118496	597228
	97	.	269588	20700	22263	51874	364425
	98	.	189303	13924	.	33719	236946
	99	.	97764	8000	150	2506	108420
GOM	92	.	625272	711229	671851	486510	2494862
	93	1900	532357	591504	739072	527578	2392411
	94	6400	435629	592057	582602	498301	2114989
	95	.	519812	534695	627225	484707	2166439
	96	800	573931	883876	948220	635219	3042046
	97	.	754286	681742	993223	514131	2943382
	98	.	615657	651767	652232	616563	2536219
	99	.	768652	848802	695680	622382	2935516
NEC	92	.	124589	342774	921332	561410	1950105
	93	.	48049	277977	1237740	564667	2128433
	94	.	96061	233047	1139055	828410	2296573
	95	.	94217	375139	1384138	934515	2788009
	96	1000	12493	417138	1088354	248149	1767134
	97	.	8005	204979	1081444	603193	1897621
	98	.	74280	130290	891264	610795	1706629
	99	.	48090	184682	811224	507278	1551274
NED	92	.	.	133715	467449	179012	780176
	93	600	.	88046	478646	220933	788225
	94	.	.	76508	453969	261711	792188
	95	.	2300	20096	541154	161155	724705
	96	400	.	.	396844	185363	582607
	97	.	.	130843	519467	12109	662419
	98	.	.	41700	347572	100407	489679
	99	.	2650	48100	192726	95243	338719
OFS	92	.	230290	48734	2225	55251	336500
	93	800	305279	39345	2050	73815	421289
	94	.	222736	97191	4050	171151	495128
	95	.	558368	366542	23470	16300	964680
	96	.	465238	341204	122572	159436	1088450
	97	950	433815	203352	31005	145911	815033
	98	.	303876	159561	2902	55814	522153
	99	.	137780	120359	27410	58928	344477
SEC	92	.	246526	342757	246171	174607	1010061
	93	2050	220554	432553	262565	180029	1097751

		quarter					
NAREA	year	unknown	1	2	3	4	Grand Total
	94	1300	279282	477738	239721	185505	1183546
	95	.	253514	528068	189866	152371	1123819
	96	.	363123	707620	328714	394887	1794344
	97	.	357542	428253	319084	186106	1290985
	98	.	290016	460390	168046	198536	1116988
	99	.	359185	501437	218790	172189	1251601

Table 8a. Estimated bycatch of marine mammals and marine turtles in the U.S. Atlantic longline fishery, stratified by taxon-year-quarter-NAREA (grouped fishing areas). The table is sorted in the order of year, quarter, NAREA. Estimated total bycatch (discard) is the sum of the estimated number of animals dead (dead) and animals alive (alive) upon return to the sea as reported by observers. Estimated coefficients of variation for the catch estimates (cv_c, cv_d, cv_a for total, dead, and alive catches, respectively), and upper and lower 95% lognormal confidence bounds (u_disc, l_disc for total catch; u_dead, l_dead for dead animals; and u_live, l_live for living animals) are also given. Where observer effort is less than 5 sets for a taxon-NAREA-year-quarter stratum, a pooled bycatch rate is estimated by pooling observations across quarters or across quarters and years to achieve the minimum of 5 observed sets (**qyn5**). No listing for a taxon-year-NAREA stratum implies an estimate of 0.

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	GOM	92	1	12	1	61	2	0	0	0	0	12	1	61	2
COMMON DOLPHIN	NEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NEC	92	1	5	0.69	17	1	5	0.69	17	1	0	0	0	0
PILOT WHALE	NEC	92	1	28	0.56	78	10	8	0.85	34	2	20	0.55	55	7
PILOT WHALE SHORTFIN	NEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			1 Total	**50**		**181**	**13**	**13**		**51**	**3**	**37**		**141**	**9**
DOLPHIN	NEC	92	2	20	1	102	4	0	0	0	0	20	1	102	4
			2 Total	**20**		**102**	**4**	**0**		**0**	**0**	**20**		**102**	**4**
PILOT WHALE	NEC	92	3	307	0.73	1111	85	102	1	522	20	205	0.69	699	60
			3 Total	**307**		**1111**	**85**	**102**		**522**	**20**	**205**		**699**	**60**
DOLPHIN RISSOS	GOM	92	4	15	1	77	3	0	0	0	0	15	1	77	3
COMMON DOLPHIN	NEC	92	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
DOLPHIN RISSOS	NEC	92	4	40	0.7	138	12	40	0.7	138	12	0	0	0	0
PILOT WHALE	NEC	92	4	131	0.38	270	64	30	0.71	105	9	100	0.41	218	46
PILOT WHALE SHORTFIN	NEC	92	4	18	1	92	4	0	0	0	0	18	1	92	4
			4 Total	**217**		**643**	**86**	**70**		**243**	**21**	**146**		**453**	**56**
		92 Total		**594**		**2037**	**188**	**185**		**816**	**44**	**408**		**1395**	**129**
DOLPHIN RISSOS	GOM	93	1	44	1	225	9	44	1	225	9	0	0	0	0
DOLPHIN BOTTLENOSE	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN PANTROPIC SPOTTED	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
PILOT WHALE	NEC	93	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
			1 Total	**51**		**260**	**10**	**44**		**225**	**9**	**7**		**35**	**1**
PILOT WHALE	NEC	93	2	46	0.5	117	18	0	0	0	0	46	0.5	117	18
PILOT WHALE	SEC	93	2	23	1	118	4	0	0	0	0	23	1	118	4
			2 Total	**69**		**235**	**22**	**0**		**0**	**0**	**69**		**235**	**22**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	NEC	93	3	36	0.73	129	10	0	0	0	0	36	0.73	129	10
PILOT WHALE	NEC	93	3	14	1	72	3	0	0	0	0	14	1	72	3
DOLPHIN BOTTLENOSE	NED	93	3	20	1	102	4	0	0	0	0	20	1	102	4
			3 Total	**70**		**303**	**17**	**0**		**0**	**0**	**70**		**303**	**17**
PILOT WHALE	NEC	93	4	103	0.38	213	50	17	1	87	3	86	0.42	190	39
			4 Total	**103**		**213**	**50**	**17**		**87**	**3**	**86**		**190**	**39**
		93 Total		**293**		**1011**	**99**	**61**		**312**	**12**	**232**		**763**	**79**
PILOT WHALE	NEC	94	1	5	1.01	26	1	0	0	0	0	5	1.01	26	1
			1 Total	**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
DOLPHIN PANTROPIC SPOTTED	GOM	94	2	27	1	138	5	0	0	0	0	27	1	138	5
WHALE KILLER	NED	94	2	1	0.98	5	0	1	0.98	5	0	0	0	0	0
			2 Total	**28**		**143**	**5**	**1**		**5**	**0**	**27**		**138**	**5**
DOLPHIN ATLANTIC SPOTTED	GOM	94	3	15	1	77	3	15	1	77	3	0	0	0	0
DOLPHIN RISSOS	NEC	94	3	67	0.49	167	27	67	0.49	167	27	0	0	0	0
PILOT WHALE	NEC	94	3	202	0.43	450	91	180	0.47	433	75	22	1	112	4
WHALE KILLER	NED	94	3	13	0.99	66	3	13	0.99	66	3	0	0	0	0
			3 Total	**297**		**760**	**124**	**275**		**743**	**108**	**22**		**112**	**4**
DOLPHIN RISSOS	NEC	94	4	49	0.57	139	17	49	0.57	139	17	0	0	0	0
PILOT WHALE	NEC	94	4	17	1	87	3	17	1	87	3	0	0	0	0
			4 Total	**66**		**226**	**20**	**66**		**226**	**20**	**0**		**0**	**0**
		94 Total		**396**		**1155**	**150**	**342**		**974**	**128**	**54**		**276**	**10**
DOLPHIN RISSOS	NED	95	2	1	0.98	5	0	1	0.98	5	0	0	0	0	0
			2 Total	**1**		**5**	**0**	**1**		**5**	**0**	**0**		**0**	**0**
DOLPHIN RISSOS	NEC	95	3	87	0.51	223	34	69	0.59	202	24	18	1	92	4
MARINE MAMMAL	NEC	95	3	24	1	123	5	0	0	0	0	24	1	123	5
PILOT WHALE	NEC	95	3	177	0.35	343	91	177	0.35	343	91	0	0	0	0
PILOT WHALE SHORTFIN	NEC	95	3	31	1	159	6	31	1	159	6	0	0	0	0
DOLPHIN RISSOS	NED	95	3	18	1	92	4	18	1	92	4	0	0	0	0
			3 Total	**337**		**940**	**140**	**295**		**796**	**125**	**42**		**215**	**9**
PILOT WHALE	NEC	95	4	105	0.51	268	41	86	0.59	251	30	19	1	97	4
PILOT WHALE	SEC	95	4	36	1	184	7	0	0	0	0	36	1	184	7
			4 Total	**141**		**452**	**48**	**86**		**251**	**30**	**55**		**281**	**11**
		95 Total		**479**		**1397**	**188**	**382**		**1052**	**155**	**97**		**496**	**20**
DOLPHIN RISSOS	NEC	96	1	2	0.71	7	1	1	0.98	5	0	1	0.98	5	0
			1 Total	**2**		**7**	**1**	**1**		**5**	**0**	**1**		**5**	**0**
DOLPHIN RISSOS	NEC	96	2	59	0.72	209	17	21	1	107	4	38	1	194	7
			2 Total	**59**		**209**	**17**	**21**		**107**	**4**	**38**		**194**	**7**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	GOM	96	3	24	1	123	5	24	1	123	5	0	0	0	0
DOLPHIN RISSOS	NEC	96	3	161	0.72	570	45	58	1	297	11	103	1	527	20
DOLPHIN BOTTLENOSE	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN RISSOS	NED	96	3	2	0.98	10	0	2	0.98	10	0	0	0	0	0
MARINE MAMMAL	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
WHALE KILLER	NED	96	3	1	0.98	5	0	1	0.98	5	0	0	0	0	0
			3 Total	**191**		**723**	**50**	**85**		**435**	**16**	**106**		**542**	**20**
DOLPHIN RISSOS	NEC	96	4	36	0.72	128	10	13	0.99	66	3	23	1	118	4
DOLPHIN BOTTLENOSE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN RISSOS	NED	96	4	1	0.98	5	0	1	0.98	5	0	0	0	0	0
MARINE MAMMAL	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
WHALE KILLER	NED	96	4	1	0.98	5	0	1	0.98	5	0	0	0	0	0
MARINE MAMMAL	SEC	96	4	20	1	102	4	0	0	0	0	20	1	102	4
			4 Total	**60**		**250**	**14**	**15**		**76**	**3**	**45**		**230**	**8**
		96 Total		**312**		**1189**	**82**	**122**		**623**	**23**	**190**		**971**	**35**
DOLPHIN SPINNER SHORT-BEAKED	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
			1 Total	**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
PILOT WHALE	NEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
			3 Total	**30**		**153**	**6**	**0**		**0**	**0**	**30**		**153**	**6**
		97 Total		**43**		**219**	**9**	**0**		**0**	**0**	**43**		**219**	**9**
BEAKED WHALE	CAR	98	1	30	1	153	6	0	0	0	0	30	1	153	6
DOLPHIN BOTTLENOSE	GOM	98	1	25	1	128	5	25	1	128	5	0	0	0	0
DOLPHIN BOTTLENOSE	NEC	98	1	4	0.98	20	1	0	0	0	0	4	0.98	20	1
			1 Total	**59**		**301**	**12**	**25**		**128**	**5**	**34**		**173**	**7**
BEAKED WHALE	CAR	98	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			2 Total	**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
DOLPHIN RISSOS	NEC	98	3	96	0.7	329	28	48	1	245	9	49	1	251	10
PILOT WHALE	NEC	98	3	48	1	245	9	0	0	0	0	48	1	245	9
DOLPHIN BOTTLENOSE	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN RISSOS	NED	98	3	2	0.98	10	0	2	0.98	10	0	0	0	0	0
MARINE MAMMAL	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
WHALE KILLER	NED	98	3	1	0.98	5	0	1	0.98	5	0	0	0	0	0
			3 Total	**150**		**604**	**37**	**51**		**260**	**9**	**100**		**511**	**19**
BEAKED WHALE	CAR	98	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
			4 Total	**5**		**26**	**1**	**0**		**0**	**0**	**5**		**26**	**1**
		98 Total		**216**		**941**	**50**	**76**		**388**	**14**	**141**		**720**	**27**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	NEC	99	2	3	0.98	15	1	3	0.98	15	1	0	0	0	0
PILOT WHALE	NEC	99	2	28	0.78	108	7	28	0.78	108	7	0	0	0	0
PILOT WHALE	SEC	99	2	7	1	36	1	7	1	36	1	0	0	0	0
			2 Total	**38**		**159**	**9**	**38**		**159**	**9**	**0**		**0**	**0**
PILOT WHALE	NEC	99	3	306	0.78	1183	79	306	0.78	1183	79	0	0	0	0
MARINE MAMMAL	NED	99	3	12	1	61	2	0	0	0	0	12	1	61	2
			3 Total	**318**		**1244**	**81**	**306**		**1183**	**79**	**12**		**61**	**2**
DOLPHIN RISSOS	NEC	99	4	18	1	92	4	18	1	92	4	0	0	0	0
MARINE MAMMAL	NED	99	4	2	0.98	10	0	0	0	0	0	2	0.98	10	0
			4 Total	**20**		**102**	**4**	**18**		**92**	**4**	**2**		**10**	**0**
		99 Total		**376**		**1505**	**94**	**362**		**1434**	**92**	**14**		**71**	**2**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	CAR	92	1	54	1	276	11	54	1	276	11	0	0	0	0
TURTLE LOGGERHEAD	CAR	92	1	108	0.67	357	33	0	0	0	0	108	0.67	357	33
TURTLE	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE GREEN	NEC	92	1	2	0.71	7	1	0	0	0	0	1	0.98	5	0
TURTLE HAWKSBILL	NEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE LEATHERBACK	NEC	92	1	38	0.57	108	13	0	0	0	0	38	0.57	108	13
TURTLE LOGGERHEAD	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
KEMPS RIDLEY	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE LEATHERBACK	OFS	92	1	10	0.75	37	3	0	0	0	0	10	0.75	37	3
TURTLE LOGGERHEAD	OFS	92	1	15	0.69	51	4	0	0	0	0	15	0.69	51	4
TURTLE LEATHERBACK	SEC	92	1	26	0.7	89	8	0	0	0	0	26	0.7	89	8
			1 Total	**261**		**965**	**74**	**54**		**276**	**11**	**206**		**687**	**62**
TURTLE LEATHERBACK	CAR	92	2	10	1	51	2	10	1	51	2	0	0	0	0
TURTLE LOGGERHEAD	CAR	92	2	20	0.67	66	6	0	0	0	0	20	0.67	66	6
TURTLE	NEC	92	2	20	1	102	4	0	0	0	0	20	1	102	4
TURTLE GREEN	NEC	92	2	40	0.69	135	12	0	0	0	0	20	1	102	4
TURTLE LEATHERBACK	NEC	92	2	71	0.69	242	21	0	0	0	0	71	0.69	242	21
TURTLE LOGGERHEAD	NEC	92	2	23	1	118	4	0	0	0	0	23	1	118	4
TURTLE LEATHERBACK	NED	92	2	98	0.4	207	46	0	0	0	0	98	0.4	207	46
TURTLE LOGGERHEAD	NED	92	2	28	1	143	5	0	0	0	0	28	1	143	5

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	OFS	92	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
TURTLE LOGGERHEAD	OFS	92	2	3	0.68	10	1	0	0	0	0	3	0.68	10	1
		2 Total		**315**		**1081**	**102**	**10**		**51**	**2**	**285**		**997**	**92**
TURTLE LEATHERBACK	NEC	92	3	149	0.75	548	41	0	0	0	0	149	0.75	548	41
TURTLE LEATHERBACK	NED	92	3	44	0.69	150	13	0	0	0	0	44	0.69	150	13
TURTLE LOGGERHEAD	NED	92	3	27	1	138	5	0	0	0	0	27	1	138	5
TURTLE LEATHERBACK	SEC	92	3	64	0.69	219	19	0	0	0	0	64	0.69	219	19
		3 Total		**284**		**1055**	**78**	**0**		**0**	**0**	**284**		**1055**	**78**
TURTLE LEATHERBACK	CAR	92	4	17	1	87	3	17	1	87	3	0	0	0	0
TURTLE LOGGERHEAD	CAR	92	4	33	0.67	109	10	0	0	0	0	33	0.67	109	10
TURTLE HAWKSBILL	NEC	92	4	15	1	77	3	0	0	0	0	15	1	77	3
TURTLE LEATHERBACK	NEC	92	4	219	0.28	377	127	0	0	0	0	219	0.28	377	127
TURTLE LOGGERHEAD	NEC	92	4	11	1	56	2	0	0	0	0	11	1	56	2
TURTLE GREEN	NED	92	4	37	0.52	96	14	5	1.01	26	1	32	0.53	85	12
TURTLE LEATHERBACK	OFS	92	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
TURTLE LOGGERHEAD	OFS	92	4	3	0.68	10	1	0	0	0	0	3	0.68	10	1
		4 Total		**337**		**819**	**161**	**22**		**113**	**4**	**315**		**721**	**156**
		92 Total		**1197**		**3920**	**415**	**86**		**440**	**17**	**1090**		**3460**	**388**
TURTLE LOGGERHEAD	CAR	93	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE GREEN	GOM	93	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE LEATHERBACK	GOM	93	1	105	0.47	250	44	0	0	0	0	105	0.47	250	44
TURTLE LOGGERHEAD	OFS	93	1	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE LOGGERHEAD	SEC	93	1	8	1	41	2	8	1	41	2	0	0	0	0
		1 Total		**156**		**511**	**54**	**8**		**41**	**2**	**148**		**470**	**52**
TURTLE	GOM	93	2	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE LEATHERBACK	GOM	93	2	30	0.49	75	12	0	0	0	0	30	0.49	75	12
TURTLE LEATHERBACK	NEC	93	2	126	0.28	215	74	0	0	0	0	126	0.28	215	74
TURTLE LOGGERHEAD	NEC	93	2	30	0.58	86	10	0	0	0	0	30	0.58	86	10
TURTLE LEATHERBACK	NED	93	2	119	0.54	323	44	0	0	0	0	119	0.54	323	44
TURTLE LOGGERHEAD	OFS	93	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE LOGGERHEAD	SEC	93	2	18	1	92	4	0	0	0	0	18	1	92	4
		2 Total		**333**		**842**	**146**	**0**		**0**	**0**	**333**		**842**	**146**
TURTLE LOGGERHEAD	CAR	93	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
TURTLE LEATHERBACK	GOM	93	3	41	1	210	8	0	0	0	0	41	1	210	8
TURTLE	NEC	93	3	18	1	92	4	0	0	0	0	0	0	0	0
TURTLE LEATHERBACK	NEC	93	3	169	0.42	373	77	0	0	0	0	169	0.42	373	77
TURTLE LOGGERHEAD	NEC	93	3	31	0.71	108	9	0	0	0	0	31	0.71	108	9
TURTLE GREEN	NED	93	3	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LEATHERBACK	NED	93	3	222	0.35	434	113	0	0	0	0	222	0.35	434	113

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LOGGERHEAD	NED	93	3	155	0.37	311	77	0	0	0	0	155	0.37	311	77
TURTLE LEATHERBACK	SEC	93	3	20	1	102	4	0	0	0	0	20	1	102	4
TURTLE LOGGERHEAD	SEC	93	3	16	1	82	3	0	0	0	0	16	1	82	3
		3 Total		**685**		**1777**	**297**	**0**		**0**	**0**	**667**		**1685**	**293**
TURTLE LEATHERBACK	CAR	93	4	20	1	102	4	0	0	0	0	20	1	102	4
TURTLE LOGGERHEAD	CAR	93	4	40	0.67	131	12	0	0	0	0	40	0.67	131	12
TURTLE LOGGERHEAD	GOM	93	4	26	1	133	5	0	0	0	0	26	1	133	5
TURTLE LEATHERBACK	NEC	93	4	44	0.43	99	20	0	0	0	0	44	0.43	99	20
TURTLE LEATHERBACK	NED	93	4	42	0.47	101	17	0	0	0	0	42	0.47	101	17
TURTLE LOGGERHEAD	NED	93	4	10	1	51	2	0	0	0	0	10	1	51	2
TURTLE LOGGERHEAD	OFS	93	4	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE LEATHERBACK	SEC	93	4	41	0.69	140	12	0	0	0	0	41	0.69	140	12
TURTLE LOGGERHEAD	SEC	93	4	22	1	112	4	0	0	0	0	22	1	112	4
		4 Total		**247**		**879**	**76**	**0**		**0**	**0**	**247**		**879**	**76**
		93 Total		**1421**		**4009**	**573**	**8**		**41**	**2**	**1395**		**3876**	**567**
TURTLE LEATHERBACK	GOM	94	0	1	0.81	4	0	0	0	0	0	1	0.81	4	0
		0 Total		**1**		**4**	**0**	**0**		**0**	**0**	**1**		**4**	**0**
TURTLE LEATHERBACK	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE LOGGERHEAD	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE	GOM	94	1	20	1	102	4	0	0	0	0	20	1	102	4
TURTLE LEATHERBACK	GOM	94	1	132	0.38	272	64	0	0	0	0	132	0.38	272	64
TURTLE LEATHERBACK	OFS	94	1	21	1	107	4	0	0	0	0	21	1	107	4
		1 Total		**217**		**705**	**80**	**0**		**0**	**0**	**217**		**705**	**80**
TURTLE LEATHERBACK	CAR	94	2	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LOGGERHEAD	CAR	94	2	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LEATHERBACK	GOM	94	2	104	0.48	254	43	0	0	0	0	104	0.48	254	43
TURTLE GREEN	NEC	94	2	5	1.01	26	1	0	0	0	0	5	1.01	26	1
TURTLE LEATHERBACK	NEC	94	2	16	0.7	55	5	0	0	0	0	16	0.7	55	5
TURTLE LOGGERHEAD	NEC	94	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
TURTLE	NED	94	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE LEATHERBACK	NED	94	2	19	0.65	61	6	0	0	0	0	19	0.65	61	6
TURTLE LOGGERHEAD	NED	94	2	115	0.33	215	62	1	0.98	5	0	113	0.33	211	61
TURTLE LEATHERBACK	OFS	94	2	9	1	46	2	0	0	0	0	9	1	46	2
		2 Total		**309**		**842**	**127**	**1**		**5**	**0**	**307**		**838**	**126**
TURTLE LEATHERBACK	CAR	94	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
TURTLE LOGGERHEAD	CAR	94	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
TURTLE LEATHERBACK	GOM	94	3	16	1	82	3	0	0	0	0	16	1	82	3
KEMPS RIDLEY	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE GREEN	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	NEC	94	3	79	0.5	198	32	0	0	0	0	79	0.5	198	32
TURTLE	NED	94	3	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE LEATHERBACK	NED	94	3	175	0.31	315	97	0	0	0	0	175	0.31	315	97
TURTLE LOGGERHEAD	NED	94	3	1015	0.17	1403	734	13	0.99	66	3	988	0.17	1369	713
TURTLE LEATHERBACK	SEC	94	3	39	0.7	134	11	0	0	0	0	39	0.7	134	11
		3 Total		**1387**		**2452**	**890**	**13**		**66**	**3**	**1360**		**2418**	**869**
TURTLE LEATHERBACK	CAR	94	4	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LOGGERHEAD	CAR	94	4	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LEATHERBACK	GOM	94	4	14	1	72	3	0	0	0	0	14	1	72	3
TURTLE LEATHERBACK	NEC	94	4	67	0.62	206	22	0	0	0	0	67	0.62	206	22
TURTLE LOGGERHEAD	NEC	94	4	30	0.7	104	9	14	1	72	3	16	1	82	3
TURTLE LEATHERBACK	NED	94	4	10	1	51	2	0	0	0	0	10	1	51	2
TURTLE LOGGERHEAD	NED	94	4	95	0.49	234	39	0	0	0	0	95	0.49	234	39
TURTLE LEATHERBACK	OFS	94	4	16	1	82	3	0	0	0	0	16	1	82	3
		4 Total		**256**		**871**	**82**	**14**		**72**	**3**	**242**		**849**	**76**
		94 Total		**2170**		**4874**	**1179**	**28**		**143**	**6**	**2127**		**4814**	**1151**
TURTLE LEATHERBACK	NEC	95	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE LEATHERBACK	NED	95	1	2	0.61	6	1	0	0	0	0	2	0.61	6	1
TURTLE LOGGERHEAD	NED	95	1	5	0.31	9	3	0	0	0	0	5	0.31	9	3
TURTLE LEATHERBACK	OFS	95	1	44	0.57	125	15	0	0	0	0	44	0.57	125	15
TURTLE LOGGERHEAD	OFS	95	1	41	0.57	116	14	0	0	0	0	41	0.57	116	14
TURTLE	SEC	95	1	66	0.69	225	19	0	0	0	0	66	0.69	225	19
TURTLE LOGGERHEAD	SEC	95	1	31	1	159	6	0	0	0	0	31	1	159	6
		1 Total		**191**		**650**	**58**	**0**		**0**	**0**	**191**		**650**	**58**
TURTLE LEATHERBACK	GOM	95	2	40	0.49	100	16	0	0	0	0	40	0.49	100	16
TURTLE LEATHERBACK	NEC	95	2	36	1	184	7	0	0	0	0	36	1	184	7
TURTLE LOGGERHEAD	NEC	95	2	170	0.42	374	77	0	0	0	0	170	0.42	374	77
TURTLE LEATHERBACK	NED	95	2	18	0.58	52	6	0	0	0	0	18	0.58	52	6
TURTLE LOGGERHEAD	NED	95	2	47	0.32	87	25	0	0	0	0	47	0.32	87	25
TURTLE LEATHERBACK	OFS	95	2	64	0.73	231	18	0	0	0	0	64	0.73	231	18
TURTLE	SEC	95	2	69	0.7	239	20	0	0	0	0	69	0.7	239	20
TURTLE LEATHERBACK	SEC	95	2	45	0.74	165	12	0	0	0	0	45	0.74	165	12
TURTLE LOGGERHEAD	SEC	95	2	86	0.64	272	27	0	0	0	0	86	0.64	272	27
		2 Total		**575**		**1704**	**208**	**0**		**0**	**0**	**575**		**1704**	**208**
TURTLE LEATHERBACK	NEC	95	3	34	0.7	118	10	0	0	0	0	34	0.7	118	10
TURTLE LOGGERHEAD	NEC	95	3	204	0.36	406	102	0	0	0	0	204	0.36	406	102
TURTLE LEATHERBACK	NED	95	3	563	0.17	787	403	0	0	0	0	563	0.17	787	403
TURTLE LOGGERHEAD	NED	95	3	1371	0.2	2025	928	0	0	0	0	1371	0.2	2025	928
TURTLE LEATHERBACK	OFS	95	3	2	0.61	6	1	0	0	0	0	2	0.61	6	1

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LOGGERHEAD	OFS	95	3	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE GREEN	SEC	95	3	34	1	174	7	0	0	0	0	34	1	174	7
		3 Total		**2209**		**3519**	**1451**	**0**		**0**	**0**	**2209**		**3519**	**1451**
TURTLE LEATHERBACK	GOM	95	4	11	1	56	2	0	0	0	0	11	1	56	2
TURTLE LOGGERHEAD	NEC	95	4	108	0.43	242	48	0	0	0	0	108	0.43	242	48
TURTLE LEATHERBACK	NED	95	4	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE LOGGERHEAD	NED	95	4	195	0.44	446	85	0	0	0	0	195	0.44	446	85
TURTLE LEATHERBACK	OFS	95	4	2	0.61	6	1	0	0	0	0	2	0.61	6	1
TURTLE LOGGERHEAD	OFS	95	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
		4 Total		**334**		**840**	**139**	**0**		**0**	**0**	**334**		**840**	**139**
		95 Total		**3309**		**6713**	**1856**	**0**		**0**	**0**	**3309**		**6713**	**1856**
TURTLE LEATHERBACK	CAR	96	1	129	0	0	0	0	0	0	0	129	0	0	0
TURTLE LEATHERBACK	NEC	96	1	2	0.49	5	1	0	0	0	0	2	0.49	5	1
TURTLE LOGGERHEAD	NEC	96	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE LOGGERHEAD	OFS	96	1	65	0.45	150	28	0	0	0	0	65	0.45	150	28
TURTLE LOGGERHEAD	SEC	96	1	33	1	169	6	0	0	0	0	33	1	169	6
		1 Total		**230**		**327**	**35**	**0**		**0**	**0**	**230**		**327**	**35**
TURTLE LEATHERBACK	CAR	96	2	40	0	0	0	0	0	0	0	40	0	0	0
TURTLE LEATHERBACK	NEC	96	2	61	0.55	167	22	0	0	0	0	61	0.55	167	22
TURTLE LOGGERHEAD	NEC	96	2	44	0.69	149	13	0	0	0	0	44	0.69	149	13
TURTLE LOGGERHEAD	OFS	96	2	37	0.45	86	16	0	0	0	0	37	0.45	86	16
TURTLE LEATHERBACK	SEC	96	2	36	1	184	7	0	0	0	0	36	1	184	7
TURTLE LOGGERHEAD	SEC	96	2	52	0.6	153	18	0	0	0	0	52	0.6	153	18
		2 Total		**270**		**739**	**76**	**0**		**0**	**0**	**270**		**739**	**76**
TURTLE LEATHERBACK	CAR	96	3	17	0	0	0	0	0	0	0	17	0	0	0
TURTLE LEATHERBACK	GOM	96	3	97	0.62	297	32	0	0	0	0	97	0.62	297	32
TURTLE LEATHERBACK	NEC	96	3	165	0.55	452	60	0	0	0	0	165	0.55	452	60
TURTLE LOGGERHEAD	NEC	96	3	119	0.69	404	35	0	0	0	0	119	0.69	404	35
TURTLE	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE GREEN	NED	96	3	11	0.75	41	3	1	0.98	5	0	10	0.77	38	3
TURTLE LEATHERBACK	NED	96	3	162	0.56	452	58	0	0	0	0	162	0.56	452	58
TURTLE LOGGERHEAD	NED	96	3	336	0.53	896	126	1	0.98	5	0	333	0.53	888	125
		3 Total		**908**		**2547**	**314**	**2**		**10**	**0**	**904**		**2536**	**313**
TURTLE LEATHERBACK	CAR	96	4	47	0	0	0	0	0	0	0	47	0	0	0
TURTLE LEATHERBACK	GOM	96	4	28	1	143	5	0	0	0	0	28	1	143	5
TURTLE LEATHERBACK	NEC	96	4	36	0.55	99	13	0	0	0	0	36	0.55	99	13
TURTLE LOGGERHEAD	NEC	96	4	26	0.69	88	8	0	0	0	0	26	0.69	88	8
TURTLE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE GREEN	NED	96	4	5	0.77	19	1	1	0.98	5	0	5	0.77	19	1

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	NED	96	4	77	0.56	215	28	0	0	0	0	77	0.56	215	28
TURTLE LOGGERHEAD	NED	96	4	159	0.53	424	60	1	0.98	5	0	158	0.53	421	59
TURTLE LOGGERHEAD	OFS	96	4	18	0.45	42	8	0	0	0	0	18	0.45	42	8
TURTLE LEATHERBACK	SEC	96	4	18	1	92	4	0	0	0	0	18	1	92	4
TURTLE LOGGERHEAD	SEC	96	4	23	1	118	4	0	0	0	0	23	1	118	4
		4 Total		**438**		**1245**	**131**	**2**		**10**	**0**	**437**		**1242**	**130**
		96 Total		**1846**		**4858**	**556**	**4**		**20**	**0**	**1841**		**4844**	**554**
TURTLE LEATHERBACK	CAR	97	1	76	1	389	15	0	0	0	0	76	1	389	15
TURTLE	GOM	97	1	21	1	107	4	0	0	0	0	21	1	107	4
TURTLE LEATHERBACK	GOM	97	1	79	1	404	15	0	0	0	0	79	1	404	15
TURTLE LOGGERHEAD	GOM	97	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE LOGGERHEAD	NEC	97	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
KEMPS RIDLEY	OFS	97	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE	OFS	97	1	19	1	97	4	0	0	0	0	19	1	97	4
TURTLE LEATHERBACK	OFS	97	1	36	0.69	123	10	0	0	0	0	36	0.69	123	10
TURTLE LOGGERHEAD	OFS	97	1	56	0.74	204	15	0	0	0	0	56	0.74	204	15
TURTLE HAWKSBILL	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE LOGGERHEAD	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		1 Total		**348**		**1633**	**75**	**0**		**0**	**0**	**348**		**1633**	**75**
TURTLE LEATHERBACK	CAR	97	2	6	1.01	31	1	0	0	0	0	6	1.01	31	1
TURTLE LEATHERBACK	NED	97	2	4	0.98	20	1	0	0	0	0	4	0.98	20	1
TURTLE LOGGERHEAD	NED	97	2	15	0.62	46	5	0	0	0	0	15	0.62	46	5
TURTLE LOGGERHEAD	SEC	97	2	24	1	123	5	0	0	0	0	24	1	123	5
		2 Total		**49**		**220**	**12**	**0**		**0**	**0**	**49**		**220**	**12**
TURTLE LEATHERBACK	CAR	97	3	6	1.01	31	1	0	0	0	0	6	1.01	31	1
TURTLE LOGGERHEAD	NEC	97	3	93	0.43	210	41	0	0	0	0	93	0.43	210	41
TURTLE LEATHERBACK	NED	97	3	15	1	77	3	0	0	0	0	15	1	77	3
TURTLE LOGGERHEAD	NED	97	3	61	0.63	188	20	0	0	0	0	61	0.63	188	20
KEMPS RIDLEY	OFS	97	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	OFS	97	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE LEATHERBACK	OFS	97	3	2	0.71	7	1	0	0	0	0	2	0.71	7	1
TURTLE LOGGERHEAD	OFS	97	3	3	0.74	11	1	0	0	0	0	3	0.74	11	1
TURTLE LEATHERBACK	SEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
		3 Total		**212**		**687**	**73**	**0**		**0**	**0**	**212**		**687**	**73**
TURTLE LEATHERBACK	CAR	97	4	15	1	77	3	0	0	0	0	15	1	77	3
TURTLE LOGGERHEAD	NEC	97	4	51	0.69	174	15	0	0	0	0	51	0.69	174	15
TURTLE LOGGERHEAD	NED	97	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
KEMPS RIDLEY	OFS	97	4	4	0.98	20	1	0	0	0	0	4	0.98	20	1
TURTLE	OFS	97	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	OFS	97	4	9	0.7	31	3	0	0	0	0	9	0.7	31	3
TURTLE LOGGERHEAD	OFS	97	4	14	0.74	51	4	0	0	0	0	14	0.74	51	4
		4 Total		**99**		**382**	**27**	**0**		**0**	**0**	**99**		**382**	**27**
		97 Total		**708**		**2922**	**187**	**0**		**0**	**0**	**708**		**2922**	**187**
TURTLE LOGGERHEAD	CAR	98	1	63	0.67	207	19	0	0	0	0	63	0.67	207	19
TURTLE HAWKSBILL	NEC	98	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE LEATHERBACK	SEC	98	1	72	0.72	256	20	0	0	0	0	72	0.72	256	20
TURTLE LOGGERHEAD	SEC	98	1	35	1	179	7	0	0	0	0	35	1	179	7
		1 Total		**183**		**708**	**49**	**0**		**0**	**0**	**183**		**708**	**49**
TURTLE LOGGERHEAD	CAR	98	2	5	0.65	16	2	0	0	0	0	5	0.65	16	2
TURTLE GREEN	NED	98	2	1	0.81	4	0	0	0	0	0	1	0.81	4	0
TURTLE LEATHERBACK	NED	98	2	17	0.56	47	6	0	0	0	0	17	0.56	47	6
TURTLE LOGGERHEAD	NED	98	2	35	0.53	93	13	0	0	0	0	35	0.53	93	13
		2 Total		**58**		**160**	**21**	**0**		**0**	**0**	**58**		**160**	**21**
TURTLE LEATHERBACK	NEC	98	3	84	1	430	16	0	0	0	0	84	1	430	16
TURTLE LOGGERHEAD	NEC	98	3	299	0.47	713	125	0	0	0	0	299	0.47	713	125
TURTLE	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE GREEN	NED	98	3	10	0.75	37	3	1	0.98	5	0	8	0.76	30	2
TURTLE LEATHERBACK	NED	98	3	142	0.56	396	51	0	0	0	0	142	0.56	396	51
TURTLE LOGGERHEAD	NED	98	3	295	0.53	787	111	1	0.98	5	0	293	0.53	781	110
TURTLE LEATHERBACK	SEC	98	3	9	0.72	32	3	0	0	0	0	9	0.72	32	3
TURTLE LOGGERHEAD	SEC	98	3	11	0.86	47	3	0	0	0	0	11	0.86	47	3
		3 Total		**851**		**2447**	**312**	**2**		**10**	**0**	**847**		**2434**	**310**
TURTLE LOGGERHEAD	CAR	98	4	11	0.66	36	3	0	0	0	0	11	0.66	36	3
TURTLE LOGGERHEAD	NEC	98	4	154	0.74	564	42	0	0	0	0	154	0.74	564	42
TURTLE GREEN	NED	98	4	3	0.74	11	1	0	0	0	0	2	0.81	8	1
TURTLE LEATHERBACK	NED	98	4	41	0.56	114	15	0	0	0	0	41	0.56	114	15
TURTLE LOGGERHEAD	NED	98	4	85	0.53	227	32	0	0	0	0	84	0.53	224	31
TURTLE LOGGERHEAD	SEC	98	4	27	0.7	93	8	0	0	0	0	27	0.7	93	8
		4 Total		**321**		**1045**	**101**	**0**		**0**	**0**	**319**		**1039**	**100**
		98 Total		**1413**		**4360**	**483**	**2**		**10**	**0**	**1407**		**4341**	**480**
TURTLE LEATHERBACK	CAR	99	1	16	0.69	54	5	0	0	0	0	16	0.69	54	5
TURTLE LOGGERHEAD	CAR	99	1	38	0.48	92	16	0	0	0	0	38	0.48	92	16
TURTLE	GOM	99	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE LEATHERBACK	NED	99	1	2	0.36	4	1	0	0	0	0	2	0.36	4	1
TURTLE LOGGERHEAD	NED	99	1	3	0.27	5	2	0	0	0	0	3	0.27	5	2
TURTLE LEATHERBACK	SEC	99	1	132	0.68	441	40	0	0	0	0	132	0.68	441	40
		1 Total		**213**		**708**	**68**	**0**		**0**	**0**	**213**		**708**	**68**
TURTLE LEATHERBACK	CAR	99	2	1	0.61	3	0	0	0	0	0	1	0.61	3	0

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LOGGERHEAD	CAR	99	2	3	0.45	7	1	0	0	0	0	3	0.45	7	1
TURTLE	NEC	99	2	4	0.98	20	1	0	0	0	0	4	0.98	20	1
TURTLE LEATHERBACK	NEC	99	2	26	0.69	88	8	0	0	0	0	26	0.69	88	8
TURTLE LOGGERHEAD	NEC	99	2	36	0.39	75	17	3	0.98	15	1	34	0.43	76	15
TURTLE LEATHERBACK	NED	99	2	12	0.49	30	5	0	0	0	0	12	0.49	30	5
TURTLE LOGGERHEAD	NED	99	2	42	0.34	81	22	0	0	0	0	42	0.34	81	22
TURTLE LEATHERBACK	SEC	99	2	50	0.63	155	16	0	0	0	0	50	0.63	155	16
TURTLE LOGGERHEAD	SEC	99	2	35	0.7	121	10	0	0	0	0	35	0.7	121	10
		2 Total		**209**		**580**	**80**	**3**		**15**	**1**	**207**		**581**	**78**
TURTLE LEATHERBACK	NED	99	3	362	0.3	645	203	0	0	0	0	362	0.3	645	203
TURTLE LOGGERHEAD	NED	99	3	348	0.24	553	219	0	0	0	0	348	0.24	553	219
TURTLE LEATHERBACK	SEC	99	3	37	1	189	7	0	0	0	0	37	1	189	7
		3 Total		**747**		**1387**	**429**	**0**		**0**	**0**	**747**		**1387**	**429**
TURTLE LOGGERHEAD	CAR	99	4	1	0.36	2	0	0	0	0	0	1	0.36	2	0
TURTLE	GOM	99	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE LEATHERBACK	GOM	99	4	26	1	133	5	0	0	0	0	26	1	133	5
TURTLE LOGGERHEAD	GOM	99	4	35	1	179	7	0	0	0	0	35	1	179	7
TURTLE	NEC	99	4	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE LEATHERBACK	NEC	99	4	166	0.69	562	49	0	0	0	0	166	0.69	562	49
TURTLE LOGGERHEAD	NEC	99	4	228	0.39	473	110	18	1	92	4	211	0.43	469	95
TURTLE LEATHERBACK	NED	99	4	88	0.4	188	41	0	0	0	0	88	0.4	188	41
TURTLE LOGGERHEAD	NED	99	4	121	0.29	211	69	0	0	0	0	121	0.29	211	69
TURTLE LOGGERHEAD	SEC	99	4	41	0.68	138	12	0	0	0	0	41	0.68	138	12
		4 Total		**741**		**2064**	**300**	**18**		**92**	**4**	**724**		**2060**	**285**
		99 Total		**1910**		**4739**	**877**	**21**		**107**	**5**	**1891**		**4736**	**860**

Table 9a. Estimated bycatch of marine mammals and marine turtles in the U.S. Atlantic longline fishery, stratified by taxon-year-quarter-NAREA (grouped fishing areas). This table is Table 8a sorted in the order of taxon, year, quarter. Estimated total bycatch (discard) is the sum of the estimated number of animals dead (dead) and animals alive (alive) upon return to the sea as reported by observers. Estimated coefficients of variation for the catch estimates (cv_c, cv_d, cv_a for total, dead, and alive catches, respectively), and upper and lower 95% lognormal confidence bounds (u_disc, l_disc for total catch; u_dead, l_dead for dead animals; and u_live, l_live for living animals) are also given. Where observer effort is less than 5 sets for a taxon-NAREA-year-quarter stratum, a pooled bycatch rate is estimated by pooling observations across quarters or across quarters and years to achieve the minimum of 5 observed sets (**qyn5**). No listing for a species-year-NAREA stratum implies an estimate of 0.

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
BEAKED WHALE	CAR	98	1	30	1	153	6	0	0	0	0	30	1	153	6
BEAKED WHALE	CAR	98	2	2	0.98	10	0	0	0	0	0	2	0.98	10	0
BEAKED WHALE	CAR	98	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
		98 Total		**37**		**189**	**7**	**0**		**0**	**0**	**37**		**189**	**7**
COMMON DOLPHIN	NEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
COMMON DOLPHIN	NEC	92	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
DOLPHIN	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
DOLPHIN	NEC	92	2	20	1	102	4	0	0	0	0	20	1	102	4
		92 Total		**36**		**183**	**7**	**0**		**0**	**0**	**36**		**183**	**7**
DOLPHIN ATLANTIC SPOTTED	GOM	94	3	15	1	77	3	15	1	77	3	0	0	0	0
		94 Total		**15**		**77**	**3**	**15**		**77**	**3**	**0**		**0**	**0**
DOLPHIN BOTTLENOSE	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	NED	93	3	20	1	102	4	0	0	0	0	20	1	102	4
		93 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
DOLPHIN BOTTLENOSE	NED	96	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
DOLPHIN BOTTLENOSE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**3**		**15**	**0**	**0**		**0**	**0**	**3**		**15**	**0**
DOLPHIN BOTTLENOSE	GOM	98	1	25	1	128	5	25	1	128	5	0	0	0	0
DOLPHIN BOTTLENOSE	NEC	98	1	4	0.98	20	1	0	0	0	0	4	0.98	20	1
DOLPHIN BOTTLENOSE	NED	98	3	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		98 Total		**31**		**158**	**6**	**25**		**128**	**5**	**6**		**30**	**1**
DOLPHIN PANTROPIC SPOTTED	NEC	93	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		93 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**
DOLPHIN PANTROPIC SPOTTED	GOM	94	2	27	1	138	5	0	0	0	0	27	1	138	5
		94 Total		**27**		**138**	**5**	**0**		**0**	**0**	**27**		**138**	**5**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
DOLPHIN RISSOS	GOM	92	1	12	1	61	2	0	0	0	0	12	1	61	2
DOLPHIN RISSOS	NEC	92	1	5	0.69	17	1	5	0.69	17	1	0	0	0	0
DOLPHIN RISSOS	GOM	92	4	15	1	77	3	0	0	0	0	15	1	77	3
DOLPHIN RISSOS	NEC	92	4	40	0.7	138	12	40	0.7	138	12	0	0	0	0
		92 Total		**72**		**293**	**18**	**45**		**155**	**13**	**27**		**138**	**5**
DOLPHIN RISSOS	GOM	93	1	44	1	225	9	44	1	225	9	0	0	0	0
DOLPHIN RISSOS	NEC	93	3	36	0.73	129	10	0	0	0	0	36	0.73	129	10
		93 Total		**80**		**354**	**19**	**44**		**225**	**9**	**36**		**129**	**10**
DOLPHIN RISSOS	NEC	94	3	67	0.49	167	27	67	0.49	167	27	0	0	0	0
DOLPHIN RISSOS	NEC	94	4	49	0.57	139	17	49	0.57	139	17	0	0	0	0
		94 Total		**116**		**306**	**44**	**116**		**306**	**44**	**0**		**0**	**0**
DOLPHIN RISSOS	NED	95	2	1	0.98	5	0	1	0.98	5	0	0	0	0	0
DOLPHIN RISSOS	NEC	95	3	87	0.51	223	34	69	0.59	202	24	18	1	92	4
DOLPHIN RISSOS	NED	95	3	18	1	92	4	18	1	92	4	0	0	0	0
		95 Total		**106**		**320**	**38**	**88**		**299**	**28**	**18**		**92**	**4**
DOLPHIN RISSOS	NEC	96	1	2	0.71	7	1	1	0.98	5	0	1	0.98	5	0
DOLPHIN RISSOS	NEC	96	2	59	0.72	209	17	21	1	107	4	38	1	194	7
DOLPHIN RISSOS	GOM	96	3	24	1	123	5	24	1	123	5	0	0	0	0
DOLPHIN RISSOS	NEC	96	3	161	0.72	570	45	58	1	297	11	103	1	527	20
DOLPHIN RISSOS	NED	96	3	2	0.98	10	0	2	0.98	10	0	0	0	0	0
DOLPHIN RISSOS	NEC	96	4	36	0.72	128	10	13	0.99	66	3	23	1	118	4
DOLPHIN RISSOS	NED	96	4	1	0.98	5	0	1	0.98	5	0	0	0	0	0
		96 Total		**285**		**1052**	**78**	**120**		**613**	**23**	**165**		**844**	**31**
DOLPHIN RISSOS	NEC	98	3	96	0.7	329	28	48	1	245	9	49	1	251	10
DOLPHIN RISSOS	NED	98	3	2	0.98	10	0	2	0.98	10	0	0	0	0	0
		98 Total		**98**		**339**	**28**	**50**		**255**	**9**	**49**		**251**	**10**
DOLPHIN RISSOS	NEC	99	2	3	0.98	15	1	3	0.98	15	1	0	0	0	0
DOLPHIN RISSOS	NEC	99	4	18	1	92	4	18	1	92	4	0	0	0	0
		99 Total		**21**		**107**	**5**	**21**		**107**	**5**	**0**		**0**	**0**
DOLPHIN SPINNER SHORT-BEAKED	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		97 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
MARINE MAMMAL	NEC	95	3	24	1	123	5	0	0	0	0	24	1	123	5
		95 Total		**24**		**123**	**5**	**0**		**0**	**0**	**24**		**123**	**5**
MARINE MAMMAL	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
MARINE MAMMAL	SEC	96	4	20	1	102	4	0	0	0	0	20	1	102	4
		96 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
MARINE MAMMAL	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		98 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
MARINE MAMMAL	NED	99	3	12	1	61	2	0	0	0	0	12	1	61	2
MARINE MAMMAL	NED	99	4	2	0.98	10	0	0	0	0	0	2	0.98	10	0
		99 Total		**14**		**71**	**2**	**0**		**0**	**0**	**14**		**71**	**2**
PILOT WHALE	NEC	92	1	28	0.56	78	10	8	0.85	34	2	20	0.55	55	7
PILOT WHALE	NEC	92	3	307	0.73	1111	85	102	1	522	20	205	0.69	699	60
PILOT WHALE	NEC	92	4	131	0.38	270	64	30	0.71	105	9	100	0.41	218	46
		92 Total		**466**		**1459**	**159**	**140**		**661**	**31**	**325**		**972**	**113**
PILOT WHALE	NEC	93	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
PILOT WHALE	NEC	93	2	46	0.5	117	18	0	0	0	0	46	0.5	117	18
PILOT WHALE	SEC	93	2	23	1	118	4	0	0	0	0	23	1	118	4
PILOT WHALE	NEC	93	3	14	1	72	3	0	0	0	0	14	1	72	3
PILOT WHALE	NEC	93	4	103	0.38	213	50	17	1	87	3	86	0.42	190	39
		93 Total		**189**		**535**	**76**	**17**		**87**	**3**	**172**		**512**	**65**
PILOT WHALE	NEC	94	1	5	1.01	26	1	0	0	0	0	5	1.01	26	1
PILOT WHALE	NEC	94	3	202	0.43	450	91	180	0.47	433	75	22	1	112	4
PILOT WHALE	NEC	94	4	17	1	87	3	17	1	87	3	0	0	0	0
		94 Total		**224**		**563**	**95**	**197**		**520**	**78**	**27**		**138**	**5**
PILOT WHALE	NEC	95	3	177	0.35	343	91	177	0.35	343	91	0	0	0	0
PILOT WHALE	NEC	95	4	105	0.51	268	41	86	0.59	251	30	19	1	97	4
PILOT WHALE	SEC	95	4	36	1	184	7	0	0	0	0	36	1	184	7
		95 Total		**318**		**795**	**139**	**263**		**594**	**121**	**55**		**281**	**11**
PILOT WHALE	NEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
		97 Total		**30**		**153**	**6**	**0**		**0**	**0**	**30**		**153**	**6**
PILOT WHALE	NEC	98	3	48	1	245	9	0	0	0	0	48	1	245	9
		98 Total		**48**		**245**	**9**	**0**		**0**	**0**	**48**		**245**	**9**
PILOT WHALE	NEC	99	2	28	0.78	108	7	28	0.78	108	7	0	0	0	0
PILOT WHALE	SEC	99	2	7	1	36	1	7	1	36	1	0	0	0	0
PILOT WHALE	NEC	99	3	306	0.78	1183	79	306	0.78	1183	79	0	0	0	0
		99 Total		**341**		**1327**	**87**	**341**		**1327**	**87**	**0**		**0**	**0**
PILOT WHALE SHORTFIN	NEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
PILOT WHALE SHORTFIN	NEC	92	4	18	1	92	4	0	0	0	0	18	1	92	4
		92 Total		**20**		**102**	**4**	**0**		**0**	**0**	**20**		**102**	**4**
PILOT WHALE SHORTFIN	NEC	95	3	31	1	159	6	31	1	159	6	0	0	0	0
		95 Total		**31**		**159**	**6**	**31**		**159**	**6**	**0**		**0**	**0**
WHALE KILLER	NED	94	2	1	0.98	5	0	1	0.98	5	0	0	0	0	0
WHALE KILLER	NED	94	3	13	0.99	66	3	13	0.99	66	3	0	0	0	0
		94 Total		**14**		**71**	**3**	**14**		**71**	**3**	**0**		**0**	**0**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE MAMMALS															
WHALE KILLER	NED	96	3	1	0.98	5	0	1	0.98	5	0	0	0	0	0
WHALE KILLER	NED	96	4	1	0.98	5	0	1	0.98	5	0	0	0	0	0
		96 Total		**2**		**10**	**0**	**2**		**10**	**0**	**0**		**0**	**0**
WHALE KILLER	NED	98	3	1	0.98	5	0	1	0.98	5	0	0	0	0	0
		98 Total		**1**		**5**	**0**	**1**		**5**	**0**	**0**		**0**	**0**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
KEMPS RIDLEY	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		92 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
KEMPS RIDLEY	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
		94 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
KEMPS RIDLEY	OFS	97	1	17	1	87	3	0	0	0	0	17	1	87	3
KEMPS RIDLEY	OFS	97	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
KEMPS RIDLEY	OFS	97	4	4	0.98	20	1	0	0	0	0	4	0.98	20	1
		97 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
TURTLE	NEC	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	OFS	92	1	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	NEC	92	2	20	1	102	4	0	0	0	0	20	1	102	4
		92 Total		**22**		**112**	**4**	**0**		**0**	**0**	**22**		**112**	**4**
TURTLE	GOM	93	2	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE	NEC	93	3	18	1	92	4	0	0	0	0	0	0	0	0
		93 Total		**27**		**138**	**6**	**0**		**0**	**0**	**9**		**46**	**2**
TURTLE	GOM	94	1	20	1	102	4	0	0	0	0	20	1	102	4
TURTLE	NED	94	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	NED	94	3	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		94 Total		**34**		**173**	**7**	**0**		**0**	**0**	**34**		**173**	**7**
TURTLE	SEC	95	1	66	0.69	225	19	0	0	0	0	66	0.69	225	19
TURTLE	SEC	95	2	69	0.7	239	20	0	0	0	0	69	0.7	239	20
		95 Total		**135**		**464**	**39**	**0**		**0**	**0**	**135**		**464**	**39**
TURTLE	NED	96	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	NED	96	4	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		96 Total		**2**		**10**	**0**	**0**		**0**	**0**	**2**		**10**	**0**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE	GOM	97	1	21	1	107	4	0	0	0	0	21	1	107	4
TURTLE	OFS	97	1	19	1	97	4	0	0	0	0	19	1	97	4
TURTLE	OFS	97	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE	OFS	97	4	5	1.01	26	1	0	0	0	0	5	1.01	26	1
		97 Total		**46**		**235**	**9**	**0**		**0**	**0**	**46**		**235**	**9**
TURTLE	NED	98	3	1	0.98	5	0	0	0	0	0	1	0.98	5	0
		98 Total		**1**		**5**	**0**	**0**		**0**	**0**	**1**		**5**	**0**
TURTLE	GOM	99	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE	NEC	99	2	4	0.98	20	1	0	0	0	0	4	0.98	20	1
TURTLE	GOM	99	4	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE	NEC	99	4	22	1	112	4	0	0	0	0	22	1	112	4
		99 Total		**61**		**310**	**12**	**0**		**0**	**0**	**61**		**310**	**12**
TURTLE GREEN	NEC	92	1	2	0.71	7	1	0	0	0	0	1	0.98	5	0
TURTLE GREEN	NEC	92	2	40	0.69	135	12	0	0	0	0	20	1	102	4
TURTLE GREEN	NED	92	4	37	0.52	96	14	5	1.01	26	1	32	0.53	85	12
		92 Total		**79**		**238**	**27**	**5**		**26**	**1**	**53**		**192**	**16**
TURTLE GREEN	GOM	93	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE GREEN	NED	93	3	12	1	61	2	0	0	0	0	12	1	61	2
		93 Total		**29**		**148**	**5**	**0**		**0**	**0**	**29**		**148**	**5**
TURTLE GREEN	NEC	94	2	5	1.01	26	1	0	0	0	0	5	1.01	26	1
TURTLE GREEN	NEC	94	3	22	1	112	4	0	0	0	0	22	1	112	4
		94 Total		**27**		**138**	**5**	**0**		**0**	**0**	**27**		**138**	**5**
TURTLE GREEN	SEC	95	3	34	1	174	7	0	0	0	0	34	1	174	7
		95 Total		**34**		**174**	**7**	**0**		**0**	**0**	**34**		**174**	**7**
TURTLE GREEN	NED	96	3	11	0.75	41	3	1	0.98	5	0	10	0.77	38	3
TURTLE GREEN	NED	96	4	5	0.77	19	1	1	0.98	5	0	5	0.77	19	1
		96 Total		**16**		**60**	**4**	**2**		**10**	**0**	**15**		**57**	**4**
TURTLE GREEN	NED	98	2	1	0.81	4	0	0	0	0	0	1	0.81	4	0
TURTLE GREEN	NED	98	3	10	0.75	37	3	1	0.98	5	0	8	0.76	30	2
TURTLE GREEN	NED	98	4	3	0.74	11	1	0	0	0	0	2	0.81	8	1
		98 Total		**14**		**52**	**4**	**1**		**5**	**0**	**11**		**42**	**3**
TURTLE HAWKSBILL	NEC	92	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE HAWKSBILL	NEC	92	4	15	1	77	3	0	0	0	0	15	1	77	3
		92 Total		**17**		**87**	**3**	**0**		**0**	**0**	**17**		**87**	**3**
TURTLE HAWKSBILL	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		97 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**
TURTLE HAWKSBILL	NEC	98	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
		98 Total		**13**		**66**	**3**	**0**		**0**	**0**	**13**		**66**	**3**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	CAR	92	1	54	1	276	11	54	1	276	11	0	0	0	0
TURTLE LEATHERBACK	NEC	92	1	38	0.57	108	13	0	0	0	0	38	0.57	108	13
TURTLE LEATHERBACK	OFS	92	1	10	0.75	37	3	0	0	0	0	10	0.75	37	3
TURTLE LEATHERBACK	SEC	92	1	26	0.7	89	8	0	0	0	0	26	0.7	89	8
TURTLE LEATHERBACK	CAR	92	2	10	1	51	2	10	1	51	2	0	0	0	0
TURTLE LEATHERBACK	NEC	92	2	71	0.69	242	21	0	0	0	0	71	0.69	242	21
TURTLE LEATHERBACK	NED	92	2	98	0.4	207	46	0	0	0	0	98	0.4	207	46
TURTLE LEATHERBACK	OFS	92	2	2	0.71	7	1	0	0	0	0	2	0.71	7	1
TURTLE LEATHERBACK	NEC	92	3	149	0.75	548	41	0	0	0	0	149	0.75	548	41
TURTLE LEATHERBACK	NED	92	3	44	0.69	150	13	0	0	0	0	44	0.69	150	13
TURTLE LEATHERBACK	SEC	92	3	64	0.69	219	19	0	0	0	0	64	0.69	219	19
TURTLE LEATHERBACK	CAR	92	4	17	1	87	3	17	1	87	3	0	0	0	0
TURTLE LEATHERBACK	NEC	92	4	219	0.28	377	127	0	0	0	0	219	0.28	377	127
TURTLE LEATHERBACK	OFS	92	4	2	0.71	7	1	0	0	0	0	2	0.71	7	1
		92 Total		**804**		**2405**	**309**	**81**		**414**	**16**	**723**		**1991**	**293**
TURTLE LEATHERBACK	GOM	93	1	105	0.47	250	44	0	0	0	0	105	0.47	250	44
TURTLE LEATHERBACK	GOM	93	2	30	0.49	75	12	0	0	0	0	30	0.49	75	12
TURTLE LEATHERBACK	NEC	93	2	126	0.28	215	74	0	0	0	0	126	0.28	215	74
TURTLE LEATHERBACK	NED	93	2	119	0.54	323	44	0	0	0	0	119	0.54	323	44
TURTLE LEATHERBACK	GOM	93	3	41	1	210	8	0	0	0	0	41	1	210	8
TURTLE LEATHERBACK	NEC	93	3	169	0.42	373	77	0	0	0	0	169	0.42	373	77
TURTLE LEATHERBACK	NED	93	3	222	0.35	434	113	0	0	0	0	222	0.35	434	113
TURTLE LEATHERBACK	SEC	93	3	20	1	102	4	0	0	0	0	20	1	102	4
TURTLE LEATHERBACK	CAR	93	4	20	1	102	4	0	0	0	0	20	1	102	4
TURTLE LEATHERBACK	NEC	93	4	44	0.43	99	20	0	0	0	0	44	0.43	99	20
TURTLE LEATHERBACK	NED	93	4	42	0.47	101	17	0	0	0	0	42	0.47	101	17
TURTLE LEATHERBACK	SEC	93	4	41	0.69	140	12	0	0	0	0	41	0.69	140	12
		93 Total		**979**		**2424**	**429**	**0**		**0**	**0**	**979**		**2424**	**429**
TURTLE LEATHERBACK	GOM	94	0	1	0.81	4	0	0	0	0	0	1	0.81	4	0
TURTLE LEATHERBACK	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE LEATHERBACK	GOM	94	1	132	0.38	272	64	0	0	0	0	132	0.38	272	64
TURTLE LEATHERBACK	OFS	94	1	21	1	107	4	0	0	0	0	21	1	107	4
TURTLE LEATHERBACK	CAR	94	2	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LEATHERBACK	GOM	94	2	104	0.48	254	43	0	0	0	0	104	0.48	254	43
TURTLE LEATHERBACK	NEC	94	2	16	0.7	55	5	0	0	0	0	16	0.7	55	5
TURTLE LEATHERBACK	NED	94	2	19	0.65	61	6	0	0	0	0	19	0.65	61	6
TURTLE LEATHERBACK	OFS	94	2	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE LEATHERBACK	CAR	94	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
TURTLE LEATHERBACK	GOM	94	3	16	1	82	3	0	0	0	0	16	1	82	3

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	NEC	94	3	79	0.5	198	32	0	0	0	0	79	0.5	198	32
TURTLE LEATHERBACK	NED	94	3	175	0.31	315	97	0	0	0	0	175	0.31	315	97
TURTLE LEATHERBACK	SEC	94	3	39	0.7	134	11	0	0	0	0	39	0.7	134	11
TURTLE LEATHERBACK	CAR	94	4	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LEATHERBACK	GOM	94	4	14	1	72	3	0	0	0	0	14	1	72	3
TURTLE LEATHERBACK	NEC	94	4	67	0.62	206	22	0	0	0	0	67	0.62	206	22
TURTLE LEATHERBACK	NED	94	4	10	1	51	2	0	0	0	0	10	1	51	2
TURTLE LEATHERBACK	OFS	94	4	16	1	82	3	0	0	0	0	16	1	82	3
		94 Total		**767**		**2188**	**306**	**0**		**0**	**0**	**767**		**2188**	**306**
TURTLE LEATHERBACK	NEC	95	1	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE LEATHERBACK	NED	95	1	2	0.61	6	1	0	0	0	0	2	0.61	6	1
TURTLE LEATHERBACK	OFS	95	1	44	0.57	125	15	0	0	0	0	44	0.57	125	15
TURTLE LEATHERBACK	GOM	95	2	40	0.49	100	16	0	0	0	0	40	0.49	100	16
TURTLE LEATHERBACK	NEC	95	2	36	1	184	7	0	0	0	0	36	1	184	7
TURTLE LEATHERBACK	NED	95	2	18	0.58	52	6	0	0	0	0	18	0.58	52	6
TURTLE LEATHERBACK	OFS	95	2	64	0.73	231	18	0	0	0	0	64	0.73	231	18
TURTLE LEATHERBACK	SEC	95	2	45	0.74	165	12	0	0	0	0	45	0.74	165	12
TURTLE LEATHERBACK	NEC	95	3	34	0.7	118	10	0	0	0	0	34	0.7	118	10
TURTLE LEATHERBACK	NED	95	3	563	0.17	787	403	0	0	0	0	563	0.17	787	403
TURTLE LEATHERBACK	OFS	95	3	2	0.61	6	1	0	0	0	0	2	0.61	6	1
TURTLE LEATHERBACK	GOM	95	4	11	1	56	2	0	0	0	0	11	1	56	2
TURTLE LEATHERBACK	NED	95	4	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE LEATHERBACK	OFS	95	4	2	0.61	6	1	0	0	0	0	2	0.61	6	1
		95 Total		**880**		**1933**	**495**	**0**		**0**	**0**	**880**		**1933**	**495**
TURTLE LEATHERBACK	CAR	96	1	129	0	0	0	0	0	0	0	129	0	0	0
TURTLE LEATHERBACK	NEC	96	1	2	0.49	5	1	0	0	0	0	2	0.49	5	1
TURTLE LEATHERBACK	CAR	96	2	40	0	0	0	0	0	0	0	40	0	0	0
TURTLE LEATHERBACK	NEC	96	2	61	0.55	167	22	0	0	0	0	61	0.55	167	22
TURTLE LEATHERBACK	SEC	96	2	36	1	184	7	0	0	0	0	36	1	184	7
TURTLE LEATHERBACK	CAR	96	3	17	0	0	0	0	0	0	0	17	0	0	0
TURTLE LEATHERBACK	GOM	96	3	97	0.62	297	32	0	0	0	0	97	0.62	297	32
TURTLE LEATHERBACK	NEC	96	3	165	0.55	452	60	0	0	0	0	165	0.55	452	60
TURTLE LEATHERBACK	NED	96	3	162	0.56	452	58	0	0	0	0	162	0.56	452	58
TURTLE LEATHERBACK	CAR	96	4	47	0	0	0	0	0	0	0	47	0	0	0
TURTLE LEATHERBACK	GOM	96	4	28	1	143	5	0	0	0	0	28	1	143	5
TURTLE LEATHERBACK	NEC	96	4	36	0.55	99	13	0	0	0	0	36	0.55	99	13
TURTLE LEATHERBACK	NED	96	4	77	0.56	215	28	0	0	0	0	77	0.56	215	28
TURTLE LEATHERBACK	SEC	96	4	18	1	92	4	0	0	0	0	18	1	92	4
		96 Total		**915**		**2106**	**230**	**0**		**0**	**0**	**915**		**2106**	**230**

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LEATHERBACK	CAR	97	1	76	1	389	15	0	0	0	0	76	1	389	15
TURTLE LEATHERBACK	GOM	97	1	79	1	404	15	0	0	0	0	79	1	404	15
TURTLE LEATHERBACK	OFS	97	1	36	0.69	123	10	0	0	0	0	36	0.69	123	10
TURTLE LEATHERBACK	CAR	97	2	6	1.01	31	1	0	0	0	0	6	1.01	31	1
TURTLE LEATHERBACK	NED	97	2	4	0.98	20	1	0	0	0	0	4	0.98	20	1
TURTLE LEATHERBACK	CAR	97	3	6	1.01	31	1	0	0	0	0	6	1.01	31	1
TURTLE LEATHERBACK	NED	97	3	15	1	77	3	0	0	0	0	15	1	77	3
TURTLE LEATHERBACK	OFS	97	3	2	0.71	7	1	0	0	0	0	2	0.71	7	1
TURTLE LEATHERBACK	SEC	97	3	30	1	153	6	0	0	0	0	30	1	153	6
TURTLE LEATHERBACK	CAR	97	4	15	1	77	3	0	0	0	0	15	1	77	3
TURTLE LEATHERBACK	OFS	97	4	9	0.7	31	3	0	0	0	0	9	0.7	31	3
		97 Total		**278**		**1343**	**59**	**0**		**0**	**0**	**278**		**1343**	**59**
TURTLE LEATHERBACK	SEC	98	1	72	0.72	256	20	0	0	0	0	72	0.72	256	20
TURTLE LEATHERBACK	NED	98	2	17	0.56	47	6	0	0	0	0	17	0.56	47	6
TURTLE LEATHERBACK	NEC	98	3	84	1	430	16	0	0	0	0	84	1	430	16
TURTLE LEATHERBACK	NED	98	3	142	0.56	396	51	0	0	0	0	142	0.56	396	51
TURTLE LEATHERBACK	SEC	98	3	9	0.72	32	3	0	0	0	0	9	0.72	32	3
TURTLE LEATHERBACK	NED	98	4	41	0.56	114	15	0	0	0	0	41	0.56	114	15
		98 Total		**365**		**1275**	**111**	**0**		**0**	**0**	**365**		**1275**	**111**
TURTLE LEATHERBACK	CAR	99	1	16	0.69	54	5	0	0	0	0	16	0.69	54	5
TURTLE LEATHERBACK	NED	99	1	2	0.36	4	1	0	0	0	0	2	0.36	4	1
TURTLE LEATHERBACK	SEC	99	1	132	0.68	441	40	0	0	0	0	132	0.68	441	40
TURTLE LEATHERBACK	CAR	99	2	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE LEATHERBACK	NEC	99	2	26	0.69	88	8	0	0	0	0	26	0.69	88	8
TURTLE LEATHERBACK	NED	99	2	12	0.49	30	5	0	0	0	0	12	0.49	30	5
TURTLE LEATHERBACK	SEC	99	2	50	0.63	155	16	0	0	0	0	50	0.63	155	16
TURTLE LEATHERBACK	NED	99	3	362	0.3	645	203	0	0	0	0	362	0.3	645	203
TURTLE LEATHERBACK	SEC	99	3	37	1	189	7	0	0	0	0	37	1	189	7
TURTLE LEATHERBACK	GOM	99	4	26	1	133	5	0	0	0	0	26	1	133	5
TURTLE LEATHERBACK	NEC	99	4	166	0.69	562	49	0	0	0	0	166	0.69	562	49
TURTLE LEATHERBACK	NED	99	4	88	0.4	188	41	0	0	0	0	88	0.4	188	41
		99 Total		**918**		**2492**	**380**	**0**		**0**	**0**	**918**		**2492**	**380**
TURTLE LOGGERHEAD	CAR	92	1	108	0.67	357	33	0	0	0	0	108	0.67	357	33
TURTLE LOGGERHEAD	NEC	92	1	3	0.98	15	1	0	0	0	0	3	0.98	15	1
TURTLE LOGGERHEAD	OFS	92	1	15	0.69	51	4	0	0	0	0	15	0.69	51	4
TURTLE LOGGERHEAD	CAR	92	2	20	0.67	66	6	0	0	0	0	20	0.67	66	6
TURTLE LOGGERHEAD	NEC	92	2	23	1	118	4	0	0	0	0	23	1	118	4
TURTLE LOGGERHEAD	NED	92	2	28	1	143	5	0	0	0	0	28	1	143	5
TURTLE LOGGERHEAD	OFS	92	2	3	0.68	10	1	0	0	0	0	3	0.68	10	1

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LOGGERHEAD	NED	92	3	27	1	138	5	0	0	0	0	27	1	138	5
TURTLE LOGGERHEAD	CAR	92	4	33	0.67	109	10	0	0	0	0	33	0.67	109	10
TURTLE LOGGERHEAD	NEC	92	4	11	1	56	2	0	0	0	0	11	1	56	2
TURTLE LOGGERHEAD	OFS	92	4	3	0.68	10	1	0	0	0	0	3	0.68	10	1
		92 Total		**274**		**1073**	**72**	**0**		**0**	**0**	**274**		**1073**	**72**
TURTLE LOGGERHEAD	CAR	93	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE LOGGERHEAD	OFS	93	1	9	1	46	2	0	0	0	0	9	1	46	2
TURTLE LOGGERHEAD	SEC	93	1	8	1	41	2	8	1	41	2	0	0	0	0
TURTLE LOGGERHEAD	NEC	93	2	30	0.58	86	10	0	0	0	0	30	0.58	86	10
TURTLE LOGGERHEAD	OFS	93	2	1	0.98	5	0	0	0	0	0	1	0.98	5	0
TURTLE LOGGERHEAD	SEC	93	2	18	1	92	4	0	0	0	0	18	1	92	4
TURTLE LOGGERHEAD	CAR	93	3	1	0.81	4	0	0	0	0	0	1	0.81	4	0
TURTLE LOGGERHEAD	NEC	93	3	31	0.71	108	9	0	0	0	0	31	0.71	108	9
TURTLE LOGGERHEAD	NED	93	3	155	0.37	311	77	0	0	0	0	155	0.37	311	77
TURTLE LOGGERHEAD	SEC	93	3	16	1	82	3	0	0	0	0	16	1	82	3
TURTLE LOGGERHEAD	CAR	93	4	40	0.67	131	12	0	0	0	0	40	0.67	131	12
TURTLE LOGGERHEAD	GOM	93	4	26	1	133	5	0	0	0	0	26	1	133	5
TURTLE LOGGERHEAD	NED	93	4	10	1	51	2	0	0	0	0	10	1	51	2
TURTLE LOGGERHEAD	OFS	93	4	2	0.98	10	0	0	0	0	0	2	0.98	10	0
TURTLE LOGGERHEAD	SEC	93	4	22	1	112	4	0	0	0	0	22	1	112	4
		93 Total		**386**		**1299**	**133**	**8**		**41**	**2**	**378**		**1258**	**131**
TURTLE LOGGERHEAD	CAR	94	1	22	1	112	4	0	0	0	0	22	1	112	4
TURTLE LOGGERHEAD	CAR	94	2	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LOGGERHEAD	NEC	94	2	16	0.73	58	4	0	0	0	0	16	0.73	58	4
TURTLE LOGGERHEAD	NED	94	2	115	0.33	215	62	1	0.98	5	0	113	0.33	211	61
TURTLE LOGGERHEAD	CAR	94	3	3	0.98	15	1	0	0	0	0	3	0.98	15	1
TURTLE LOGGERHEAD	NED	94	3	1015	0.17	1403	734	13	0.99	66	3	988	0.17	1369	713
TURTLE LOGGERHEAD	CAR	94	4	12	1	61	2	0	0	0	0	12	1	61	2
TURTLE LOGGERHEAD	NEC	94	4	30	0.7	104	9	14	1	72	3	16	1	82	3
TURTLE LOGGERHEAD	NED	94	4	95	0.49	234	39	0	0	0	0	95	0.49	234	39
		94 Total		**1320**		**2263**	**857**	**28**		**143**	**6**	**1277**		**2203**	**829**
TURTLE LOGGERHEAD	NED	95	1	5	0.31	9	3	0	0	0	0	5	0.31	9	3
TURTLE LOGGERHEAD	OFS	95	1	41	0.57	116	14	0	0	0	0	41	0.57	116	14
TURTLE LOGGERHEAD	SEC	95	1	31	1	159	6	0	0	0	0	31	1	159	6
TURTLE LOGGERHEAD	NEC	95	2	170	0.42	374	77	0	0	0	0	170	0.42	374	77
TURTLE LOGGERHEAD	NED	95	2	47	0.32	87	25	0	0	0	0	47	0.32	87	25
TURTLE LOGGERHEAD	SEC	95	2	86	0.64	272	27	0	0	0	0	86	0.64	272	27
TURTLE LOGGERHEAD	NEC	95	3	204	0.36	406	102	0	0	0	0	204	0.36	406	102
TURTLE LOGGERHEAD	NED	95	3	1371	0.2	2025	928	0	0	0	0	1371	0.2	2025	928

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LOGGERHEAD	OFS	95	3	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE LOGGERHEAD	NEC	95	4	108	0.43	242	48	0	0	0	0	108	0.43	242	48
TURTLE LOGGERHEAD	NED	95	4	195	0.44	446	85	0	0	0	0	195	0.44	446	85
TURTLE LOGGERHEAD	OFS	95	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
		95 Total		**2260**		**4142**	**1315**	**0**		**0**	**0**	**2260**		**4142**	**1315**
TURTLE LOGGERHEAD	NEC	96	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE LOGGERHEAD	OFS	96	1	65	0.45	150	28	0	0	0	0	65	0.45	150	28
TURTLE LOGGERHEAD	SEC	96	1	33	1	169	6	0	0	0	0	33	1	169	6
TURTLE LOGGERHEAD	NEC	96	2	44	0.69	149	13	0	0	0	0	44	0.69	149	13
TURTLE LOGGERHEAD	OFS	96	2	37	0.45	86	16	0	0	0	0	37	0.45	86	16
TURTLE LOGGERHEAD	SEC	96	2	52	0.6	153	18	0	0	0	0	52	0.6	153	18
TURTLE LOGGERHEAD	NEC	96	3	119	0.69	404	35	0	0	0	0	119	0.69	404	35
TURTLE LOGGERHEAD	NED	96	3	336	0.53	896	126	1	0.98	5	0	333	0.53	888	125
TURTLE LOGGERHEAD	NEC	96	4	26	0.69	88	8	0	0	0	0	26	0.69	88	8
TURTLE LOGGERHEAD	NED	96	4	159	0.53	424	60	1	0.98	5	0	158	0.53	421	59
TURTLE LOGGERHEAD	OFS	96	4	18	0.45	42	8	0	0	0	0	18	0.45	42	8
TURTLE LOGGERHEAD	SEC	96	4	23	1	118	4	0	0	0	0	23	1	118	4
		96 Total		**913**		**2682**	**322**	**2**		**10**	**0**	**909**		**2671**	**320**
TURTLE LOGGERHEAD	GOM	97	1	17	1	87	3	0	0	0	0	17	1	87	3
TURTLE LOGGERHEAD	NEC	97	1	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE LOGGERHEAD	OFS	97	1	56	0.74	204	15	0	0	0	0	56	0.74	204	15
TURTLE LOGGERHEAD	SEC	97	1	13	0.99	66	3	0	0	0	0	13	0.99	66	3
TURTLE LOGGERHEAD	NED	97	2	15	0.62	46	5	0	0	0	0	15	0.62	46	5
TURTLE LOGGERHEAD	SEC	97	2	24	1	123	5	0	0	0	0	24	1	123	5
TURTLE LOGGERHEAD	NEC	97	3	93	0.43	210	41	0	0	0	0	93	0.43	210	41
TURTLE LOGGERHEAD	NED	97	3	61	0.63	188	20	0	0	0	0	61	0.63	188	20
TURTLE LOGGERHEAD	OFS	97	3	3	0.74	11	1	0	0	0	0	3	0.74	11	1
TURTLE LOGGERHEAD	NEC	97	4	51	0.69	174	15	0	0	0	0	51	0.69	174	15
TURTLE LOGGERHEAD	NED	97	4	1	0.61	3	0	0	0	0	0	1	0.61	3	0
TURTLE LOGGERHEAD	OFS	97	4	14	0.74	51	4	0	0	0	0	14	0.74	51	4
		97 Total		**349**		**1166**	**112**	**0**		**0**	**0**	**349**		**1166**	**112**
TURTLE LOGGERHEAD	CAR	98	1	63	0.67	207	19	0	0	0	0	63	0.67	207	19
TURTLE LOGGERHEAD	SEC	98	1	35	1	179	7	0	0	0	0	35	1	179	7
TURTLE LOGGERHEAD	CAR	98	2	5	0.65	16	2	0	0	0	0	5	0.65	16	2
TURTLE LOGGERHEAD	NED	98	2	35	0.53	93	13	0	0	0	0	35	0.53	93	13
TURTLE LOGGERHEAD	NEC	98	3	299	0.47	713	125	0	0	0	0	299	0.47	713	125
TURTLE LOGGERHEAD	NED	98	3	295	0.53	787	111	1	0.98	5	0	293	0.53	781	110
TURTLE LOGGERHEAD	SEC	98	3	11	0.86	47	3	0	0	0	0	11	0.86	47	3
TURTLE LOGGERHEAD	CAR	98	4	11	0.66	36	3	0	0	0	0	11	0.66	36	3

COMMON	NAREA	yr	qtr	discard	cv_c	u_disc	l_disc	dead	cv_d	u_dead	l_dead	alive	cv_a	u_alive	l_alive
MARINE TURTLES															
TURTLE LOGGERHEAD	NEC	98	4	154	0.74	564	42	0	0	0	0	154	0.74	564	42
TURTLE LOGGERHEAD	NED	98	4	85	0.53	227	32	0	0	0	0	84	0.53	224	31
TURTLE LOGGERHEAD	SEC	98	4	27	0.7	93	8	0	0	0	0	27	0.7	93	8
		98 Total		**1020**		**2962**	**365**	**1**		**5**	**0**	**1017**		**2953**	**363**
TURTLE LOGGERHEAD	CAR	99	1	38	0.48	92	16	0	0	0	0	38	0.48	92	16
TURTLE LOGGERHEAD	NED	99	1	3	0.27	5	2	0	0	0	0	3	0.27	5	2
TURTLE LOGGERHEAD	CAR	99	2	3	0.45	7	1	0	0	0	0	3	0.45	7	1
TURTLE LOGGERHEAD	NEC	99	2	36	0.39	75	17	3	0.98	15	1	34	0.43	76	15
TURTLE LOGGERHEAD	NED	99	2	42	0.34	81	22	0	0	0	0	42	0.34	81	22
TURTLE LOGGERHEAD	SEC	99	2	35	0.7	121	10	0	0	0	0	35	0.7	121	10
TURTLE LOGGERHEAD	NED	99	3	348	0.24	553	219	0	0	0	0	348	0.24	553	219
TURTLE LOGGERHEAD	CAR	99	4	1	0.36	2	0	0	0	0	0	1	0.36	2	0
TURTLE LOGGERHEAD	GOM	99	4	35	1	179	7	0	0	0	0	35	1	179	7
TURTLE LOGGERHEAD	NEC	99	4	228	0.39	473	110	18	1	92	4	211	0.43	469	95
TURTLE LOGGERHEAD	NED	99	4	121	0.29	211	69	0	0	0	0	121	0.29	211	69
TURTLE LOGGERHEAD	SEC	99	4	41	0.68	138	12	0	0	0	0	41	0.68	138	12
		99 Total		**931**		**1937**	**485**	**21**		**107**	**5**	**912**		**1934**	**468**

Table 10. Comparison of the revised estimates of total bycatch by taxon and year using pooling order qyn (q=quarter, y=year, n=NAREA: the order from left to right represents the pooling priority) with the minimum observed sets criterion (N_{min}) = 5. These revised estimates are compared with previous estimates from three different levels of pooling with no N_{min} criterion as reported in Johnson *et al*. (1999) (J) for 1992-97 turtles, Yeung (1999*a)* (Y*a*) for 1992-97 mammals, and Yeung (1999*b)* (Y*b*) for 1998 turtles and mammals: 1) c1=no pooling; 2) c2=pooling across quarters with an NAREA-year stratum; 3) c3=pooling across quarters and NAREAs with an MAREA-year stratum. The upper(u_*) and lower (l_*) 95% confidence limits for the estimates are given. In the case of the previous estimates, the source report in code (J, Y*a*, Y*b*) and source table number (t*) are indicated. The qyn5 and c2 estimates (shaded) represent the closest pooling schemes between the present and previous reports.

		this report t9a			J t9,Ya t6,Yb t5 1) no pooling			J t11,Ya t7,Yb t6 2) pooled with quarters			J t12,Ya t8,Yb t7 3) pooled across quarters and NA REAs		
species	**yr**	**qyn5**	**u_qyn5**	**l_qyn5**	**c1**	**u_c1**	**l_c1**	**c2**	**u_c2**	**l_c2**	**c3**	**u_c3**	**l_c3**
MARINE MAMMALS													
MARINE MAMMAL	92												
	93												
	94												
	95	24	123	5	24	123	5	22	114	4	22	112	4
	96	22	112	4	20	102	4	26	133	5	43	220	8
	97												
	98	1	5	0									
	Total	**47**	**240**	**9**	**44**	**225**	**9**	**48**	**247**	**9**	**65**	**332**	**12**
BEAKED WHALE	92												
	93												
	94												
	95												
	96												
	97												
	98	37	189	7	5	26	1	37	189	7	88	450	17
	Total	**37**	**189**	**7**	**5**	**26**	**1**	**37**	**189**	**7**	**88**	**450**	**17**
COMMON DOLPHIN	92	15	76	3	13	66	3	27	138	5	24	123	5
	93												
	94												
	95												
	96												
	97												
	98												
	Total	**15**	**76**	**3**	**13**	**66**	**3**	**27**	**138**	**5**	**24**	**123**	**5**

species	yr	this report t9a qyn5	u_qyn5	l_qyn5	J t9,Ya t6,Yb t5 1) no pooling c1	u_c1	l_c1	J t11,Ya t7,Yb t6 2) pooled with quarters c2	u_c2	l_c2	J t12,Ya t8,Yb t7 3) pooled across quarters and NA REAs c3	u_c3	l_c3
MARINE MAMMALS													
DOLPHIN	92	21	107	4	25	128	5	18	92	4	17	87	3
	93												
	94												
	95												
	96												
	97												
	98												
	Total	**21**	**107**	**4**	**25**	**128**	**5**	**18**	**92**	**4**	**17**	**87**	**3**
ATLANTIC SPOTTED DOLPHIN	92												
	93												
	94	15	77	3	15	77	3	17	87	3	17	87	3
	95												
	96												
	97												
	98												
	Total	**15**	**77**	**3**	**15**	**77**	**3**	**17**	**87**	**3**	**17**	**87**	**3**
BOTTLENOSE DOLPHIN	92												
	93	22	112	4	26	133	5	31	158	7	29	148	6
	94												
	95												
	96	3	15	0									
	97												
	98	31	158	6	26	132	5	54	277	10	46	236	9
	Total	**56**	**285**	**10**	**52**	**265**	**10**	**85**	**435**	**17**	**75**	**384**	**15**
PANTROPIC SPOTTED DOLPHIN	92												
	93	2	10	0	2	10	0	12	61	2	11	56	2
	94	27	138	5	26	133	5	20	102	4	20	102	4
	95												
	96												
	97												
	98												
	Total	**29**	**148**	**5**	**28**	**143**	**5**	**32**	**163**	**6**	**31**	**158**	**6**

species	yr	this report t9a qyn5	u_qyn5	l_qyn5	J t9,Ya t6,Yb t5 1) no pooling c1	u_c1	l_c1	J t11,Ya t7,Yb t6 2) pooled with quarters c2	u_c2	l_c2	J t12,Ya t8,Yb t7 3) pooled across quarters and NA REAs c3	u_c3	l_c3
MARINE MAMMALS													
DOLPHIN RISSOS	92	72	293	18	54	212	14	129	524	33	121	497	30
	93	80	354	19	83	366	20	63	281	15	62	277	14
	94	116	306	44	103	273	39	88	179	43	87	178	43
	95	106	320	38	112	351	39	100	308	35	101	311	35
	96	285	1052	78	176	661	47	265	980	73	99	395	25
	97												
	98	98	339	28	96	329	28	72	249	21	47	163	14
	Total	**757**	**2664**	**225**	**624**	**2192**	**187**	**717**	**2521**	**220**	**517**	**1821**	**161**
SHORT-BEAKED SPINNER DOLPHIN	92												
	93												
	94												
	95												
	96												
	97	13	66	3	13	66	3	13	66	3	16	82	3
	98												
	Total	**13**	**66**	**3**	**13**	**66**	**3**	**13**	**66**	**3**	**16**	**82**	**3**
PILOT WHALE	92	466	1459	159	369	1096	136	465	881	246	420	803	220
	93	189	535	76	180	516	72	200	414	108	193	330	113
	94	224	563	95	144	456	50	168	482	64	161	328	79
	95	318	795	139	282	727	118	251	581	126	252	444	143
	96												
	97	30	153	6	30	153	6	34	174	7	29	148	6
	98	48	245	9	48	245	9	36	184	7	24	123	5
	Total	**1275**	**3750**	**484**	**1053**	**3193**	**391**	**1154**	**2716**	**558**	**1079**	**2176**	**566**
PILOT WHALE SHORTFIN	92	20	102	4									
	93												
	94												
	95	31	159	6	63	218	18	58	202	17	58	202	17
	96												
	97												
	98												
	Total	**51**	**261**	**10**	**63**	**218**	**18**	**58**	**202**	**17**	**58**	**202**	**17**

species	yr	this report t9a qyn5	u_qyn5	l_qyn5	J t9,Ya t6,Yb t5 1) no pooling c1	u_c1	l_c1	J t11,Ya t7,Yb t6 2) pooled with quarters c2	u_c2	l_c2	J t12,Ya t8,Yb t7 3) pooled across quarters and NA REAs c3	u_c3	l_c3
MARINE MAMMALS													
KILLER WHALE	92												
	93												
	94	14	71	3	6	31	1	14	72	3	16	82	3
	95	2	10	0									
	96												
	97												
	98	1	5	0									
	Total	**17**	**86**	**3**	**6**	**31**	**1**	**14**	**72**	**3**	**16**	**82**	**3**

species	yr	this report t9a qyn5	u_qyn5	l_qyn5	J t9,Ya t6,Yb t5 1) no pooling c1	u_c1	l_c1	J t11,Ya t7,Yb t6 2) pooled with quarters c2	u_c2	l_c2	J t12,Ya t8,Yb t7 3) pooled across quarters and NAREAs c3	u_c3	l_c3
MARINE TURTLES													
TURTLE	92	22	112	4	25	128	5	18	92	4	17	87	3
	93	27	138	6	28	143	6	27	138	6	26	132	6
	94	34	173	7	46	235	9	29	149	6	31	159	6
	95	135	464	39	243	801	74	165	412	66	160	404	63
	96	2	10	0									
	97	46	235	9	38	194	8	43	220	9	45	230	9
	98	1	5	0									
	Total	**267**	**1137**	**65**	**380**	**1501**	**102**	**282**	**1011**	**91**	**279**	**1012**	**87**
GREEN	92	79	238	27	87	268	29	129	370	46	186	518	68
	93	29	148	5	32	164	6	25	128	5	24	123	5
	94	27	138	5	25	128	5	24	86	7	24	86	7
	95	34	174	7	37	189	7	31	159	6	30	153	6
	96	16	60	4									
	97												
	98	14	52	4									
	Total	**199**	**810**	**52**	**181**	**749**	**47**	**209**	**743**	**64**	**264**	**880**	**86**

species	yr	this report t9a qyn5	u_qyn5	l_qyn5	J t9,Ya t6,Yb t5 1) no pooling c1	u_c1	l_c1	J t11,Ya t7,Yb t6 2) pooled with quarters c2	u_c2	l_c2	J t12,Ya t8,Yb t7 3) pooled across quarters and NAREAs c3	u_c3	l_c3
MARINE TURTLES													
HAWKSBILL	92	17	87	3	15	77	3	30	153	6	28	143	5
	93												
	94												
	95												
	96												
	97	13	66	3	13	66	3	13	66	3	16	82	3
	98	13	66	3	13	66	3	77	394	15	51	261	10
	Total	**43**	**219**	**9**	**41**	**209**	**9**	**120**	**613**	**24**	**95**	**486**	**18**
KEMPS RIDLEY	92	1	5	0									
	93												
	94	22	112	4	19	97	4	15	77	3	15	77	3
	95												
	96												
	97	22	112	4	17	87	3	23	118	4	24	123	5
	98												
	Total	**45**	**229**	**8**	**36**	**184**	**7**	**38**	**195**	**7**	**39**	**200**	**8**
LEATHERBACK	92	804	2405	309	648	1770	273	871	1948	455	848	1439	505
	93	979	2424	429	1014	2569	433	889	1620	512	840	1379	515
	94	767	2188	306	607	1735	238	700	1683	334	723	1302	402
	95	880	1933	495	996	2062	573	925	1650	570	903	1447	586
	96	915	2106	230	419	1585	121	674	2446	203	378	1122	137
	97	278	1343	59	274	1016	74	357	1331	98	248	751	89
	98	365	1275	111	187	962	35	169	864	32	167	698	41
	Total	**4988**	**13674**	**1939**	**4145**	**11699**	**1747**	**4585**	**11542**	**2204**	**4107**	**8138**	**2275**
LOGGERHEAD	92	274	1073	72	116	460	30	247	829	73	177	488	65
	93	386	1299	133	404	1321	141	374	984	156	365	773	188
	94	1320	2263	857	1500	2474	968	1279	2032	874	1509	2234	1032
	95	2260	4142	1315	1748	3435	986	2169	3490	1390	2100	3194	1380
	96	913	2682	322	287	977	90	410	1148	152	476	1048	217
	97	349	1166	112	321	1168	94	329	931	123	336	764	154
	98	1020	2962	365	516	1551	182	472	1152	200	510	1250	225
	Total	**6522**	**15587**	**3176**	**4892**	**11386**	**2491**	**5280**	**10566**	**2968**	**5473**	**9751**	**3261**

Table 11. Observer comments relating to the condition of A) marine mammals and B) marine turtles observed caught in 1999 by U.S. pelagic longline vessels operating in the North Atlantic. Unique trip identifier (TRIP #), date landed, common name of species taken, latitude (Lat), longitude (Lon), and estimated body length are also given. Injury codes 1-15 refer to criteria used to classified **marine mammals** as "seriously injured":

1=Loss of/damage to appendage/jaw 2=Inability to use appendage(s) 3=Asymmetry in body shape
4=Rupture/puncture of eyeball 5=Inability to swim or dive 6=Ingestion of gear
7=Mouth is bound by the gear 8=Cetacean is hooked internally (e.g., in the mouth)
9=Animal is anchored 10=Line/net entangling the animal is likely to further entangle the animal
11=Visible blood flow. 12=Swelling or hemorrhage. 13=Laceration.
14=Listlessness/inability to defend itself. 15=Equilibrium imbalance.

A '?' beside the code number indicates that such injury was probably sustained. Animals with injuries matching at least one of criteria 1-10 are considered to be seriously injured (S.I. = 'Y') and may be assumed to have died. Other injuries are not considered serious (S.I. = 'N') and the animal is assumed to have survived. D=dead upon retrieval.

Trip #	Date Landed (set)	Common Name	Lat (deg min)	Lon (deg min)	Est. Length (cm)	Injury Codes	S.I.	Observer Comments
A. MARINE MAMMALS								
T45	6/7/99 (6/2)	pilot whale	32 21	77 34	152	8,10	**Y**	hooked in mouth; alive; left with ~54 ft of leader.
F69	8/11/99 (7/27)	marine mammal	45 56	41 47	762	8	**Y**	unidentified whale; hooked on gangion; mainline parted off and gagion snap slipped off; swam away.
W05	8/28/99 (8/20)	pilot whale	37 38	74 01	350	10	**Y**	accompanied by 2 other animals, ~18 ft mainline still wrapped around tail; swam away.
W05	8/28/99 (8/20)	pilot whale	37 38	74 01	275	dead	**D**	2 animals nearby, wrapped in mainline; both sides of mainline cut to discard carcass; sank.
W05	8/28/99 (8/20)	pilot whale	37 38	74 01	175	8,10	**Y**	caught with hook in mouth; mono cut with 8 ft of line attached; swam away.
W05	8/28/98 (8/24)	pilot whale	37 27	74 15	275	10	**Y**	tail wrapped in mainline; swam downward immediately; too quick for picture.
A31114	10/16/99 (10/12)	Risso's dolphin	39 43	71 32	214	8,10	**Y**	hook appeared to be in mouth but could not be sure as animal never broke surface; leader cut ~6 fathoms from animal.

B. MARINE TURTLES

trip	m	d	y	lat deg	lat min	lon deg	lon min	species	condition	hook location	hook removed Y/N=1/0	entangled Y/N=1/0	line left (ft)	CL (cm)	comment
W07	10	21	99	39	53	69	51	Leatherback	alive, injured	beak/mouth	0	0	2	150	hooked in mouth
W07	10	21	99	39	53	69	51	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0	2	60	swallowed hook
W07	10	23	99	38	37	72	48	Loggerhead	alive, injured	head/neck (external)	0	0	2	65	hooked on side of mouth
W07	10	23	99	38	37	72	48	Leatherback	alive, injured	unknown beak/mouth	1	0	0	150	spit hook of of mouth
W07	10	26	99	39	54	70	34	Loggerhead	alive, injured	beak/mouth	0	0	1	80	hooked in tongue
W07	10	28	99	39	25	69	31	Leatherback	alive, injured	not hooked		1	0	125	wrapped in mainline,untangled by crew
W07	10	31	99	39	49	69	53	Loggerhead	fresh dead	beak/mouth		0	0		hooked in mouth
W07	11	1	99	39	43	70	9	Loggerhead	alive, injured	beak/mouth	0	0	0	60	hooked in mouth,only hook left
W08	11	26	99	37	43	74	4	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0	4	60	swallowed hook
W08	11	27	99	37	41	74	4	Loggerhead	alive, injured	beak/mouth	1	0	0	55	spit hook out of mouth, dove immediately,no gear attached
R02	12	4	99	35	43	74	44	unknown	alive, injured	beak/mouth	0	0	5	150	hooked in mouth
S20	11	25	99	25	19	89	34	Leatherback	alive, injured	flipper	0	0	2	180	hooked in left front flipper
S20	11	30	99	24	14	83	52	Loggerhead	alive, injured	beak/mouth	0	0	2	140	hooked in mouth
P50	11	13	99	26	36	92	28	unknown	alive, injured	beak/mouth	0	0		120	line cut short, hook in side of mouth,original id was hawksbill, but improbable
T44	4	23	99	32	39	72	49	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0	0	120	hooked in throat
T44	4	23	99	32	39	72	49	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0	0	70	hook in throat
F67	6	15	99	32	13	78	23	Leatherback	alive, injured	flipper	0	0	6	152	
F67	6	15	99	32	13	78	23	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	48	hooked in mouth
T45	6	1	99	32	29	78	5	Leatherback	alive, injured	flipper	0	1	48	182	hook location unknown,excellent condition
S14	5	30	99	39	52	54	52	Loggerhead	alive, injured	unknown beak/mouth	1	0	0	50	Lip hooked, hook removed, released in excellent condition
S14	5	30	99	39	52	54	52	Loggerhead	alive, injured	flipper	1	0	0	65	hooked right pectoral fin, excellent condition
S14	5	30	99	39	52	54	52	Loggerhead	alive, injured	unknown beak/mouth	0	0	0	60	mouth hooked,released in good condition
S14	6	3	99	41	36	51	25	Leatherback	alive, uninjured	unknown other	0	1	12	170	
S14	6	10	99	42	22	51	27	Loggerhead	alive, injured	unknown beak/mouth	0	0	2	140	mouth hooked
S14	6	13	99	41	10	51	24	Leatherback	alive, injured	flipper	0	0	15	200	right front flipper snagged
S14	6	16	99	41	51	50	20	Leatherback	alive, injured	unknown beak/mouth	0	0		179	mouth hooked, some line left in with hook
S14	6	16	99	41	51	50	20	Loggerhead	alive, injured	unknown beak/mouth	0	0		100	mouth hooked, some line left in with hook

trip	m	d	y	lat deg	lat min	lon deg	lon min	species	condition	hook location	hook removed Y/N=1/0	entangled Y/N=1/0	line left (ft)	CL (cm)	comment
S14	6	16	99	41	51	50	20	Leatherback	alive, injured	unknown beak/mouth	0	0		180	mouth hooked, some line left in with hook
S14	6	17	99	42	1	50	25	Loggerhead	alive, injured	unknown beak/mouth	0	0	4	90	mouth hooked
S14	6	18	99	41	59	50	24	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0	3	80	hook swallowed
S14	6	18	99	41	59	50	24	Loggerhead	alive, injured	unknown beak/mouth	0	0	2	65	mouth hooked
S14	6	18	99	41	59	50	24	Loggerhead	alive, injured	unknown beak/mouth	0	0	4	80	mouth hooked
S14	6	18	99	41	59	50	24	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0	4	100	swallowed hook
S14	6	18	99	41	59	50	24	Loggerhead	alive, injured	unknown beak/mouth	0	0	0	80	mouth hooked
S14	6	19	99	42	3	50	22	Loggerhead	alive, injured	unknown beak/mouth	0	0	10	70	mouth hooked
S14	6	20	99	42	14	50	44	Loggerhead	alive, injured	unknown beak/mouth	0	0		120	mouth hooked, seemed in very bad shape
S14	6	22	99	42	24	50	48	Leatherback	alive, injured	flipper	0	0		200	tail? hooked,swam off strong
S14	6	22	99	42	24	50	48	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0		90	hook swallowed
S14	6	23	99	42	24	50	38	Loggerhead	alive, injured	flipper	0	0		90	tail hooked
S14	6	23	99	42	24	50	38	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0		90	hook swallowed
S14	6	23	99	42	24	50	38	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0		110	hook swallowed
S14	6	23	99	42	24	50	38	Loggerhead	alive, injured	ingested (throat/esophagus)	0	0		125	hook swallowed, seemed in very bad shape
S10	1	27	99	28	0	79	25	Leatherback	alive, injured	flipper	0	1	6	200	hooked in right pectoral fin
S10	1	30	99	28	0	79	25	Leatherback	alive, injured	head/neck (external)	0	0	12	200	hooked by mouth
P43	3	1	99	26	14	91	34	unknown	other, unknown	unknown other	0	1	20		tangled, maybe hooked but not in mouth
N34	2	27	99	20	29	73	50	Loggerhead	alive, injured	unknown beak/mouth	0	0	1	70	hooked in mouth
N34	2	28	99	20	25	75	50	Loggerhead	alive, injured	unknown beak/mouth	0	0	3	80	hooked in mouth
N34	2	28	99	20	25	75	50	Loggerhead	alive, uninjured	not hooked		1	0	85	entangled in flipper,all line removed
N34	3	1	99	20	27	73	50	Leatherback	alive, injured	unknown beak/mouth	0	0	2	100	hooked in mouth
N34	3	4	99	20	25	73	52	Loggerhead	alive, injured	unknown beak/mouth	0	0	2	100	hooked in mouth
N34	3	4	99	20	27	73	50	Leatherback	alive, injured	flipper	0	0	2	110	hooked in left front flipper
N34	3	9	99	20	25	73	52	Loggerhead	alive, injured	unknown beak/mouth	0	0	3	65	hooked in mouth
W03	4	22	99	28	37	79	29	Leatherback	alive, injured	unknown beak/mouth	0	0	9	160	hooked in mouth
Q09	8	11	99	31	45	79	5	Leatherback	alive, uninjured	unknown other	0	0	60		dove as boat approached, line cut at clip,not known tangled or hooked
F69	7	16	99	45	45	43	1	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	71	mouth hooked
F69	7	16	99	45	45	43	0	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	56	mouth hooked
F69	7	16	99	45	45	43	4	Loggerhead	alive, injured	unknown beak/mouth	1	0	0	51	mouth hooked
F69	7	17	99	46	4	43	35	Loggerhead	alive, injured	unknown beak/mouth	0	0	4	64	mouth hooked
F69	7	17	99	46	4	43	35	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	71	mouth hooked
F69	7	17	99	46	4	43	35	Loggerhead	alive, injured	flipper	0	0	0	48	

trip	m	d	y	lat deg	lat min	lon deg	lon min	species	condition	hook location	hook removed Y/N=1/0	entangled Y/N=1/0	line left (ft)	CL (cm)	comment
F69	7	19	99	46	6	43	14	Loggerhead	alive, injured	unknown beak/mouth	1	0	0	46	mouth hooked
F69	7	19	99	46	6	43	14	Loggerhead	alive, injured	unknown beak/mouth	0	0	3	66	mouth hooked
F69	7	19	99	46	6	43	14	Loggerhead	alive, injured	unknown beak/mouth	0	0	3	71	mouth hooked
F69	7	19	99	46	6	43	14	Leatherback	alive, injured	unknown beak/mouth	0	0	12	183	mouth hooked
F69	7	19	99	46	6	43	14	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	71	mouth hooked
F69	7	20	99	46	6	43	1	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	69	mouth hooked
F69	7	20	99	46	6	43	1	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	69	mouth hooked
F69	7	20	99	46	6	43	1	Loggerhead	alive, injured	unknown beak/mouth	0	0	2	71	mouth hooked
F69	7	20	99	46	6	43	1	Leatherback	alive, uninjured	not hooked		1	0	168	tangled in radio buoy drop rope, untangled completely
F69	7	21	99	45	59	42	46	Leatherback	alive, injured	flipper	0	0	9	183	
F69	7	21	99	45	59	42	46	Leatherback	alive, injured	unknown beak/mouth	0	0	10	152	mouth hooked
F69	7	21	99	45	59	42	46	Loggerhead	alive, injured	unknown beak/mouth	0	0	4	69	mouth hooked
F69	7	21	99	45	59	42	46	Leatherback	alive, injured	flipper	0	1	12	168	
F69	7	22	99	42	2	42	36	Loggerhead	other, unknown	unknown other				66	did not see capture or release
F69	7	22	99	46	2	42	36	Leatherback	other, unknown	unknown other				168	did not see capture or release, id by captain
F69	7	22	99	46	2	42	36	Leatherback	other, unknown	unknown other				168	did not see capture or release
F69	7	22	99	46	2	42	36	Leatherback	alive, injured	unknown beak/mouth	0	0	12	183	mouth hooked
F69	7	22	99	46	2	42	36	Leatherback	other, unknown	unknown other				183	did not see capture or release
F69	7	22	99	46	2	42	36	Leatherback	alive, uninjured	not hooked		1	0	168	tangled in mainline, line cut
F69	7	26	99	46	18	42	39	Loggerhead	alive, injured	unknown beak/mouth	0	0	4	66	mouth hooked
F69	7	27	99	46	9	42	21	Loggerhead	alive, injured	head/neck (external)	0	0	8	183	
F69	7	28	99	46	9	41	53	Loggerhead	alive, injured	unknown other	0	0	18	183	did not see capture
F69	7	28	99	46	9	41	53	Loggerhead	alive, injured	unknown beak/mouth	0	0	3	66	mouth hooked
F69	7	28	99	46	9	41	53	Leatherback	other, unknown	unknown other				168	did not see capture or release
F69	7	28	99	46	9	41	53	Leatherback	other, unknown	unknown other				122	did not see capture or release
F69	7	28	99	46	9	41	53	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	64	mouth hooked
F69	7	28	99	46	9	41	53	Leatherback	alive, uninjured	not hooked		1	24	168	tangled in mainline and buoy drop;untangled from mainline,but bullet buoy and buoy drop remained tangled on animal
F69	7	29	99	46	0	41	33	Loggerhead	alive, injured	unknown beak/mouth	0	0	4	69	mouth hooked
F69	7	29	99	46	0	41	33	Loggerhead	alive, injured	unknown beak/mouth	0	0	4	61	mouth hooked
F69	7	29	99	46	0	41	33	Loggerhead	other, unknown	unknown other				64	did not see capture or release
F69	7	29	99	46	0	41	33	Loggerhead	alive, injured	unknown beak/mouth	0	0	3	56	mouth hooked, animal remained on the surface of the water

trip	m	d	y	lat deg	lat min	lon deg	lon min	species	condition	hook location	hook removed Y/N=1/0	entangled Y/N=1/0	line left (ft)	CL (cm)	comment
F69	7	29	99	46	0	41	33	Leatherback	alive, uninjured	not hooked		1	0	152	mainline tangled around neck,untangled from mainline,remained on the surface with head above surface
F69	7	29	99	46	0	41	33	Leatherback	alive, injured	unknown other	0	0	12	168	hooked unknown, remained just below surface
F69	7	29	99	46	0	41	33	Leatherback	alive, injured	flipper	0	0	12	183	
F69	7	29	99	46	0	41	33	Leatherback	alive, uninjured	not hooked		1	0	168	tangled in mainline around neck and flipper, untangled completely
F69	7	29	99	46	0	41	33	Leatherback	alive, injured	flipper	0		12	168	
F69	7	29	99	46	0	41	33	Leatherback	other, unknown	unknown other				168	did not see capture or release
F69	7	29	99	46	0	41	33	Leatherback	alive, injured	not hooked		1	0	152	tangled in mainline,gangion line and buoy drop,line cut at boat side
F69	7	30	99	46	11	41	51	Leatherback	alive, injured	unknown beak/mouth	0	0	10	183	mouth hooked
F69	7	30	99	46	11	41	51	Loggerhead	alive, injured	unknown beak/mouth	0	0	6	66	mouth hooked
F69	7	30	99	46	11	41	51	Leatherback	alive, injured	flipper	0	0	5	183	
F69	7	30	99	46	11	41	51	Leatherback	alive, injured	flipper	0	0	6	183	
F69	7	31	99	46	5	41	33	Leatherback	other, unknown	unknown other				168	did not see capture or release
F69	7	31	99	46	5	41	33	Leatherback	alive, injured	flipper	0	0	15	168	
F69	7	31	99	46	5	41	33	Leatherback	alive, uninjured	not hooked		1	0	183	tangled in drop buoy, cut loose completely
F69	8	3	99	46	15	41	54	Leatherback	alive, injured	flipper	0	0	6	152	
F69	8	3	99	46	15	41	54	Loggerhead	alive, injured	unknown beak/mouth	0	0	5	71	mouth hooked
S17	10	2	99	28	1	79	38	Loggerhead	alive, injured	beak/mouth	0	0	6	100	hooked in mouth
S18	10	22	99	31	36	78	50	Loggerhead	alive, injured	beak/mouth	0	0	6	110	hooked in mouth
W07	10	21	99	39	53	69	51	Loggerhead	alive, injured	beak/mouth	0	0	2	75	hooked in tongue
W07	10	21	99	39	53	69	51	Loggerhead	alive, injured	unknown beak/mouth	1	0	0	75	spit hook out of mouth
W07	10	21	99	39	53	69	51	Leatherback	alive, injured	flipper	0	0	2	135	hooked in right front flipper
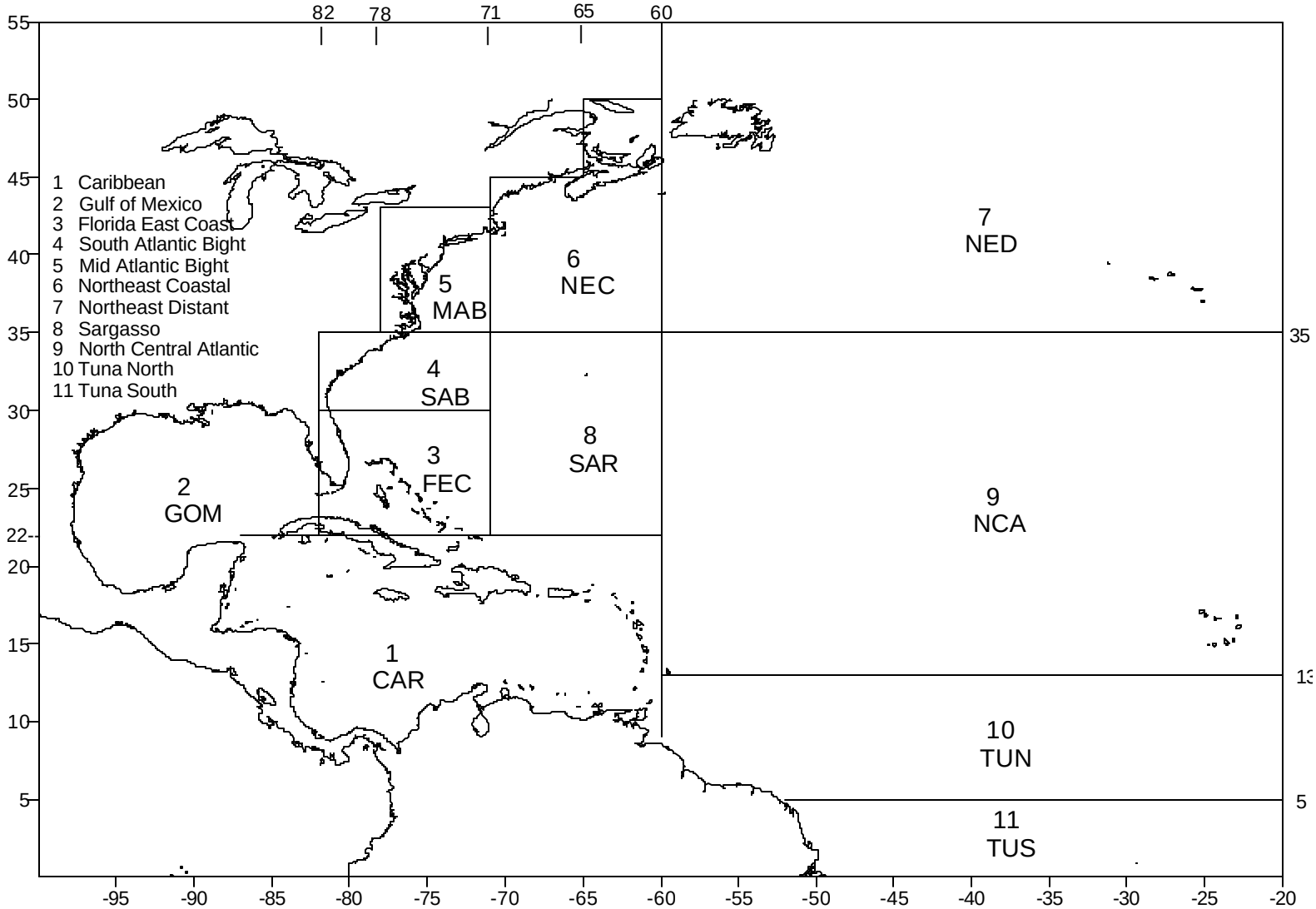
Figure 1. The geographical zones used to classify observed and reported U.S. Atlantic pelagic longline fishing effort. For the purpose of estimation, several strata were combined. The Southeast Coastal (SEC) stratum was defined as areas 3 and 4; the Northeast Coastal (NEC) stratum was defined as areas 5 and 6; and the Offshore South (OFS) was defined as areas 8, 9, 10, and 11. Larger regions were also defined as those generally within the US Atlantic EEZ (USATL: SEC, NEC), other Atlantic waters (OTHATL: OFS, areas 1 and 7); and the Gulf of Mexico (GOM: area 2).