

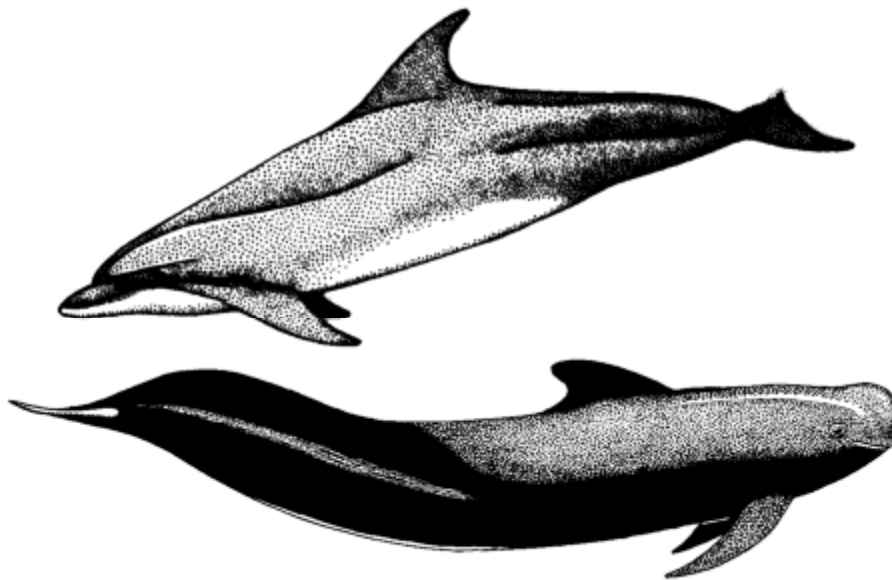


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ESTIMATES OF MARINE MAMMAL AND MARINE TURTLE BYCATCH BY THE U.S.  
ATLANTIC PELAGIC LONGLINE FLEET IN 1999-2000

BY

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August 2001

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### Summary

This report presents the 1999-2000 estimates of the bycatch of marine mammals and turtles by the U.S. Atlantic pelagic longline fleet that lands tunas and Atlantic swordfish. The information is required by NOAA Fisheries to meet its responsibility for management of interactions between protected species and commercial fisheries based on the level of incidental serious injury and mortality. Estimates were based on bycatch rates from a representative sample of the fleet recorded by scientific observers, and fishing effort reported by the fleet. Estimates were constructed using the delta-lognormal method. The basic analytical stratum for which bycatch was estimated for each taxon was year-calendar quarter-grouped fishing area (NAREA). If a stratum had reported effort but no observed effort, quarters, years, and finally NAREA were pooled stepwise in that order until the number of observed sets ( $N_{min}$ )  $\geq 5$  before a pooled bycatch rate was estimated for the stratum. For marine mammals, 94 (95% CI=19, 481) pilot whales were estimated to be dead due to interaction with pelagic longline in 1999 and 24 (5, 123) in 2000, and the number estimated to be seriously injured was 291 (80, 1064) in 1999 and 109 (26, 463) in 2000. No Risso's dolphin was estimated to have died in 1999 but 23 (5, 117) were estimated to be seriously injured; in 2000, 41 (8, 210) were estimated to have died and 23 (5, 117) seriously injured. No other species had estimated mortality, but 28 (5, 143) pygmy sperm whales as well as 19 (4, 97) unidentified whales were estimated to be seriously injured. For marine turtles, 1016 (412, 2764) leatherbacks and 994 (512, 2093) loggerheads were estimated to be caught in pelagic longline in 1999; 769 (251, 2512) leatherbacks and 1256 (529, 3391) loggerheads were estimated to be caught in 2000. The only estimated mortality was for 23 (5, 117) loggerheads in 1999.

## Introduction

Longline is the principal gear used to fish for tunas (*Thunnus* spp.) and swordfish (*Xiphias gladius*) in the U.S. North Atlantic (including the Gulf of Mexico) (Hoey and Bertolino 1988). Non-targeted bycatch of this fishery includes protected species of marine mammals and turtles, which are hooked or entangled in the longline. The level of fishery-related mortality of these protected species has to be monitored and managed in accordance with the Marine Mammal Protection Act and the Endangered Species Act. The 1999-2000 estimates of marine mammals and turtles that were incidentally caught by the U.S. pelagic longline fishery are presented in this report. The 1999 estimates presented here supersede those reported earlier in Yeung *et al.* (2000) to the drafters of a Biological Opinion on the impact of the pelagic longline fishery on marine turtles.

Bycatch estimates of marine mammals and turtles for 1992-1997 (Johnson *et al.* 1999) and 1998 (Yeung 1999a; b) have been published. In these previous reports, the robustness of the bycatch estimates from several different pooling schemes for bycatch rates were examined, from minimal 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 these previous reports.

In Yeung *et al.* (2000), bycatch estimates for 1999 were analyzed using the pooling scheme employed in the analysis of longline fisheries for tunas, swordfish, sharks, and billfish (Brown, in press). Estimates for 1992-1998 were also re-analyzed using this scheme in the same report. The level of pooling in this scheme is determined by a criterion of a minimum number of observed fishing sets ( $N_{min}=5$ ). Quarters, years, and finally NAREA are pooled stepwise in that order until the number of observed sets  $\geq 5$  before a pooled bycatch rate is estimated for the analytical stratum of year-quarter-NAREA. This pooling scheme was used in the analysis of 1999-2000 data for the present report. For that stratum with reported effort but no observed effort, this pooling scheme allows for a bycatch estimate based on observations from similar strata.

## Methods

Data usage in this report followed Yeung *et al.* (2000) and differed from other previous reports (Johnson *et al.* 1999; Yeung 1999a; b) in the following respects: (1) Previously, only effort strictly targeting tunas or swordfish to the exclusion of other species was included; here, logbook effort that targeted some other species in addition to tunas or swordfish was also included. (2) The fishing area previously was defined by the locations where the longline was set out to begin fishing; here, it was defined by the location where the haul-back of the longline began after fishing. (3) The parts of sets that were interrupted (*e.g.*, when the main line was severed) previously were defined as separate sets; here, they were combined. Data sources and methods of bycatch estimation remained unchanged and are only briefly recapitulated here:

### ***Reported and Observed Data***



same trip) or observer logs. Where specific locations could not be determined or extrapolated from neighboring days, the reported sets are proportionally assigned to fishing areas based on the overall distribution of the reported effort with known locations.

### ***Catch Estimation***

Estimates of bycatch of marine mammals and marine turtles were constructed using the delta-lognormal method (Pennington, 1983). Formulae and further discussion on the delta-lognormal estimation method can be found in Yeung *et al.* (2000). 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.

Bycatch estimates by the basic analytical stratum of year-quarter-NAREA are assumed independent and as such estimated bycatch and the associated variances are summed across strata to produce region-wide annual estimates. This assumption may cause the actual variance of bycatch estimate to be underestimated.

### ***Treatment of strata with no observer effort***

In the previous reports (Johnson *et al.* 1999; Yeung 1999a; b), when there was no observer effort for a particular analytical stratum, the mean bycatch rate and the proportion of positive sets were not estimated. No estimate of take was made for the stratum even though the logbook showed that there was fishing effort. Strata with no observed effort occurred mainly in CAR, NED, and OFS of the "other Atlantic waters" (MAREA=OthAtl).

Pooling of observed effort is necessary to obtain estimates for these empty cells with no observed effort. The pooling method used in this analysis was described in Yeung *et al.* (2000). It is based on the assessment method for the catch of large pelagics in the U.S. pelagic longline fisheries (Brown, in press). A degree of pooling of observed effort (sets) is assessed stepwise using a criterion of minimum number of observed sets ( $N_{min}$ ). A low  $N_{min}$  of 5 observed sets and high of 30 sets were chosen arbitrarily and evaluated using 1992-1999 data in Yeung *et al.* (2000). Both choices of the parameter resulted in similar estimates, but  $N_{min}=5$  is preferred because it would reduce the need to pool data and thus the smoothing of the effects due to the time-area differences. The pooling priority order of quarter, year, and NAREA was established according to the increasing order of variance explained attributed to the effect in a GLM:  $L'_j = \text{year} + \text{quarter} + \text{NAREA}$ , where the catch rate (from 1992-1999, including zero catch rates) in the  $j^{\text{th}}$  observed set  $L'_j = \log_e(\text{catch/hooks} + 0.00001)$ ,  $j = 1, 2, \dots, N$  (Yeung *et al.* 2000). NAREA was the most significant effect in the model and therefore the last to enter the pooling scheme.

Thus, in the absence of observer data for a basic analytical stratum, observations are first pooled across quarters within year-NAREA to obtain a minimum of  $N_{min}$  observed sets. Should that not suffice to meet the  $N_{min}$  criterion, observations are then pooled across all quarters in all years (1999 and 2000 in this analysis) within NAREA. Lastly, if  $N_{min}$  is still not met, observations are pooled across quarters in all years and all NAREAs to obtain an estimate of the

bycatch rate and the proportion of positive sets for the stratum. The variance for the bycatch  $V(C)$  is then estimated over the pooled stratum. It would be highly unusual for the pooling of NAREAs to be necessary to achieve the low  $N_{min}$  of 5. The extent of pooling in this analysis can be determined by examination of Table 3B; any cell with a number of observations less than  $N_{min}$  would require pooling according to the pooling scheme.

### ***Serious Injury and Mortality***

Marine mammals were classified by their condition upon return to the sea and bycatch estimates were produced separately for each category. The four release conditions are: (1) alive, (2) dead, (3) unknown, and (4) seriously injured. Seriously-injured mammals are defined as having sustained injury of sufficient severity to significantly increase the near-term probability of death of the animal (Angliss and DeMaster 1998). The "serious injury" designation is based on checking observer comments on the animal against fifteen criteria (Appendix I; Yeung 1999a). Failure to take into account serious injury to an animal that might result in death after its release would underestimate the impact of the fishery on a species. For marine turtles only conditions (1)-(3) were applied. Since 1999, detailed information on the release condition of each marine turtle caught in the pelagic longline gear has been recorded separately in the Sea Turtle Life History Form (Appendix II) by observers and reviewed by the Sea Turtle Team in SEFSC. The category "alive" when applied to marine turtles includes "alive, injured" and "alive, uninjured".

## **Results and Discussion**

Reported and observed effort (hooks and sets) by year-quarter-AREA are respectively summarized in Tables 1-2. Total reported effort was 7242.8 thousand hooks in 11235 sets for 1999 and 7527.5 thousand hooks in 11307 sets in 2000 (Table 1). Total observed effort was 291.2 thousand hooks in 420 sets for 1999 and 329.7 thousand hooks in 464 sets for 2000 (Table 2). Table 3 provides summaries of reported and observed effort (sets) by the basic analytical stratum of year-quarter-NAREA.

The few cells with no reported effort were in the OFS, NED and CAR (Table 3A). There were more cells with no observed effort but they also occurred in those same areas just mentioned (Table 3B). Incidental takes of marine mammals were very low in these areas, but marine turtle takes could be very high in NED (Table 4). Pooling across quarters within year-NAREA was sufficient to achieve the  $N_{min}$  of 5 sets for estimating bycatch in all empty cells with no observed effort and in NEC 1999 quarter 2 where effort  $< N_{min}$  (4). The one exception where further pooling of observed effort across years within NAREA was necessary to achieve  $N_{min}$  was CAR 2000, in which there was no observed effort in any quarter.

The percentage observer coverage (observed effort  $\div$  reported effort  $\times$  100%) by hooks ranged from 0-38% (Table 5). The percentage coverage by sets was very similar. Whether by sets or by hooks, the total annual percent coverage was about 4% for 1999 and 2000.



A total of seven marine mammals were observed to be caught in five sets in 1999 (Tables 4, 6). Five of the seven were caught in NEC, one in SEC, and one in NED. There were five pilot whales (*Globicephalus* sp.), one Risso's dolphin (*Grampus griseus*), and one unidentified marine mammal. One pilot whale was observed to be dead and four were classified as seriously injured (Appendix I). The Risso's dolphin was also classified as seriously injured.

Fourteen marine mammals were observed caught in 2000 in 13 sets. Again, they were all caught in NEC, SEC, or NED. There were eight were pilot whales, three Risso's dolphins, one pygmy sperm whale (*Kogia breviceps*), one common dolphin (*Delphinus delphis*), and one unidentified whale. One pilot whale and one Risso's dolphin were observed to be dead. Four pilot whales, one Risso's dolphin, the pygmy sperm whale, and the unidentified whale were classified as seriously injured. No marine mammal was released with condition "unknown" in 1999-2000.

A total of 112 marine turtles were observed to be caught in 1999 (Tables 4, 6). Of that, 45 were leatherbacks (*Dermochelys coriacea*), 64 were loggerheads (*Caretta caretta*), and 3 were unidentified hard-shell turtles. The majority (76) was caught in NED. Only one loggerhead was observed to be dead. A total of 87 marine turtles were observed to be caught in 2000. Of that, 32 were leatherbacks, 50 were loggerheads, and 5 were unidentified hard-shells turtles. None was observed to be dead. In 2000, the incidental takes were more evenly distributed among NED, SEC, GOM, and NEC (Table 6). Summary of the observed condition of each turtle as recorded in the Sea Turtle Life History Form is given in Appendix III.

Bycatch estimates for each taxon of marine mammals and turtles by the basic year-quarter-NAREA-taxon stratum are given in Table 7. In cases where a stratum had no observed bycatch due to no observed effort, there could still be a non-zero bycatch estimate from pooling effort and bycatch data across strata as described in the Methods section. The basic stratified estimates were further summed to give annual estimates by NAREA (Table 8) and MAREA (Table 9), and finally for all areas combined (Table 10).

The results as represented by the summed annual estimates for all areas combined indicate that pilot whale was the most common species of marine mammal caught in pelagic longline (Table 10). The number of pilot whales estimated to be dead in 1999 due to interaction with pelagic longline was 94 (95% CI=19, 481) in 1999 and 24 (5, 123) in 2000, and the number estimated to be seriously injured was 291 (80, 1064) in 1999 and 109 (26, 463) in 2000. Risso's dolphins were the second most common species caught. No Risso's dolphin was estimated to have died in 1999 but 23 (5, 117) were estimated to be seriously injured; in 2000, 41 (8, 210) were estimated to have died and 23 (5, 117) seriously injured. No other species had estimated mortality, but 28 (5, 143) pygmy sperm whales as well as 19 (4, 97) unidentified whales were estimated to be seriously injured. All marine mammals bycatch came from US Atlantic (US Atl) or other Atlantic waters (OthAtl). The estimated bycatch of marine mammals in GOM is nil (Table 9).

Almost the same number of leatherbacks (1016; 95% CI=412, 2794) and loggerheads (994; 512, 2093) were estimated to be caught in pelagic longline in 1999, but twice as many loggerheads (1256; 529, 3391) as leatherbacks (769; 251, 2512) were estimated to be caught in

2000 (Table 10). The discrepancies in bycatch of species between years could be a combined result of oceanographic conditions and animal behavior (NMFS-SEFSC 2001). The only estimated mortality was for 23 (5, 117) loggerheads in 1999. There were also a small fraction of turtles of either species that were classified to be of unknown condition when released. The self-reported incidental take of marine turtles in the logbook amounted to only 578 in 1999 and 271 in 2000, vastly lower than the estimated total takes. Turtles released "alive, uninjured" were usually not hooked but lightly entangled in the gear and account for less than 10 % of the "alive" category (Table 11).

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 was not greatly disparate in magnitude between the choice of  $N_{min}= 5$  or 30 when pooling priority was held constant, although the higher  $N_{min}$  tends to give a higher estimate. The choice of pooling priority between the order of quarter-year and of year-quarter, with  $N_{min}$  held constant, appeared to also have a small effect on the magnitude of the estimated total bycatch in most cases (Yeung *et al.* 2000).

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, pooling across strata to obtain the necessary number of observations 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. Pooling may obscure significant differences and trends within and across factors. Where there is a paucity of actual observations, this method may be an acceptable alternative when applied with a consideration of its limitations.

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Table 1. Effort in A) number of hooks (H 1000) and B) number of sets reported in logbook for the pelagic longline fishery in the U.S. Atlantic in 1999-2000, stratified by calendar quarter and fishing area (AREA). Effort data lacking area and quarter information are designated as unknown (UNK). Blank cell indicates no reported effort for that stratum.

A. Number of hooks (H 1000)

| YEAR  | QTR | CAR   | FEC   | GOM    | MAB    | NCA   | NEC   | NED   | SAB   | SAR  | TUN  | TUS   | unk   | Total  |
|-------|-----|-------|-------|--------|--------|-------|-------|-------|-------|------|------|-------|-------|--------|
| 1999  | 1   | 124.7 | 218.8 | 833.7  | 49.4   | 68.3  |       | 2.7   | 214.4 | 16.8 | 10.5 | 42.2  | 27.0  | 1608.5 |
| 1999  | 2   | 24.5  | 247.0 | 902.8  | 128.3  | 2.8   | 83.4  | 48.1  | 280.5 |      | 22.9 | 93.5  | 30.7  | 1864.7 |
| 1999  | 3   | 0.2   | 113.4 | 768.0  | 508.1  | 15.0  | 391.3 | 192.7 | 131.6 |      | 4.6  | 6.8   | 31.4  | 2163.2 |
| 1999  | 4   | 2.5   | 117.4 | 681.3  | 455.3  | 29.1  | 96.3  | 95.2  | 82.7  |      | 1.0  | 28.9  | 16.8  | 1606.4 |
| Total |     | 151.9 | 696.7 | 3185.9 | 1141.1 | 115.3 | 571.1 | 338.7 | 709.2 | 16.8 | 39.0 | 171.4 | 105.9 | 7242.8 |
| 2000  | 1   | 145.5 | 188.1 | 781.7  | 37.9   | 54.6  |       |       | 141.8 |      | 2.4  | 49.8  | 22.4  | 1424.0 |
| 2000  | 2   | 51.4  | 220.8 | 888.8  | 146.9  | 6.1   | 50.5  | 80.2  | 350.2 | 3.8  | 12.9 | 25.7  | 55.5  | 1892.9 |
| 2000  | 3   |       | 154.8 | 901.0  | 350.1  |       | 468.0 | 361.6 | 87.4  |      |      | 0.8   | 80.6  | 2404.3 |
| 2000  | 4   | 47.9  | 109.2 | 862.4  | 418.8  | 9.1   | 80.8  | 101.1 | 101.4 |      |      | 8.4   | 67.2  | 1806.3 |
| Total |     | 244.8 | 672.9 | 3433.9 | 953.7  | 69.7  | 599.4 | 542.9 | 680.8 | 3.8  | 15.3 | 84.6  | 225.8 | 7527.5 |

B. Number of sets

| YEAR  | QTR | CAR | FEC  | GOM  | MAB  | NCA | NEC | NED | SAB  | SAR | TUN | TUS | unk | Total |
|-------|-----|-----|------|------|------|-----|-----|-----|------|-----|-----|-----|-----|-------|
| 1999  | 1   | 210 | 573  | 1123 | 84   | 100 |     | 4   | 329  | 22  | 16  | 57  | 45  | 2563  |
| 1999  | 2   | 50  | 651  | 1219 | 238  | 4   | 103 | 69  | 482  |     | 27  | 122 | 60  | 3025  |
| 1999  | 3   | 1   | 382  | 1008 | 696  | 16  | 492 | 228 | 308  |     | 5   | 8   | 60  | 3204  |
| 1999  | 4   | 6   | 401  | 920  | 595  | 36  | 120 | 108 | 197  |     | 1   | 29  | 30  | 2443  |
| Total |     | 267 | 2007 | 4270 | 1613 | 156 | 715 | 409 | 1316 | 22  | 49  | 216 | 195 | 11235 |
| 2000  | 1   | 248 | 497  | 1019 | 76   | 86  |     |     | 212  |     | 3   | 62  | 32  | 2235  |
| 2000  | 2   | 76  | 593  | 1186 | 230  | 16  | 58  | 88  | 531  | 5   | 16  | 27  | 72  | 2898  |
| 2000  | 3   |     | 483  | 1179 | 573  |     | 583 | 397 | 209  |     |     | 1   | 75  | 3500  |
| 2000  | 4   | 87  | 362  | 1099 | 634  | 11  | 92  | 117 | 202  |     |     | 7   | 63  | 2674  |
| Total |     | 411 | 1935 | 4483 | 1513 | 113 | 733 | 602 | 1154 | 5   | 19  | 97  | 242 | 11307 |

Table 2. Observed effort in A) number of hooks (H 1000) and B) number of sets sampled from the pelagic longline fishery in the U.S. Atlantic in 1999-2000, stratified by calendar quarter and fishing area (AREA). Blank cell indicates no observed effort for that stratum.

A. Number of hooks (H 1000)

| YEAR  | QTR | CAR   | FEC   | GOM    | MAB   | NCA   | NEC   | NED   | SAB   | SAR  | TUN  | TUS  | Total  |
|-------|-----|-------|-------|--------|-------|-------|-------|-------|-------|------|------|------|--------|
| 1999  | 1   | 12.24 | 4.52  | 33.72  | 2.33  | 1.50  |       |       | 3.18  | 2.06 | 1.73 | 7.78 | 69.05  |
| 1999  | 2   |       | 11.76 | 30.89  | 3.05  |       |       | 18.43 | 22.90 |      |      |      | 87.02  |
| 1999  | 3   |       | 3.94  | 29.58  | 6.64  |       | 12.14 | 13.81 | 1.70  |      |      |      | 67.80  |
| 1999  | 4   |       | 1.31  | 40.15  | 11.17 |       | 10.02 |       | 4.68  |      |      |      | 67.33  |
| Total |     | 12.24 | 21.52 | 134.33 | 23.19 | 1.50  | 22.16 | 32.24 | 32.46 | 2.06 | 1.73 | 7.78 | 291.19 |
| 2000  | 1   |       | 4.67  | 20.87  | 2.11  | 10.54 |       |       | 7.58  |      |      |      | 45.77  |
| 2000  | 2   |       | 9.79  | 41.86  | 5.63  |       | 6.91  |       | 25.68 |      |      |      | 89.86  |
| 2000  | 3   |       | 5.37  | 45.79  | 14.39 |       | 21.45 | 32.07 | 1.34  |      |      |      | 120.40 |
| 2000  | 4   |       | 4.31  | 32.07  | 13.77 |       | 7.07  | 6.69  | 9.79  |      |      |      | 73.70  |
| Total |     |       | 24.14 | 140.58 | 35.89 | 10.54 | 35.43 | 38.76 | 44.39 |      |      |      | 329.73 |

B. Number of sets

| YEAR  | QTR | CAR | FEC | GOM | MAB | NCA | NEC | NED | SAB | SAR | TUN | TUS | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 1999  | 1   | 17  | 8   | 47  | 6   | 2   |     |     | 5   | 3   | 2   | 10  | 100   |
| 1999  | 2   |     | 32  | 42  | 4   |     |     | 23  | 28  |     |     |     | 129   |
| 1999  | 3   |     | 12  | 35  | 13  |     | 12  | 17  | 5   |     |     |     | 94    |
| 1999  | 4   |     | 5   | 53  | 16  |     | 11  |     | 12  |     |     |     | 97    |
| Total |     | 17  | 57  | 177 | 39  | 2   | 23  | 40  | 50  | 3   | 2   | 10  | 420   |
| 2000  | 1   |     | 13  | 31  | 5   | 15  |     |     | 11  |     |     |     | 75    |
| 2000  | 2   |     | 24  | 51  | 10  |     | 7   |     | 30  |     |     |     | 122   |
| 2000  | 3   |     | 14  | 45  | 23  |     | 30  | 38  | 4   |     |     |     | 154   |
| 2000  | 4   |     | 12  | 44  | 22  |     | 10  | 9   | 16  |     |     |     | 113   |
| Total |     |     | 63  | 171 | 60  | 15  | 47  | 47  | 61  |     |     |     | 464   |

Table 3. A) Reported and B) observed effort (sets) for the pelagic longline fishery in the U.S. Atlantic in 1999-2000, summarized by year-quarter-NAREA. If there is reported effort in a stratum but the observed effort is less than the  $N_{min}$  of 5 sets, the value in the stratum is put in bold type to indicate that pooling is necessary to estimate bycatch for that stratum.

A) Reported effort

| yr    | qtr | CAR | GOM  | NEC  | NED | OFS | SEC  |
|-------|-----|-----|------|------|-----|-----|------|
| 1999  | 1   | 210 | 1123 | 84   | 4   | 195 | 902  |
|       | 2   | 50  | 1219 | 341  | 69  | 153 | 1133 |
|       | 3   | 1   | 1008 | 1188 | 228 | 29  | 690  |
|       | 4   | 6   | 920  | 715  | 108 | 66  | 598  |
| Total |     | 267 | 4270 | 2328 | 409 | 443 | 3323 |
| 2000  | 1   | 248 | 1019 | 76   | 0   | 151 | 709  |
|       | 2   | 76  | 1186 | 288  | 88  | 64  | 1124 |
|       | 3   | 0   | 1179 | 1156 | 398 | 0   | 692  |
|       | 4   | 87  | 1099 | 726  | 117 | 18  | 564  |
| Total |     | 411 | 4483 | 2246 | 603 | 233 | 3089 |

B) Observed effort

| yr    | qtr | CAR      | GOM | NEC      | NED      | OFS      | SEC |
|-------|-----|----------|-----|----------|----------|----------|-----|
| 1999  | 1   | 17       | 47  | 6        | <b>0</b> | 17       | 13  |
|       | 2   | <b>0</b> | 42  | <b>4</b> | 23       | <b>0</b> | 60  |
|       | 3   | <b>0</b> | 35  | 25       | 17       | <b>0</b> | 17  |
|       | 4   | <b>0</b> | 53  | 27       | <b>0</b> | <b>0</b> | 17  |
| Total |     | 17       | 177 | 62       | 40       | 17       | 107 |
| 2000  | 1   | <b>0</b> | 31  | 5        | 0        | 15       | 24  |
|       | 2   | <b>0</b> | 51  | 17       | <b>0</b> | <b>0</b> | 54  |
|       | 3   | 0        | 45  | 53       | 38       | 0        | 18  |
|       | 4   | <b>0</b> | 44  | 32       | 9        | <b>0</b> | 28  |
| Total |     | 0        | 171 | 107      | 47       | 15       | 124 |



Table 4. Observed total number of A) marine mammals and B) marine turtles caught in the pelagic longline fishery in the U.S. Atlantic in 1999-2000 by year-quarter -NAREA. Blank cells indicate no observed effort.

A. Marine mammals

| yr    | qtr | CAR | SEC | GOM | NEC | OFS | NED | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-------|
| 1999  | 1   | 0   | 0   | 0   | 0   | 0   |     | 0     |
| 1999  | 2   |     | 1   | 0   | 0   |     | 0   | 1     |
| 1999  | 3   |     | 0   | 0   | 4   |     | 1   | 5     |
| 1999  | 4   |     | 0   | 0   | 1   |     |     | 1     |
| Total |     |     | 1   |     | 5   |     | 1   | 7     |
| 2000  | 1   |     | 1   | 0   | 1   | 0   |     | 2     |
| 2000  | 2   |     | 1   | 0   | 0   |     |     | 1     |
| 2000  | 3   |     | 1   | 0   | 5   |     | 0   | 6     |
| 2000  | 4   |     | 1   | 0   | 3   |     | 1   | 5     |
| Total |     |     | 4   |     | 9   |     | 1   | 14    |

B. Marine turtle

| yr    | qtr | CAR | SEC | GOM | NEC | OFS | NED | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-------|
| 1999  | 1   | 7   | 2   | 1   | 0   | 0   |     | 10    |
| 1999  | 2   |     | 6   | 0   | 0   |     | 23  | 29    |
| 1999  | 3   |     | 1   | 0   | 0   |     | 53  | 54    |
| 1999  | 4   |     | 2   | 5   | 12  |     |     | 19    |
| Total |     | 7   | 11  | 6   | 12  |     | 76  | 112   |
| 2000  | 1   |     | 3   | 3   | 0   | 5   |     | 11    |
| 2000  | 2   |     | 7   | 6   | 2   |     |     | 15    |
| 2000  | 3   |     | 2   | 5   | 16  |     | 17  | 40    |
| 2000  | 4   |     | 4   | 0   | 6   |     | 11  | 21    |
| Total |     |     | 16  | 14  | 24  | 5   | 28  | 87    |

Table 5. Percentage coverage (observed effort ÷ reported effort x 100%) in each year-quarter-NAREA stratum by A) number of hooks and B) number of sets. Blank cells indicate no reported effort.

A) Coverage by hooks

| yr   | qtr | CAR | GOM | NEC | NED | OFS | SEC |
|------|-----|-----|-----|-----|-----|-----|-----|
| 1999 | 1   | 10  | 4   | 5   | 0   | 9   | 2   |
|      | 2   | 0   | 3   | 1   | 38  | 0   | 7   |
|      | 3   | 0   | 4   | 2   | 7   | 0   | 2   |
|      | 4   | 0   | 6   | 4   | 0   | 0   | 3   |
| 2000 | 1   | 0   | 3   | 6   |     | 10  | 4   |
|      | 2   | 0   | 5   | 6   | 0   | 0   | 6   |
|      | 3   |     | 5   | 4   | 9   |     | 3   |
|      | 4   | 0   | 4   | 4   | 7   | 0   | 7   |

B) Coverage by sets

| yr   | qtr | CAR | GOM | NEC | NED | OFS | SEC |
|------|-----|-----|-----|-----|-----|-----|-----|
| 1999 | 1   | 8   | 4   | 7   | 0   | 9   | 1   |
|      | 2   | 0   | 3   | 1   | 33  | 0   | 5   |
|      | 3   | 0   | 3   | 2   | 7   | 0   | 2   |
|      | 4   | 0   | 6   | 4   | 0   | 0   | 3   |
| 2000 | 1   | 0   | 3   | 7   |     | 10  | 3   |
|      | 2   | 0   | 4   | 6   | 0   | 0   | 5   |
|      | 3   |     | 4   | 5   | 10  |     | 3   |
|      | 4   | 0   | 4   | 4   | 8   | 0   | 5   |

Table 6. A) Marine mammal and B) marine turtle bycatch observed in U.S. Atlantic pelagic longline fishery in 1999-2000 listed by year, calendar quarter (QTR), vessel trip identifier (TRIP), set on which bycatch was observed (HAUL#), the number of hooks set (HOOKS), fishing region (AREA, NAREA, MAREA), the TOTAL number observed, the number out of the total which were observed to be ALIVE, DEAD, seriously injured (INJUR) upon return to the sea (this category only applies to marine mammals), and of unknown condition (UNK) (no marine mammal fell into this category in 1999-2000).

A) Marine mammal

| YEAR | QTR | TRIP   | HAUL# | SPECIES           | TOTAL | ALIVE | DEAD | INJUR | HOOKS | AREA | NAREA | MAREA  |
|------|-----|--------|-------|-------------------|-------|-------|------|-------|-------|------|-------|--------|
| 1999 | 2   | T45    | 7     | pilot whale       | 1     | 0     | 0    | 1     | 1150  | SAB  | SEC   | US ATL |
| 1999 | 3   | W05    | 1     | pilot whale       | 3     | 0     | 1    | 2     | 425   | MAB  | NEC   | US ATL |
| 1999 | 3   | W05    | 5     | pilot whale       | 1     | 0     | 0    | 1     | 425   | MAB  | NEC   | US ATL |
| 1999 | 3   | F69    | 10    | marine mammal     | 1     | 1     | 0    | 0     | 972   | NED  | NED   | OTHATL |
| 1999 | 4   | A31114 | 1     | Risso's dolphin   | 1     | 0     | 0    | 1     | 1056  | MAB  | NEC   | US ATL |
| 2000 | 3   | T01054 | 9     | common dolphin    | 1     | 1     | 0    | 0     | 500   | NEC  | NEC   | US ATL |
| 2000 | 1   | W01010 | 1     | pilot whale       | 1     | 0     | 0    | 1     | 380   | MAB  | NEC   | US ATL |
| 2000 | 2   | K02001 | 7     | pilot whale       | 1     | 1     | 0    | 0     | 360   | FEC  | SEC   | US ATL |
| 2000 | 3   | W01012 | 3     | pilot whale       | 2     | 0     | 0    | 2     | 450   | MAB  | NEC   | US ATL |
| 2000 | 3   | T01054 | 4     | pilot whale       | 1     | 0     | 0    | 1     | 864   | NEC  | NEC   | US ATL |
| 2000 | 4   | S01032 | 5     | pilot whale       | 1     | 0     | 1    | 0     | 328   | FEC  | SEC   | US ATL |
| 2000 | 4   | T01055 | 4     | pilot whale       | 1     | 1     | 0    | 0     | 600   | MAB  | NEC   | US ATL |
| 2000 | 4   | Y01001 | 1     | pilot whale       | 1     | 1     | 0    | 0     | 396   | MAB  | NEC   | US ATL |
| 2000 | 1   | S01022 | 6     | pygmy sperm whale | 1     | 0     | 0    | 1     | 496   | FEC  | SEC   | US ATL |
| 2000 | 3   | S01028 | 1     | Risso's dolphin   | 1     | 0     | 1    | 0     | 336   | SAB  | SEC   | US ATL |
| 2000 | 4   | T01055 | 2     | Risso's dolphin   | 1     | 1     | 0    | 0     | 550   | MAB  | NEC   | US ATL |
| 2000 | 4   | J02005 | 8     | Risso's dolphin   | 1     | 0     | 0    | 1     | 591   | NED  | NED   | OTHATL |
| 2000 | 3   | W01013 | 4     | whale             | 1     | 0     | 0    | 1     | 835   | NEC  | NEC   | US ATL |

B) Marine turtle

| YEAR | QTR | TRIP | HAUL# | SPECIES     | TOTAL | ALIVE | DEAD | UNK | HOOKS | AREA | NAREA | MAREA  |
|------|-----|------|-------|-------------|-------|-------|------|-----|-------|------|-------|--------|
| 1999 | 1   | S10  | 3     | leatherback | 1     | 1     | 0    | 0   | 400   | FEC  | SEC   | US ATL |
| 1999 | 1   | N34  | 4     | leatherback | 1     | 1     | 0    | 0   | 756   | CAR  | CAR   | OTHATL |
| 1999 | 1   | S10  | 5     | leatherback | 1     | 1     | 0    | 0   | 444   | FEC  | SEC   | US ATL |
| 1999 | 1   | N34  | 7     | leatherback | 1     | 1     | 0    | 0   | 704   | CAR  | CAR   | OTHATL |
| 1999 | 2   | S14  | 4     | leatherback | 1     | 1     | 0    | 0   | 825   | NED  | NED   | OTHATL |
| 1999 | 2   | F67  | 5     | leatherback | 1     | 1     | 0    | 0   | 459   | SAB  | SEC   | US ATL |
| 1999 | 2   | T45  | 6     | leatherback | 1     | 1     | 0    | 0   | 1100  | SAB  | SEC   | US ATL |
| 1999 | 2   | W03  | 8     | leatherback | 1     | 1     | 0    | 0   | 360   | FEC  | SEC   | US ATL |
| 1999 | 2   | S14  | 12    | leatherback | 1     | 1     | 0    | 0   | 990   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 16    | leatherback | 2     | 2     | 0    | 0   | 825   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 22    | leatherback | 1     | 1     | 0    | 0   | 1100  | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 4     | leatherback | 1     | 1     | 0    | 0   | 918   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 5     | leatherback | 1     | 1     | 0    | 0   | 972   | NED  | NED   | OTHATL |
| 1999 | 3   | Q09  | 5     | leatherback | 1     | 1     | 0    | 0   | 350   | SAB  | SEC   | US ATL |
| 1999 | 3   | F69  | 6     | leatherback | 3     | 3     | 0    | 0   | 864   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 7     | leatherback | 2     | 0     | 0    | 2   | 918   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 8     | leatherback | 3     | 2     | 0    | 1   | 756   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 11    | leatherback | 3     | 1     | 0    | 2   | 648   | NED  | NED   | OTHATL |

| YEAR | QTR | TRIP | HAUL# | SPECIES     | TOTAL | ALIVE | DEAD | UNK | HOOKS | AREA | NAREA | MAREA  |
|------|-----|------|-------|-------------|-------|-------|------|-----|-------|------|-------|--------|
| 1999 | 3   | F69  | 12    | leatherback | 7     | 6     | 0    | 1   | 972   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 13    | leatherback | 3     | 3     | 0    | 0   | 702   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 14    | leatherback | 3     | 2     | 0    | 1   | 756   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 17    | leatherback | 1     | 1     | 0    | 0   | 918   | NED  | NED   | OTHATL |
| 1999 | 4   | S20  | 1     | leatherback | 1     | 1     | 0    | 0   | 460   | GOM  | GOM   | GOM    |
| 1999 | 4   | W07  | 1     | leatherback | 2     | 2     | 0    | 0   | 1020  | MAB  | NEC   | US ATL |
| 1999 | 4   | W07  | 2     | leatherback | 1     | 1     | 0    | 0   | 1060  | NEC  | NEC   | US ATL |
| 1999 | 4   | W07  | 6     | leatherback | 1     | 1     | 0    | 0   | 165   | NEC  | NEC   | US ATL |
|      |     |      |       |             |       |       |      |     |       |      |       |        |
| 1999 | 1   | N34  | 2     | loggerhead  | 1     | 1     | 0    | 0   | 768   | CAR  | CAR   | OTHATL |
| 1999 | 1   | N34  | 3     | loggerhead  | 2     | 2     | 0    | 0   | 748   | CAR  | CAR   | OTHATL |
| 1999 | 1   | N34  | 7     | loggerhead  | 1     | 1     | 0    | 0   | 704   | CAR  | CAR   | OTHATL |
| 1999 | 1   | N34  | 12    | loggerhead  | 1     | 1     | 0    | 0   | 768   | CAR  | CAR   | OTHATL |
| 1999 | 2   | S14  | 1     | loggerhead  | 3     | 3     | 0    | 0   | 990   | NED  | NED   | OTHATL |
| 1999 | 2   | T44  | 4     | loggerhead  | 2     | 2     | 0    | 0   | 1029  | SAB  | SEC   | US ATL |
| 1999 | 2   | F67  | 5     | loggerhead  | 1     | 1     | 0    | 0   | 459   | SAB  | SEC   | US ATL |
| 1999 | 2   | S14  | 10    | loggerhead  | 1     | 1     | 0    | 0   | 670   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 16    | loggerhead  | 1     | 1     | 0    | 0   | 825   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 17    | loggerhead  | 1     | 1     | 0    | 0   | 825   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 18    | loggerhead  | 5     | 5     | 0    | 0   | 990   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 19    | loggerhead  | 1     | 1     | 0    | 0   | 825   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 20    | loggerhead  | 1     | 1     | 0    | 0   | 825   | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 22    | loggerhead  | 1     | 1     | 0    | 0   | 1100  | NED  | NED   | OTHATL |
| 1999 | 2   | S14  | 23    | loggerhead  | 4     | 4     | 0    | 0   | 825   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 1     | loggerhead  | 3     | 3     | 0    | 0   | 687   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 2     | loggerhead  | 4     | 4     | 0    | 0   | 864   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 4     | loggerhead  | 3     | 3     | 0    | 0   | 918   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 5     | loggerhead  | 3     | 3     | 0    | 0   | 972   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 6     | loggerhead  | 1     | 1     | 0    | 0   | 864   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 7     | loggerhead  | 1     | 0     | 0    | 1   | 918   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 9     | loggerhead  | 1     | 1     | 0    | 0   | 972   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 10    | loggerhead  | 2     | 2     | 0    | 0   | 972   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 11    | loggerhead  | 2     | 2     | 0    | 0   | 648   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 12    | loggerhead  | 4     | 3     | 0    | 1   | 972   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 13    | loggerhead  | 1     | 1     | 0    | 0   | 702   | NED  | NED   | OTHATL |
| 1999 | 3   | F69  | 17    | loggerhead  | 1     | 1     | 0    | 0   | 918   | NED  | NED   | OTHATL |
| 1999 | 4   | W07  | 1     | loggerhead  | 3     | 3     | 0    | 0   | 1020  | GOM  | GOM   | GOM    |
| 1999 | 4   | W08  | 1     | loggerhead  | 1     | 1     | 0    | 0   | 492   | NEC  | NEC   | US ATL |
| 1999 | 4   | W07  | 2     | loggerhead  | 1     | 1     | 0    | 0   | 1060  | MAB  | NEC   | US ATL |
| 1999 | 4   | W08  | 2     | loggerhead  | 1     | 1     | 0    | 0   | 366   | NEC  | NEC   | US ATL |
| 1999 | 4   | S17  | 2     | loggerhead  | 1     | 1     | 0    | 0   | 294   | NEC  | NEC   | US ATL |
| 1999 | 4   | S18  | 2     | loggerhead  | 1     | 1     | 0    | 0   | 504   | SAB  | SEC   | US ATL |
| 1999 | 4   | W07  | 4     | loggerhead  | 1     | 1     | 0    | 0   | 1090  | MAB  | NEC   | US ATL |
| 1999 | 4   | S20  | 6     | loggerhead  | 1     | 1     | 0    | 0   | 480   | FEC  | SEC   | US ATL |
| 1999 | 4   | W07  | 9     | loggerhead  | 1     | 0     | 1    | 0   | 1020  | MAB  | NEC   | US ATL |
| 1999 | 4   | W07  | 10    | loggerhead  | 1     | 1     | 0    | 0   | 850   | NEC  | NEC   | US ATL |
|      |     |      |       |             |       |       |      |     |       |      |       |        |
| 1999 | 1   | P43  | 4     | turtle      | 1     | 0     | 0    | 1   | 750   | GOM  | GOM   | GOM    |
| 1999 | 4   | R02  | 1     | turtle      | 1     | 1     | 0    | 0   | 840   | MAB  | NEC   | US ATL |
| 1999 | 4   | P50  | 5     | turtle      | 1     | 1     | 0    | 0   | 904   | GOM  | GOM   | GOM    |

| YEAR | QTR | TRIP   | HAUL# | SPECIES     | TOTAL | ALIVE | DEAD | UNK | HOOKS | AREA | NAREA | MAREA  |
|------|-----|--------|-------|-------------|-------|-------|------|-----|-------|------|-------|--------|
| 2000 | 1   | Q02005 | 7     | leatherback | 1     | 1     | 0    | 0   | 793   | GOM  | GOM   | GOM    |
| 2000 | 1   | M01018 | 13    | leatherback | 1     | 1     | 0    | 0   | 792   | NCA  | OFS   | OTHATL |
| 2000 | 1   | S01023 | 2     | leatherback | 1     | 1     | 0    | 0   | 277   | SAB  | SEC   | US ATL |
| 2000 | 1   | S01023 | 3     | leatherback | 1     | 1     | 0    | 0   | 395   | SAB  | SEC   | US ATL |
| 2000 | 2   | P01055 | 3     | leatherback | 1     | 1     | 0    | 0   | 950   | GOM  | GOM   | GOM    |
| 2000 | 2   | P01056 | 2     | leatherback | 1     | 1     | 0    | 0   | 850   | GOM  | GOM   | GOM    |
| 2000 | 2   | P01056 | 8     | leatherback | 1     | 1     | 0    | 0   | 870   | GOM  | GOM   | GOM    |
| 2000 | 2   | P01056 | 10    | leatherback | 1     | 1     | 0    | 0   | 850   | GOM  | GOM   | GOM    |
| 2000 | 2   | B56038 | 3     | leatherback | 1     | 1     | 0    | 0   | 1000  | NEC  | NEC   | US ATL |
| 2000 | 3   | P01057 | 4     | leatherback | 1     | 1     | 0    | 0   | 850   | GOM  | GOM   | GOM    |
| 2000 | 3   | P01057 | 6     | leatherback | 2     | 2     | 0    | 0   | 850   | GOM  | GOM   | GOM    |
| 2000 | 3   | Q02009 | 5     | leatherback | 1     | 1     | 0    | 0   | 804   | GOM  | GOM   | GOM    |
| 2000 | 3   | Q02010 | 2     | leatherback | 1     | 1     | 0    | 0   | 918   | GOM  | GOM   | GOM    |
| 2000 | 3   | T01054 | 3     | leatherback | 1     | 1     | 0    | 0   | 864   | NEC  | NEC   | US ATL |
| 2000 | 3   | J02003 | 2     | leatherback | 2     | 2     | 0    | 0   | 768   | NED  | NED   | OTHATL |
| 2000 | 3   | J02003 | 15    | leatherback | 1     | 1     | 0    | 0   | 768   | NED  | NED   | OTHATL |
| 2000 | 3   | J02003 | 18    | leatherback | 1     | 1     | 0    | 0   | 804   | NED  | NED   | OTHATL |
| 2000 | 3   | M01020 | 11    | leatherback | 2     | 2     | 0    | 0   | 960   | NED  | NED   | OTHATL |
| 2000 | 3   | M01020 | 18    | leatherback | 1     | 1     | 0    | 0   | 960   | NED  | NED   | OTHATL |
| 2000 | 3   | S01028 | 4     | leatherback | 1     | 1     | 0    | 0   | 336   | SAB  | SEC   | US ATL |
| 2000 | 4   | S01032 | 6     | leatherback | 1     | 1     | 0    | 0   | 328   | FEC  | SEC   | US ATL |
| 2000 | 4   | T01055 | 5     | leatherback | 1     | 1     | 0    | 0   | 500   | MAB  | NEC   | US ATL |
| 2000 | 4   | J02005 | 10    | leatherback | 1     | 1     | 0    | 0   | 729   | NEC  | NEC   | US ATL |
| 2000 | 4   | J02005 | 13    | leatherback | 1     | 1     | 0    | 0   | 540   | NEC  | NEC   | US ATL |
| 2000 | 4   | J02005 | 1     | leatherback | 1     | 1     | 0    | 0   | 552   | NED  | NED   | OTHATL |
| 2000 | 4   | J02005 | 7     | leatherback | 3     | 3     | 0    | 0   | 648   | NED  | NED   | OTHATL |
| 2000 | 4   | S01031 | 4     | leatherback | 1     | 1     | 0    | 0   | 256   | SAB  | SEC   | US ATL |
|      |     |        |       |             |       |       |      |     |       |      |       |        |
| 2000 | 1   | S01022 | 6     | loggerhead  | 1     | 1     | 0    | 0   | 496   | FEC  | SEC   | US ATL |
| 2000 | 1   | Q02005 | 8     | loggerhead  | 1     | 1     | 0    | 0   | 797   | GOM  | GOM   | GOM    |
| 2000 | 1   | T01049 | 10    | loggerhead  | 1     | 1     | 0    | 0   | 448   | GOM  | GOM   | GOM    |
| 2000 | 1   | M01018 | 6     | loggerhead  | 1     | 1     | 0    | 0   | 768   | NCA  | OFS   | OTHATL |
| 2000 | 1   | M01018 | 8     | loggerhead  | 1     | 1     | 0    | 0   | 768   | NCA  | OFS   | OTHATL |
| 2000 | 1   | M01018 | 12    | loggerhead  | 2     | 2     | 0    | 0   | 864   | NCA  | OFS   | OTHATL |
| 2000 | 2   | R01005 | 5     | loggerhead  | 1     | 1     | 0    | 0   | 318   | FEC  | SEC   | US ATL |
| 2000 | 2   | S01025 | 4     | loggerhead  | 1     | 1     | 0    | 0   | 636   | FEC  | SEC   | US ATL |
| 2000 | 2   | S01025 | 7     | loggerhead  | 1     | 1     | 0    | 0   | 596   | FEC  | SEC   | US ATL |
| 2000 | 2   | A25006 | 2     | loggerhead  | 1     | 1     | 0    | 0   | 660   | MAB  | NEC   | US ATL |
| 2000 | 2   | J02001 | 6     | loggerhead  | 1     | 1     | 0    | 0   | 580   | SAB  | SEC   | US ATL |
| 2000 | 3   | J02004 | 4     | loggerhead  | 2     | 2     | 0    | 0   | 580   | MAB  | NEC   | US ATL |
| 2000 | 3   | J02004 | 5     | loggerhead  | 1     | 1     | 0    | 0   | 550   | MAB  | NEC   | US ATL |
| 2000 | 3   | J02004 | 6     | loggerhead  | 1     | 1     | 0    | 0   | 220   | MAB  | NEC   | US ATL |
| 2000 | 3   | W01013 | 10    | loggerhead  | 1     | 1     | 0    | 0   | 800   | MAB  | NEC   | US ATL |
| 2000 | 3   | W01013 | 12    | loggerhead  | 1     | 1     | 0    | 0   | 780   | MAB  | NEC   | US ATL |
| 2000 | 3   | J02004 | 3     | loggerhead  | 1     | 1     | 0    | 0   | 605   | NEC  | NEC   | US ATL |
| 2000 | 3   | O02008 | 1     | loggerhead  | 1     | 1     | 0    | 0   | 820   | NEC  | NEC   | US ATL |
| 2000 | 3   | T01054 | 1     | loggerhead  | 1     | 1     | 0    | 0   | 750   | NEC  | NEC   | US ATL |
| 2000 | 3   | T01054 | 2     | loggerhead  | 1     | 1     | 0    | 0   | 786   | NEC  | NEC   | US ATL |
| 2000 | 3   | T01054 | 4     | loggerhead  | 1     | 0     | 0    | 1   | 864   | NEC  | NEC   | US ATL |
| 2000 | 3   | T01054 | 7     | loggerhead  | 1     | 1     | 0    | 0   | 648   | NEC  | NEC   | US ATL |
| 2000 | 3   | W01013 | 2     | loggerhead  | 1     | 1     | 0    | 0   | 835   | NEC  | NEC   | US ATL |

| YEAR  | QTR | TRIP   | HAUL# | SPECIES    | TOTAL | ALIVE | DEAD | UNK | HOOKS | AREA | NAREA | MAREA  |
|-------|-----|--------|-------|------------|-------|-------|------|-----|-------|------|-------|--------|
| 2000  | 3   | W01013 | 4     | loggerhead | 1     | 1     | 0    | 0   | 835   | NEC  | NEC   | US ATL |
| 2000  | 3   | W01014 | 4     | loggerhead | 1     | 1     | 0    | 0   | 1044  | NEC  | NEC   | US ATL |
| 2000  | 3   | J02003 | 1     | loggerhead | 3     | 3     | 0    | 0   | 576   | NED  | NED   | OTHATL |
| 2000  | 3   | J02003 | 18    | loggerhead | 1     | 1     | 0    | 0   | 804   | NED  | NED   | OTHATL |
| 2000  | 3   | M01020 | 1     | loggerhead | 1     | 1     | 0    | 0   | 1032  | NED  | NED   | OTHATL |
| 2000  | 3   | M01020 | 3     | loggerhead | 1     | 1     | 0    | 0   | 1056  | NED  | NED   | OTHATL |
| 2000  | 3   | M01020 | 4     | loggerhead | 1     | 1     | 0    | 0   | 1056  | NED  | NED   | OTHATL |
| 2000  | 3   | M01020 | 6     | loggerhead | 1     | 1     | 0    | 0   | 625   | NED  | NED   | OTHATL |
| 2000  | 3   | M01020 | 9     | loggerhead | 1     | 1     | 0    | 0   | 1050  | NED  | NED   | OTHATL |
| 2000  | 3   | M01020 | 10    | loggerhead | 1     | 1     | 0    | 0   | 816   | NED  | NED   | OTHATL |
| 2000  | 3   | S01028 | 2     | loggerhead | 1     | 0     | 0    | 1   | 336   | SAB  | SEC   | US ATL |
| 2000  | 4   | S01031 | 1     | loggerhead | 1     | 1     | 0    | 0   | 384   | FEC  | SEC   | US ATL |
| 2000  | 4   | T01055 | 5     | loggerhead | 2     | 2     | 0    | 0   | 500   | MAB  | NEC   | US ATL |
| 2000  | 4   | K02003 | 4     | loggerhead | 1     | 1     | 0    | 0   | 768   | NEC  | NEC   | US ATL |
| 2000  | 4   | J02005 | 1     | loggerhead | 4     | 4     | 0    | 0   | 552   | NED  | NED   | OTHATL |
| 2000  | 4   | J02005 | 4     | loggerhead | 3     | 3     | 0    | 0   | 432   | NED  | NED   | OTHATL |
| 2000  | 4   | S01031 | 2     | loggerhead | 1     | 1     | 0    | 0   | 352   | SAB  | SEC   | US ATL |
| <hr/> |     |        |       |            |       |       |      |     |       |      |       |        |
| 2000  | 2   | K02001 | 3     | turtle     | 1     | 1     | 0    | 0   | 360   | FEC  | SEC   | US ATL |
| 2000  | 2   | R01005 | 3     | turtle     | 1     | 1     | 0    | 0   | 300   | FEC  | SEC   | US ATL |
| 2000  | 2   | P01056 | 4     | turtle     | 1     | 1     | 0    | 0   | 870   | GOM  | GOM   | GOM    |
| 2000  | 2   | P01056 | 7     | turtle     | 1     | 1     | 0    | 0   | 850   | GOM  | GOM   | GOM    |
| 2000  | 2   | J02001 | 5     | turtle     | 1     | 1     | 0    | 0   | 580   | SAB  | SEC   | US ATL |

Table 7. Quarterly (QTR) observed (obs.) and estimated (est.) total bycatch of A) marine mammals and B) marine turtles in the U.S. Atlantic longline fishery for 1999-2000, stratified by species-NAREA-quarter. The four categories are the TOTAL (T) number of animals, the number of animals out of the total which were DEAD (D), seriously-INJURED (S) (this category only applies to marine mammals), of UNKnown condition (U) (no marine mammal fell into this category in 1999-2000), and ALIVE (A) upon return to the sea. The estimated coefficients of variation (CV\_\*) for the bycatch estimates, and upper and lower 95% lognormal confidence bounds (U\_\*, L\_\*) are also given. The proportion of positive bycatch (PPT) is the proportion of sets observed in the stratum (N) in which at least one marine mammal or turtle was captured; PP\* is the subset of PPT in which the animal was observed to be dead (D), seriously-injured (S)/unknown(U) and alive (A). Decimals are rounded to the nearest hundredth. In certain species-NAREA-quarter strata where there is reported effort but no observed effort and therefore no observed bycatch (.), a non-zero bycatch estimate may in some cases be obtained by pooling the bycatch rate across strata.

A) Marine mammal

|                   | QTR   | NAREA | N  | PPT  | obs. | est. | CV_T | U_T  | L_T | PPD  | obs. | est. | CV_D | U_D | L_D | PPS     | obs. | est. | CV_S | U_S | L_S   | PPA  | obs. | est. | CV_A | U_A | L_A |
|-------------------|-------|-------|----|------|------|------|------|------|-----|------|------|------|------|-----|-----|---------|------|------|------|-----|-------|------|------|------|------|-----|-----|
|                   | TOTAL |       |    |      |      |      |      |      |     |      | DEAD |      |      |     |     | INJURED |      |      |      |     | ALIVE |      |      |      |      |     |     |
| 1999              |       |       |    |      |      |      |      |      |     |      |      |      |      |     |     |         |      |      |      |     |       |      |      |      |      |     |     |
| Risso's dolphin   | 2     | NEC   | 62 | 0.02 | .    | 3    | 1    | 15   | 1   | 0    | ..   | 0    |      |     |     | 0.02    | .    | 3    | 1    | 15  | 1     | 0    | ..   | 0    |      |     |     |
| Risso's dolphin   | 4     | NEC   | 27 | 0.04 | 1    | 20   | 1    | 102  | 4   | 0    | 0    | 0    |      |     |     | 0.04    | 1    | 20   | 1    | 102 | 4     | 0    | 0    | 0    |      |     |     |
| marine mammal     | 3     | NED   | 17 | 0.06 | 1    | 12   | 1    | 61   | 2   | 0    | 0    | 0    |      |     |     | 0       | 0    | 0    |      |     |       | 0.06 | 1    | 12   | 1    | 61  | 2   |
| marine mammal     | 4     | NED   | 40 | 0.03 | .    | 2    | 1    | 10   | 0   | 0    | ..   | 0    |      |     |     | 0       | .    | 0    |      |     |       | 0.03 | ..   | 2    | 1    | 10  | 0   |
| pilot whale       | 2     | NEC   | 62 | 0.03 | .    | 33   | 0.78 | 128  | 9   | 0.02 | ..   | 8    | 1    | 41  | 2   | 0.03    | .    | 25   | 0.73 | 90  | 7     | 0    | ..   | 0    |      |     |     |
| pilot whale       | 3     | NEC   | 25 | 0.08 | 4    | 344  | 0.78 | 1330 | 89  | 0.04 | 1    | 86   | 1    | 440 | 17  | 0.08    | 3    | 258  | 0.73 | 933 | 71    | 0    | 0    | 0    |      |     |     |
| pilot whale       | 2     | SEC   | 60 | 0.02 | 1    | 8    | 1    | 41   | 2   | 0    | 0    | 0    |      |     |     | 0.02    | 1    | 8    | 1    | 41  | 2     | 0    | 0    | 0    |      |     |     |
| 2000              |       |       |    |      |      |      |      |      |     |      |      |      |      |     |     |         |      |      |      |     |       |      |      |      |      |     |     |
| common dolphin    | 3     | NEC   | 53 | 0.02 | 1    | 32   | 1    | 164  | 6   | 0    | 0    | 0    |      |     |     | 0       | 0    | 0    |      |     |       | 0.02 | 1    | 32   | 1    | 164 | 6   |
| Risso's dolphin   | 4     | NEC   | 32 | 0.03 | 1    | 29   | 1    | 148  | 6   | 0    | 0    | 0    |      |     |     | 0       | 0    | 0    |      |     |       | 0.03 | 1    | 29   | 1    | 148 | 6   |
| Risso's dolphin   | 2     | NED   | 47 | 0.02 | .    | 3    | 1    | 15   | 1   | 0    | .    | 0    |      |     |     | 0.02    | .    | 3    | 1    | 15  | 1     | 0    | .    | 0    |      |     |     |
| Risso's dolphin   | 4     | NED   | 9  | 0.11 | 1    | 20   | 1    | 102  | 4   | 0    | 0    | 0    |      |     |     | 0.11    | 1    | 20   | 1    | 102 | 4     | 0    | 0    | 0    |      |     |     |
| Risso's dolphin   | 3     | SEC   | 18 | 0.06 | 1    | 41   | 1    | 210  | 8   | 0.06 | 1    | 41   | 1    | 210 | 8   | 0       | 0    | 0    |      |     |       | 0    | 0    | 0    |      |     |     |
| pilot whale       | 1     | NEC   | 5  | 0.2  | 1    | 20   | 1    | 102  | 4   | 0    | 0    | 0    |      |     |     | 0.2     | 1    | 20   | 1    | 102 | 4     | 0    | 0    | 0    |      |     |     |
| pilot whale       | 3     | NEC   | 53 | 0.04 | 3    | 89   | 0.82 | 361  | 22  | 0    | 0    | 0    |      |     |     | 0.04    | 3    | 89   | 0.82 | 361 | 22    | 0    | 0    | 0    |      |     |     |
| pilot whale       | 4     | NEC   | 32 | 0.06 | 2    | 68   | 0.71 | 238  | 19  | 0    | 0    | 0    |      |     |     | 0       | 0    | 0    |      |     |       | 0.06 | 2    | 68   | 0.71 | 238 | 19  |
| pilot whale       | 2     | SEC   | 54 | 0.02 | 1    | 30   | 1    | 153  | 6   | 0    | 0    | 0    |      |     |     | 0       | 0    | 0    |      |     |       | 0.02 | 1    | 30   | 1    | 153 | 6   |
| pilot whale       | 4     | SEC   | 28 | 0.04 | 1    | 24   | 1    | 123  | 5   | 0.04 | 1    | 24   | 1    | 123 | 5   | 0       | 0    | 0    |      |     |       | 0    | 0    | 0    |      |     |     |
| pygmy sperm whale | 1     | SEC   | 24 | 0.04 | 1    | 28   | 1    | 143  | 5   | 0    | 0    | 0    |      |     |     | 0.04    | 1    | 28   | 1    | 143 | 5     | 0    | 0    | 0    |      |     |     |
| whale             | 3     | NEC   | 53 | 0.02 | 1    | 19   | 1    | 97   | 4   | 0    | 0    | 0    |      |     |     | 0.02    | 1    | 19   | 1    | 97  | 4     | 0    | 0    | 0    |      |     |     |

B) Marine turtle

|             |   |       | QTR | NAREA | N  | PPT | obs. | est. | CV_T | U_T  | L_T | PPD  | obs. | est. | CV_D | U_D  | L_D | PPU | obs. | est. | CV_U | U_U  | L_U | PPA   | obs. | est. | CV_A | U_A | L_A |
|-------------|---|-------|-----|-------|----|-----|------|------|------|------|-----|------|------|------|------|------|-----|-----|------|------|------|------|-----|-------|------|------|------|-----|-----|
|             |   | TOTAL |     |       |    |     |      |      |      |      |     | DEAD |      |      |      |      |     | UNK |      |      |      |      |     | ALIVE |      |      |      |     |     |
| 1999        |   |       |     |       |    |     |      |      |      |      |     |      |      |      |      |      |     |     |      |      |      |      |     |       |      |      |      |     |     |
| leatherback | 1 | CAR   | 17  | 0.12  | 2  | 20  | 0.69 | 67   | 6    | 0    | 0   | 0    |      |      |      | 0.02 | 1   | 24  |      | 1    | 123  | 5    | 0   | 0     | 0    | 0    | 0    |     |     |
| leatherback | 2 | CAR   | 17  | 0.12  | .  | 4   | 0.69 | 13   | 1    | 0    | .   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.02 | .   | 4     | 1    | 20   | 1    |     |     |
| leatherback | 4 | GOM   | 53  | 0.02  | 1  | 28  | 1    | 143  | 5    | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.02 | 1   | 14    | 1    | 72   | 3    |     |     |
| leatherback | 2 | NEC   | 62  | 0.05  | .  | 31  | 0.69 | 105  | 9    | 0    | .   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.04 | 1   | 25    | 1    | 128  | 5    |     |     |
| leatherback | 4 | NEC   | 27  | 0.11  | 4  | 182 | 0.69 | 617  | 54   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.12 | 2   | 20    | 0.69 | 67   | 6    |     |     |
| leatherback | 1 | NED   | 40  | 0.35  | .  | 3   | 0.4  | 6    | 1    | 0    | .   | 0    |      |      |      | 0.13 | .   | 1   | 0.43 | 2    | 0    | 0.33 | .   | 2     | 0.41 | 4    | 1    |     |     |
| leatherback | 2 | NED   | 23  | 0.17  | 5  | 12  | 0.5  | 30   | 5    | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.15 | 2   | 161   | 0.68 | 538  | 48   |     |     |
| leatherback | 3 | NED   | 17  | 0.59  | 27 | 387 | 0.31 | 696  | 215  | 0    | 0   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.12 | .   | 4     | 0.69 | 13   | 1    |     |     |
| leatherback | 4 | NED   | 40  | 0.35  | .  | 93  | 0.4  | 200  | 43   | 0    | .   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.05 | .   | 31    | 0.69 | 105  | 9    |     |     |
| leatherback | 1 | SEC   | 13  | 0.15  | 2  | 161 | 0.68 | 538  | 48   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.17 | 5   | 12    | 0.5  | 30   | 5    |     |     |
| leatherback | 2 | SEC   | 60  | 0.05  | 3  | 53  | 0.63 | 164  | 17   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.05 | 3   | 53    | 0.63 | 164  | 17   |     |     |
| leatherback | 3 | SEC   | 17  | 0.06  | 1  | 42  | 1    | 215  | 8    | 0    | 0   | 0    |      |      |      | 0.29 | 7   | 102 | 0.43 | 228  | 46   | 0.53 | 20  | 275   | 0.32 | 508  | 149  |     |     |
| loggerhead  | 1 | CAR   | 17  | 0.24  | 5  | 50  | 0.48 | 121  | 21   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.06 | 1   | 42    | 1    | 215  | 8    |     |     |
| loggerhead  | 2 | CAR   | 17  | 0.24  | .  | 10  | 0.48 | 24   | 4    | 0    | .   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.02 | 1   | 28    | 1    | 143  | 5    |     |     |
| loggerhead  | 4 | CAR   | 17  | 0.24  | .  | 1   | 0.48 | 2    | 0    | 0    | .   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.11 | 4   | 182   | 0.69 | 617  | 54   |     |     |
| loggerhead  | 4 | GOM   | 53  | 0.02  | 3  | 38  | 1    | 194  | 7    | 0    | 0   | 0    |      |      |      | 0.13 | .   | 21  | 0.43 | 47   | 9    | 0.33 | .   | 70    | 0.41 | 152  | 32   |     |     |
| loggerhead  | 2 | NEC   | 62  | 0.11  | .  | 42  | 0.39 | 87   | 20   | 0.02 | .   | 3    | 1    | 15   | 1    | 0    | 0   | 0   |      |      |      | 0.24 | 5   | 50    | 0.48 | 121  | 21   |     |     |
| loggerhead  | 4 | NEC   | 27  | 0.26  | 7  | 250 | 0.39 | 519  | 120  | 0.04 | 1   | 20   | 1    | 102  | 4    | 0.05 | .   | 0   | 0.68 | 0    | 0    | 0.5  | .   | 3     | 0.3  | 5    | 2    |     |     |
| loggerhead  | 1 | NED   | 40  | 0.53  | .  | 3   | 0.29 | 5    | 2    | 0    | .   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.24 | .   | 10    | 0.48 | 24   | 4    |     |     |
| loggerhead  | 2 | NED   | 23  | 0.39  | 18 | 42  | 0.34 | 81   | 22   | 0    | 0   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.1  | .   | 39    | 0.42 | 87   | 18   |     |     |
| loggerhead  | 3 | NED   | 17  | 0.71  | 26 | 352 | 0.24 | 559  | 222  | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.39 | 18  | 42    | 0.34 | 81   | 22   |     |     |
| loggerhead  | 4 | NED   | 40  | 0.53  | .  | 121 | 0.29 | 211  | 69   | 0    | .   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.03 | 3   | 37    | 0.7  | 128  | 11   |     |     |
| loggerhead  | 2 | SEC   | 60  | 0.03  | 3  | 37  | 0.7  | 128  | 11   | 0    | 0   | 0    |      |      |      | 0.12 | 2   | 24  | 0.68 | 81   | 7    | 0.65 | 24  | 328   | 0.25 | 534  | 202  |     |     |
| loggerhead  | 4 | SEC   | 17  | 0.12  | 2  | 48  | 0.68 | 162  | 14   | 0    | 0   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.24 | .   | 1     | 0.48 | 2    | 0    |     |     |
| turtle      | 1 | GOM   | 47  | 0.02  | 1  | 24  | 1    | 123  | 5    | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.02 | 3   | 38    | 1    | 194  | 7    |     |     |
| turtle      | 4 | GOM   | 53  | 0.02  | 1  | 14  | 1    | 72   | 3    | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.22 | 6   | 231   | 0.42 | 513  | 104  |     |     |
| turtle      | 2 | NEC   | 62  | 0.02  | .  | 4   | 1    | 20   | 1    | 0    | .   | 0    |      |      |      | 0.05 | .   | 5   | 0.68 | 17   | 1    | 0.5  | .   | 117   | 0.3  | 207  | 66   |     |     |
| turtle      | 4 | NEC   | 27  | 0.04  | 1  | 25  | 1    | 128  | 5    | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.12 | 2   | 48    | 0.68 | 162  | 14   |     |     |
| 2000        |   |       |     |       |    |     |      |      |      |      |     |      |      |      |      |      |     |     |      |      |      |      |     |       |      |      |      |     |     |
| leatherback | 1 | CAR   | 17  | 0.12  | .  | 24  | 0.69 | 81   | 7    | 0    | .   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.04 | 2   | 42    | 0.7  | 145  | 12   |     |     |
| leatherback | 2 | CAR   | 17  | 0.12  | .  | 9   | 0.69 | 30   | 3    | 0    | .   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.06 | 3   | 86    | 0.59 | 250  | 30   |     |     |
| leatherback | 4 | CAR   | 17  | 0.12  | .  | 8   | 0.69 | 27   | 2    | 0    | .   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.12 | .   | 24    | 0.69 | 81   | 7    |     |     |
| leatherback | 1 | GOM   | 31  | 0.03  | 1  | 32  | 1    | 164  | 6    | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.03 | 1   | 32    | 1    | 164  | 6    |     |     |
| leatherback | 2 | GOM   | 51  | 0.08  | 4  | 82  | 0.49 | 202  | 33   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.07 | 1   | 9     | 1    | 46   | 2    |     |     |
| leatherback | 3 | GOM   | 45  | 0.09  | 5  | 121 | 0.51 | 309  | 47   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.08 | 2   | 86    | 0.7  | 298  | 25   |     |     |
| leatherback | 2 | NEC   | 17  | 0.06  | 1  | 12  | 1    | 61   | 2    | 0    | 0   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.12 | .   | 9     | 0.69 | 30   | 3    |     |     |
| leatherback | 3 | NEC   | 53  | 0.02  | 1  | 18  | 1    | 92   | 4    | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.08 | 4   | 82    | 0.49 | 202  | 33   |     |     |
| leatherback | 4 | NEC   | 32  | 0.09  | 3  | 85  | 0.57 | 239  | 30   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.06 | 1   | 12    | 1    | 61   | 2    |     |     |
| leatherback | 2 | NED   | 47  | 0.15  | .  | 26  | 0.59 | 76   | 9    | 0    | .   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.15 | .   | 26    | 0.59 | 76   | 9    |     |     |
| leatherback | 3 | NED   | 38  | 0.13  | 7  | 81  | 0.45 | 188  | 35   | 0    | 0   | 0    |      |      |      | 0    | .   | 0   |      |      |      | 0.07 | .   | 4     | 1    | 20   | 1    |     |     |
| leatherback | 4 | NED   | 9   | 0.22  | 4  | 75  | 0.74 | 273  | 21   | 0    | 0   | 0    |      |      |      | 0    | 0   | 0   |      |      |      | 0.09 | 5   | 121   | 0.51 | 309  | 47   |     |     |



|             |   | QTR   | NAREA | N    | PPT | obs. | est. | CV_T | U_T | L_T | PPD | obs. | est. | CV_D | U_D | L_D | PPU | obs. | est. | CV_U | U_U | L_U | PPA | obs.  | est. | CV_A | U_A | L_A  |     |     |
|-------------|---|-------|-------|------|-----|------|------|------|-----|-----|-----|------|------|------|-----|-----|-----|------|------|------|-----|-----|-----|-------|------|------|-----|------|-----|-----|
|             |   | TOTAL |       |      |     |      |      |      |     |     |     | DEAD |      |      |     |     |     | UNK  |      |      |     |     |     | ALIVE |      |      |     |      |     |     |
| 2000        |   |       |       |      |     |      |      |      |     |     |     |      |      |      |     |     |     |      |      |      |     |     |     |       |      |      |     |      |     |     |
| leatherback | 1 | OFS   | 15    | 0.07 | 1   | 9    | 1    | 46   | 2   | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.02 | 1    | 18  | 1    | 92  | 4   |
| leatherback | 2 | OFS   | 15    | 0.07 | .   | 4    | 1    | 20   | 1   | 0   | .   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.13 | 7    | 81  | 0.45 | 188 | 35  |
| leatherback | 4 | OFS   | 15    | 0.07 | .   | 2    | 1    | 10   | 0   | 0   | .   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.06 | 1    | 41  | 1    | 210 | 8   |
| leatherback | 1 | SEC   | 24    | 0.08 | 2   | 86   | 0.7  | 298  | 25  | 0   | 0   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.12 | .    | 8   | 0.69 | 27  | 2   |
| leatherback | 3 | SEC   | 18    | 0.06 | 1   | 41   | 1    | 210  | 8   | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.09 | 3    | 85  | 0.57 | 239 | 30  |
| leatherback | 4 | SEC   | 28    | 0.07 | 2   | 54   | 0.7  | 186  | 16  | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.22 | 4    | 75  | 0.74 | 273 | 21  |
| loggerhead  | 1 | CAR   | 17    | 0.24 | .   | 58   | 0.48 | 141  | 24  | 0   | .   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.07 | .    | 2   | 1    | 10  | 0   |
| loggerhead  | 2 | CAR   | 17    | 0.24 | .   | 21   | 0.48 | 51   | 9   | 0   | .   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.07 | 2    | 54  | 0.7  | 186 | 16  |
| loggerhead  | 4 | CAR   | 17    | 0.24 | .   | 20   | 0.48 | 49   | 8   | 0   | .   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.24 | .    | 58  | 0.48 | 141 | 24  |
| loggerhead  | 1 | GOM   | 31    | 0.06 | 2   | 89   | 0.72 | 318  | 25  | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.06 | 2    | 89  | 0.72 | 318 | 25  |
| loggerhead  | 2 | NEC   | 17    | 0.06 | 1   | 18   | 1    | 92   | 4   | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.2  | 4    | 35  | 0.56 | 97  | 13  |
| loggerhead  | 3 | NEC   | 53    | 0.26 | 15  | 373  | 0.26 | 614  | 226 | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.04 | 1    | 28  | 1    | 143 | 5   |
| loggerhead  | 4 | NEC   | 32    | 0.06 | 3   | 86   | 0.79 | 335  | 22  | 0   | 0   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.24 | .    | 21  | 0.48 | 51  | 9   |
| loggerhead  | 2 | NED   | 47    | 0.21 | .   | 46   | 0.52 | 120  | 18  | 0   | .   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.06 | 1    | 18  | 1    | 92  | 4   |
| loggerhead  | 3 | NED   | 38    | 0.21 | 10  | 122  | 0.37 | 248  | 60  | 0   | 0   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.21 | .    | 46  | 0.52 | 120 | 18  |
| loggerhead  | 4 | NED   | 9     | 0.22 | 7   | 166  | 0.66 | 541  | 51  | 0   | 0   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.2  | .    | 16  | 0.56 | 44  | 6   |
| loggerhead  | 1 | OFS   | 15    | 0.2  | 4   | 35   | 0.56 | 97   | 13  | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.07 | 4    | 88  | 0.51 | 224 | 35  |
| loggerhead  | 2 | OFS   | 15    | 0.2  | .   | 16   | 0.56 | 44   | 6   | 0   | .   | 0    |      |      |     |     |     | 0.02 | 1    | 18   |     | 1   | 92  | 4     | 0.25 | 14   | 356 | 0.27 | 601 | 211 |
| loggerhead  | 4 | OFS   | 15    | 0.2  | .   | 6    | 0.56 | 17   | 2   | 0   | .   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.21 | 10   | 122 | 0.37 | 248 | 60  |
| loggerhead  | 1 | SEC   | 24    | 0.04 | 1   | 28   | 1    | 143  | 5   | 0   | 0   | 0    |      |      |     |     |     | 0.06 | 1    | 41   |     | 1   | 210 | 8     | 0    | 0    | 0   |      |     |     |
| loggerhead  | 2 | SEC   | 54    | 0.07 | 4   | 88   | 0.51 | 224  | 35  | 0   | 0   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.24 | .    | 20  | 0.48 | 49  | 8   |
| loggerhead  | 3 | SEC   | 18    | 0.06 | 1   | 41   | 1    | 210  | 8   | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.06 | 3    | 86  | 0.79 | 335 | 22  |
| loggerhead  | 4 | SEC   | 28    | 0.07 | 2   | 43   | 0.69 | 147  | 13  | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.22 | 7    | 166 | 0.66 | 541 | 51  |
| turtle      | 2 | GOM   | 51    | 0.04 | 2   | 42   | 0.7  | 145  | 12  | 0   | 0   | 0    |      |      |     |     |     | 0    | .    | 0    |     |     |     |       | 0.2  | .    | 6   | 0.56 | 17  | 2   |
| turtle      | 2 | SEC   | 54    | 0.06 | 3   | 86   | 0.59 | 250  | 30  | 0   | 0   | 0    |      |      |     |     |     | 0    | 0    | 0    |     |     |     |       | 0.07 | 2    | 43  | 0.69 | 147 | 13  |

Table 8. Estimates from Table 7 summed by species-NAREA.

A) Marine mammal

|                |     | NAREA | N | obs.  | est. | CV_T | U_T | L_T | obs. | est. | CV_D | U_D | L_D | obs.    | est. | CV_S | U_S | L_S | obs.  | est. | CV_A | U_A | L_A |  |
|----------------|-----|-------|---|-------|------|------|-----|-----|------|------|------|-----|-----|---------|------|------|-----|-----|-------|------|------|-----|-----|--|
|                |     |       |   | TOTAL |      |      |     |     | DEAD |      |      |     |     | INJURED |      |      |     |     | ALIVE |      |      |     |     |  |
| 1999           |     |       |   |       |      |      |     |     |      |      |      |     |     |         |      |      |     |     |       |      |      |     |     |  |
| DOLPHIN RISSOS | NEC | 89    | 1 | 23    | 1    | 117  | 5   | 0   | 0    |      |      |     |     | 1       | 23   | 1    | 117 | 5   | 0     | 0    |      |     |     |  |
| MARINE MAMMAL  | NED | 57    | 1 | 14    | 0.99 | 71   | 2   | 0   | 0    |      |      |     |     | 0       | 0    |      |     |     | 1     | 14   | 0.99 | 71  | 2   |  |
| PILOT WHALE    | NEC | 87    | 4 | 377   | 0.78 | 1458 | 98  | 1   | 94   | 1    | 481  | 19  | 3   | 283     | 0.73 | 1023 | 78  | 0   | 0     |      |      |     |     |  |
| PILOT WHALE    | SEC | 60    | 1 | 8     | 1    | 41   | 2   | 0   | 0    |      |      |     | 1   | 8       | 1    | 41   | 2   | 0   | 0     |      |      |     |     |  |
| 2000           |     |       |   |       |      |      |     |     |      |      |      |     |     |         |      |      |     |     |       |      |      |     |     |  |
| COMMON DOLPHIN | NEC | 53    | 1 | 32    | 1    | 164  | 6   | 0   | 0    |      |      |     |     | 0       | 0    |      |     |     | 1     | 32   | 1    | 164 | 6   |  |
| DOLPHIN RISSOS | NEC | 32    | 1 | 29    | 1    | 148  | 6   | 0   | 0    |      |      |     |     | 0       | 0    |      |     |     | 1     | 29   | 1    | 148 | 6   |  |
| DOLPHIN RISSOS | NED | 56    | 1 | 23    | 1    | 117  | 5   | 0   | 0    |      |      |     |     | 1       | 23   | 1    | 117 | 5   | 0     | 0    |      |     |     |  |
| DOLPHIN RISSOS | SEC | 18    | 1 | 41    | 1    | 210  | 8   | 1   | 41   | 1    | 210  | 8   | 0   | 0       |      |      |     |     | 0     | 0    |      |     |     |  |
| PILOT WHALE    | NEC | 90    | 6 | 177   | 0.8  | 701  | 45  | 0   | 0    |      |      |     |     | 4       | 109  | 0.85 | 463 | 26  | 2     | 68   | 0.71 | 238 | 19  |  |
| PILOT WHALE    | SEC | 82    | 2 | 54    | 1    | 276  | 11  | 1   | 24   | 1    | 123  | 5   | 0   | 0       |      |      |     |     | 1     | 30   | 1    | 153 | 6   |  |
| WHALE          | NEC | 53    | 1 | 19    | 1    | 97   | 4   | 0   | 0    |      |      |     |     | 1       | 19   | 1    | 97  | 4   | 0     | 0    |      |     |     |  |
| PYGMY SPERM    | SEC | 24    | 1 | 28    | 1    | 143  | 5   | 0   | 0    |      |      |     |     | 1       | 28   | 1    | 143 | 5   | 0     | 0    |      |     |     |  |

B) Marine turtle

|             |     | NAREA | N     | obs. | est. | CV_T | U_T | L_T | obs. | est. | CV_D | U_D | L_D | obs. | est. | CV_U | U_U | L_U | obs. | est. | CV_A  | U_A  | L_A |  |  |  |
|-------------|-----|-------|-------|------|------|------|-----|-----|------|------|------|-----|-----|------|------|------|-----|-----|------|------|-------|------|-----|--|--|--|
|             |     |       | TOTAL |      |      |      |     |     | DEAD |      |      |     |     |      | UNK  |      |     |     |      |      | ALIVE |      |     |  |  |  |
| 1999        |     |       |       |      |      |      |     |     |      |      |      |     |     |      |      |      |     |     |      |      |       |      |     |  |  |  |
| TURTLE      | GOM | 100   | 2     | 38   | 1    | 195  | 8   | 0   | 0    |      |      |     |     | 1    | 24   | 1    | 123 | 5   | 1    | 14   | 1     | 72   | 3   |  |  |  |
| TURTLE      | NEC | 89    | 1     | 29   | 1    | 148  | 6   | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 1    | 29   | 1     | 148  | 6   |  |  |  |
| LEATHERBACK | CAR | 34    | 2     | 24   | 0.68 | 80   | 7   | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 2    | 24   | 0.68  | 80   | 7   |  |  |  |
| LEATHERBACK | GOM | 53    | 1     | 28   | 1    | 143  | 5   | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 1    | 28   | 1     | 143  | 5   |  |  |  |
| LEATHERBACK | NEC | 89    | 4     | 213  | 0.69 | 722  | 63  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 4    | 213  | 0.69  | 722  | 63  |  |  |  |
| LEATHERBACK | NED | 120   | 32    | 495  | 0.33 | 932  | 264 | 0   | 0    |      |      |     |     | 7    | 124  | 0.43 | 277 | 55  | 25   | 359  | 0.35  | 694  | 187 |  |  |  |
| LEATHERBACK | SEC | 90    | 6     | 256  | 0.73 | 917  | 73  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 6    | 256  | 0.73  | 917  | 73  |  |  |  |
| LOGGERHEAD  | CAR | 51    | 5     | 61   | 0.47 | 147  | 25  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 5    | 61   | 0.47  | 147  | 25  |  |  |  |
| LOGGERHEAD  | GOM | 53    | 3     | 38   | 1    | 194  | 7   | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 3    | 38   | 1     | 194  | 7   |  |  |  |
| LOGGERHEAD  | NEC | 89    | 7     | 292  | 0.39 | 606  | 140 | 1   | 23   | 1    | 117  | 5   |     | 0    | 0    |      |     |     | 6    | 270  | 0.42  | 600  | 122 |  |  |  |
| LOGGERHEAD  | NED | 120   | 44    | 518  | 0.26 | 856  | 315 | 0   | 0    |      |      |     |     | 2    | 29   | 0.69 | 98  | 8   | 42   | 490  | 0.27  | 827  | 292 |  |  |  |
| LOGGERHEAD  | SEC | 77    | 5     | 85   | 0.69 | 290  | 25  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 5    | 85   | 0.69  | 290  | 25  |  |  |  |
| 2000        |     |       |       |      |      |      |     |     |      |      |      |     |     |      |      |      |     |     |      |      |       |      |     |  |  |  |
| TURTLE      | GOM | 51    | 2     | 42   | 0.7  | 145  | 12  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 2    | 42   | 0.7   | 145  | 12  |  |  |  |
| TURTLE      | SEC | 54    | 3     | 86   | 0.59 | 250  | 30  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 3    | 86   | 0.59  | 250  | 30  |  |  |  |
| LEATHERBACK | CAR | 51    |       | 41   | 0.68 | 138  | 12  |     | 0    |      |      |     |     |      | 0    |      |     |     |      | 41   | 0.68  | 138  | 12  |  |  |  |
| LEATHERBACK | GOM | 127   | 10    | 235  | 0.58 | 675  | 86  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 10   | 235  | 0.58  | 675  | 86  |  |  |  |
| LEATHERBACK | NEC | 102   | 5     | 115  | 0.69 | 392  | 36  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 5    | 115  | 0.69  | 392  | 36  |  |  |  |
| LEATHERBACK | NED | 94    | 11    | 182  | 0.6  | 537  | 65  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 11   | 182  | 0.6   | 537  | 65  |  |  |  |
| LEATHERBACK | OFS | 45    | 1     | 15   | 0.99 | 76   | 3   | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 1    | 15   | 0.99  | 76   | 3   |  |  |  |
| LEATHERBACK | SEC | 70    | 5     | 181  | 0.77 | 694  | 49  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 5    | 181  | 0.77  | 694  | 49  |  |  |  |
| LOGGERHEAD  | CAR | 51    |       | 99   | 0.48 | 241  | 41  |     | 0    |      |      |     |     |      | 0    |      |     |     |      | 99   | 0.48  | 241  | 41  |  |  |  |
| LOGGERHEAD  | GOM | 31    | 2     | 89   | 0.72 | 318  | 25  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 2    | 89   | 0.72  | 318  | 25  |  |  |  |
| LOGGERHEAD  | NEC | 102   | 19    | 477  | 0.41 | 1041 | 252 | 0   | 0    |      |      |     |     | 1    | 18   | 1    | 92  | 4   | 18   | 460  | 0.43  | 1028 | 237 |  |  |  |
| LOGGERHEAD  | NED | 94    | 17    | 334  | 0.55 | 909  | 129 | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 17   | 334  | 0.55  | 909  | 129 |  |  |  |
| LOGGERHEAD  | OFS | 45    | 4     | 57   | 0.56 | 158  | 21  | 0   | 0    |      |      |     |     | 0    | 0    |      |     |     | 4    | 57   | 0.56  | 158  | 21  |  |  |  |
| LOGGERHEAD  | SEC | 124   | 8     | 200  | 0.73 | 724  | 61  | 0   | 0    |      |      |     |     | 1    | 41   | 1    | 210 | 8   | 7    | 159  | 0.66  | 514  | 53  |  |  |  |

Table 9. Estimates from Table 7 summed by species-MAREA.

A) Marine mammal

|                   |        | MAREA | N | obs. | est. | CV_T | U_T | L_T  | obs. | est. | CV_D | U_D | L_D | obs.    | est. | CV_S | U_S | L_S | obs. | est.  | CV_A | U_A | L_A |  |  |
|-------------------|--------|-------|---|------|------|------|-----|------|------|------|------|-----|-----|---------|------|------|-----|-----|------|-------|------|-----|-----|--|--|
|                   |        | TOTAL |   |      |      |      |     | DEAD |      |      |      |     |     | INJURED |      |      |     |     |      | ALIVE |      |     |     |  |  |
| 1999              |        |       |   |      |      |      |     |      |      |      |      |     |     |         |      |      |     |     |      |       |      |     |     |  |  |
| Risso's dolphin   | US ATL | 89    | 1 | 23   | 1    | 117  | 5   | 0    | 0    |      |      |     |     | 1       | 23   | 1    | 117 | 5   | 0    | 0     |      |     |     |  |  |
| marine mammal     | OTHATL | 57    | 1 | 14   | 0.99 | 71   | 2   | 0    | 0    |      |      |     |     | 0       | 0    |      |     |     | 1    | 14    | 0.99 | 71  | 2   |  |  |
| pilot whale       | US ATL | 147   | 5 | 385  | 0.79 | 1499 | 100 | 1    | 94   | 1    | 481  | 19  | 4   | 291     | 0.74 | 1064 | 80  | 0   | 0    |       |      |     |     |  |  |
| 2000              |        |       |   |      |      |      |     |      |      |      |      |     |     |         |      |      |     |     |      |       |      |     |     |  |  |
| common dolphin    | US ATL | 53    | 1 | 32   | 1    | 164  | 6   | 0    | 0    |      |      |     |     | 0       | 0    |      |     |     | 1    | 32    | 1    | 164 | 6   |  |  |
| Risso's dolphin   | OTHATL | 56    | 1 | 23   | 1    | 117  | 5   | 0    | 0    |      |      |     |     | 1       | 23   | 1    | 117 | 5   | 0    | 0     |      |     |     |  |  |
| Risso's dolphin   | US ATL | 50    | 2 | 70   | 1    | 358  | 14  | 1    | 41   | 1    | 210  | 8   | 0   | 0       |      |      |     |     | 1    | 29    | 1    | 148 | 6   |  |  |
| pilot whale       | US ATL | 172   | 8 | 231  | 0.85 | 977  | 56  | 1    | 24   | 1    | 123  | 5   | 4   | 109     | 0.85 | 463  | 26  | 3   | 98   | 0.8   | 391  | 25  |     |  |  |
| whale             | US ATL | 53    | 1 | 19   | 1    | 97   | 4   | 0    | 0    |      |      |     |     | 1       | 19   | 1    | 97  | 4   | 0    | 0     |      |     |     |  |  |
| pygmy sperm whale | US ATL | 24    | 1 | 28   | 1    | 143  | 5   | 0    | 0    |      |      |     |     | 1       | 28   | 1    | 143 | 5   | 0    | 0     |      |     |     |  |  |

B) Marine turtle

|             | MAREA  | N     | obs. | est. | CV_T | U_T  | L_T | obs. | est. | CV_D | U_D | L_D | obs. | est.    | CV_S | U_S | L_S | obs. | est. | CV_A  | U_A  | L_A |  |
|-------------|--------|-------|------|------|------|------|-----|------|------|------|-----|-----|------|---------|------|-----|-----|------|------|-------|------|-----|--|
|             |        | TOTAL |      |      |      |      |     | DEAD |      |      |     |     |      | INJURED |      |     |     |      |      | ALIVE |      |     |  |
| 1999        |        |       |      |      |      |      |     |      |      |      |     |     |      |         |      |     |     |      |      |       |      |     |  |
| turtle      | GOM    | 100   | 2    | 38   | 1    | 195  | 8   | 0    | 0    |      |     |     | 1    | 24      | 1    | 123 | 5   | 1    | 14   | 1     | 72   | 3   |  |
| turtle      | US ATL | 89    | 1    | 29   | 1    | 148  | 6   | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 1    | 29   | 1     | 148  | 6   |  |
| leatherback | GOM    | 53    | 1    | 28   | 1    | 143  | 5   | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 1    | 28   | 1     | 143  | 5   |  |
| leatherback | OTHATL | 154   | 34   | 519  | 0.35 | 1012 | 271 | 0    | 0    |      |     |     | 7    | 124     | 0.43 | 277 | 55  | 27   | 383  | 0.37  | 774  | 194 |  |
| leatherback | US ATL | 179   | 10   | 469  | 0.71 | 1639 | 136 | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 10   | 469  | 0.71  | 1639 | 136 |  |
| loggerhead  | GOM    | 53    | 3    | 38   | 1    | 194  | 7   | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 3    | 38   | 1     | 194  | 7   |  |
| loggerhead  | OTHATL | 171   | 49   | 579  | 0.29 | 1003 | 340 | 0    | 0    |      |     |     | 2    | 29      | 0.69 | 98  | 8   | 47   | 551  | 0.3   | 974  | 317 |  |
| loggerhead  | US ATL | 166   | 12   | 377  | 0.46 | 896  | 165 | 1    | 23   | 1    | 117 | 5   | 0    | 0       |      |     |     | 11   | 355  | 0.5   | 890  | 147 |  |
| 2000        |        |       |      |      |      |      |     |      |      |      |     |     |      |         |      |     |     |      |      |       |      |     |  |
| turtle      | GOM    | 51    | 2    | 42   | 0.7  | 145  | 12  | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 2    | 42   | 0.7   | 145  | 12  |  |
| turtle      | US ATL | 54    | 3    | 86   | 0.59 | 250  | 30  | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 3    | 86   | 0.59  | 250  | 30  |  |
| leatherback | GOM    | 127   | 10   | 235  | 0.58 | 675  | 86  | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 10   | 235  | 0.58  | 675  | 86  |  |
| leatherback | OTHATL | 190   | 12   | 238  | 0.64 | 751  | 80  | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 12   | 238  | 0.64  | 751  | 80  |  |
| leatherback | US ATL | 172   | 10   | 296  | 0.74 | 1086 | 85  | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 10   | 296  | 0.74  | 1086 | 85  |  |
| loggerhead  | GOM    | 31    | 2    | 89   | 0.72 | 318  | 25  | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 2    | 89   | 0.72  | 318  | 25  |  |
| loggerhead  | OTHATL | 190   | 21   | 490  | 0.53 | 1308 | 191 | 0    | 0    |      |     |     | 0    | 0       |      |     |     | 21   | 490  | 0.53  | 1308 | 191 |  |
| loggerhead  | US ATL | 226   | 27   | 677  | 0.52 | 1765 | 313 | 0    | 0    |      |     |     | 2    | 59      | 1    | 302 | 12  | 25   | 619  | 0.49  | 1542 | 290 |  |

Table 10. Estimates in Table 7 summed by year and species.

A) Marine mammal

|                   | obs.  | est. | CV_T | U_T  | L_T | obs. | est. | CV_D | U_D | L_D | obs.    | est. | CV_S | U_S  | L_S | obs.  | est. | CV_A | U_A | L_A |
|-------------------|-------|------|------|------|-----|------|------|------|-----|-----|---------|------|------|------|-----|-------|------|------|-----|-----|
|                   | TOTAL |      |      |      |     | DEAD |      |      |     |     | INJURED |      |      |      |     | ALIVE |      |      |     |     |
| <b>1999</b>       |       |      |      |      |     |      |      |      |     |     |         |      |      |      |     |       |      |      |     |     |
| Risso's dolphin   | 1     | 23   | 1    | 117  | 5   | 0    | 0    |      |     |     | 1       | 23   | 1    | 117  | 5   | 0     | 0    |      |     |     |
| marine mammal     | 1     | 14   | 0.99 | 71   | 2   | 0    | 0    |      |     |     | 0       | 0    |      |      |     | 1     | 14   | 0.99 | 71  | 2   |
| pilot whale       | 5     | 385  | 0.79 | 1499 | 100 | 1    | 94   | 1    | 481 | 19  | 4       | 291  | 0.74 | 1064 | 80  | 0     | 0    |      |     |     |
| <b>2000</b>       |       |      |      |      |     |      |      |      |     |     |         |      |      |      |     |       |      |      |     |     |
| common dolphin    | 1     | 32   | 1    | 164  | 6   | 0    | 0    |      |     |     | 0       | 0    |      |      |     | 1     | 32   | 1    | 164 | 6   |
| Risso's dolphin   | 3     | 93   | 1    | 475  | 19  | 1    | 41   | 1    | 210 | 8   | 1       | 23   | 1    | 117  | 5   | 1     | 29   | 1    | 148 | 6   |
| pilot whale       | 8     | 231  | 0.85 | 977  | 56  | 1    | 24   | 1    | 123 | 5   | 4       | 109  | 0.85 | 463  | 26  | 3     | 98   | 0.8  | 391 | 25  |
| whale             | 1     | 19   | 1    | 97   | 4   | 0    | 0    |      |     |     | 1       | 19   | 1    | 97   | 4   | 0     | 0    |      |     |     |
| pygmy sperm whale | 1     | 28   | 1    | 143  | 5   | 0    | 0    |      |     |     | 1       | 28   | 1    | 143  | 5   | 0     | 0    |      |     |     |

B) Marine turtle

|             | obs.  | est. | CV_T | U_T  | L_T | obs. | est. | CV_D | U_D | L_D | obs. | est. | CV_U | U_U | L_U | obs.  | est. | CV_A | U_A  | L_A |
|-------------|-------|------|------|------|-----|------|------|------|-----|-----|------|------|------|-----|-----|-------|------|------|------|-----|
|             | TOTAL |      |      |      |     | DEAD |      |      |     |     | UNK  |      |      |     |     | ALIVE |      |      |      |     |
| <b>1999</b> |       |      |      |      |     |      |      |      |     |     |      |      |      |     |     |       |      |      |      |     |
| turtle      | 3     | 67   | 1    | 343  | 14  | 0    | 0    |      |     |     | 1    | 24   | 1    | 123 | 5   | 2     | 43   | 1    | 220  | 9   |
| leatherback | 45    | 1016 | 0.55 | 2794 | 412 | 0    | 0    |      |     |     | 7    | 124  | 0.43 | 277 | 55  | 38    | 880  | 0.59 | 2556 | 335 |
| loggerhead  | 64    | 994  | 0.39 | 2093 | 512 | 1    | 23   | 1    | 117 | 5   | 2    | 29   | 0.69 | 98  | 8   | 61    | 944  | 0.41 | 2058 | 471 |
| <b>2000</b> |       |      |      |      |     |      |      |      |     |     |      |      |      |     |     |       |      |      |      |     |
| turtle      | 5     | 128  | 0.63 | 395  | 42  | 0    | 0    |      |     |     | 0    | 0    |      |     |     | 5     | 128  | 0.63 | 395  | 42  |
| leatherback | 32    | 769  | 0.66 | 2512 | 251 | 0    | 0    |      |     |     | 0    | 0    |      |     |     | 32    | 769  | 0.66 | 2512 | 251 |
| loggerhead  | 50    | 1256 | 0.54 | 3391 | 529 | 0    | 0    |      |     |     | 2    | 59   | 1    | 302 | 12  | 48    | 1198 | 0.53 | 3168 | 506 |

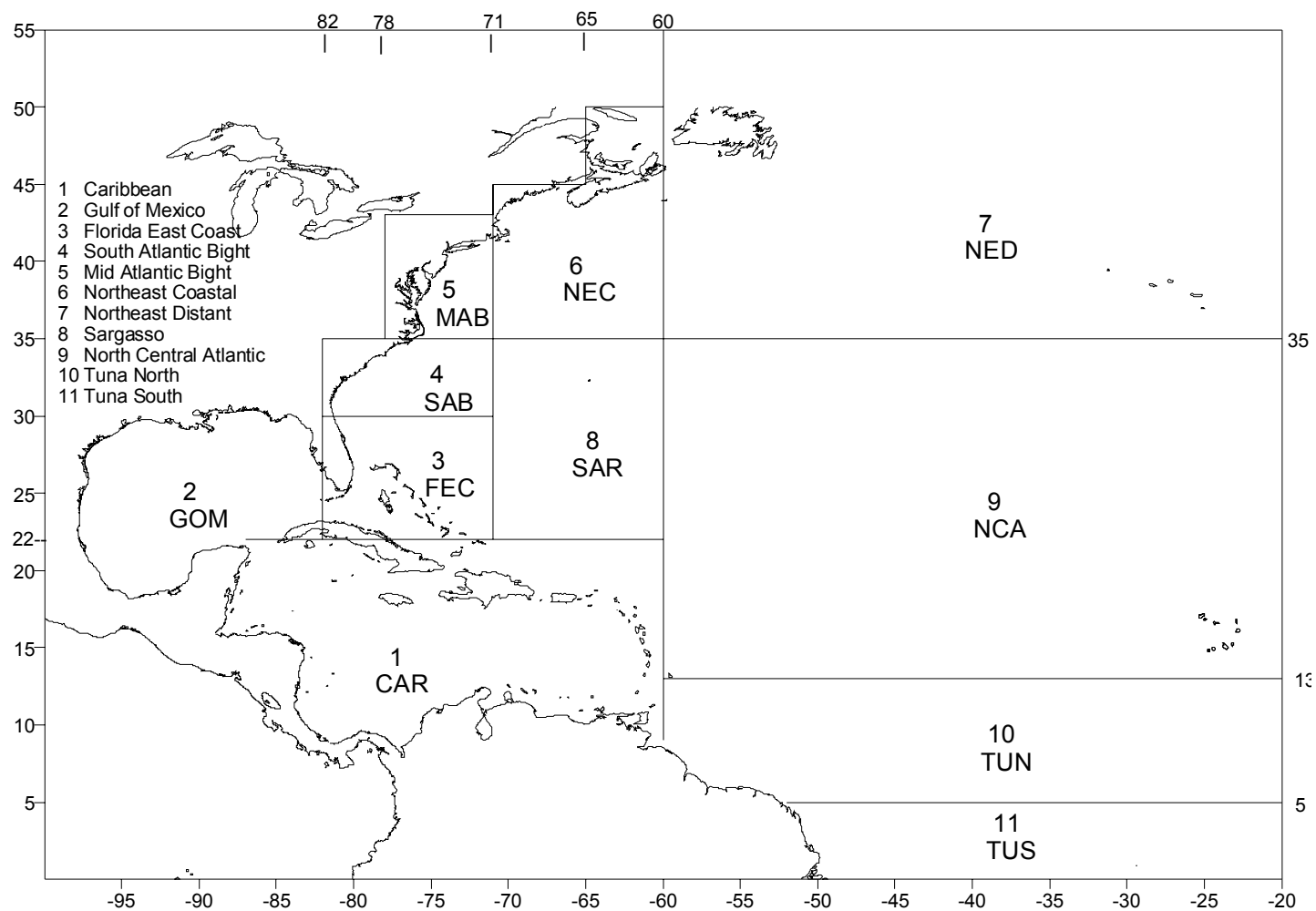
Table 11. Summary of the A) release condition and B) hook location of marine turtles observed caught in U.S. pelagic longline fishery in 1999-2000.

| A)          |             | RELEASE CONDITION |                     |            |                   |       |
|-------------|-------------|-------------------|---------------------|------------|-------------------|-------|
| year        | species     | alive, injured    | alive,<br>uninjured | fresh dead | other,<br>unknown | Total |
| 1999        | Leatherback | 30                | 8                   | 0          | 7                 | 45    |
|             | Loggerhead  | 60                | 1                   | 1          | 2                 | 64    |
|             | unknown     | 2                 | 0                   | 0          | 1                 | 3     |
| 1999 Total  |             | 92                | 9                   | 1          | 10                | 112   |
| 2000        | Leatherback | 30                | 2                   | 0          | 0                 | 32    |
|             | Loggerhead  | 46                | 2                   | 0          | 2                 | 50    |
|             | unknown     | 5                 | 0                   | 0          | 0                 | 5     |
| 2000 Total  |             | 81                | 4                   | 0          | 2                 | 87    |
| Grand Total |             | 173               | 13                  | 1          | 12                | 199   |

| B)          |             | HOOK LOCATION |                       |         |           |                         |                                    |            |                           |                  |       |
|-------------|-------------|---------------|-----------------------|---------|-----------|-------------------------|------------------------------------|------------|---------------------------|------------------|-------|
| year        | species     | beak/mouth    | carapace/<br>plastron | flipper | head/beak | head/neck<br>(external) | ingested<br>(throat/<br>esophagus) | not hooked | unknown<br>beak/<br>mouth | unknown<br>other | Total |
| 1999        | Leatherback | 1             | 0                     | 16      | 0         | 1                       | 0                                  | 8          | 9                         | 10               | 45    |
|             | Loggerhead  | 8             | 0                     | 3       | 0         | 2                       | 10                                 | 1          | 37                        | 3                | 64    |
|             | unknown     | 2             | 0                     | 0       | 0         | 0                       | 0                                  | 0          | 0                         | 1                | 3     |
| 1999 Total  |             | 11            | 0                     | 19      | 0         | 3                       | 10                                 | 9          | 46                        | 14               | 112   |
| 2000        | Leatherback | 4             | 5                     | 13      | 0         | 3                       | 0                                  | 1          | 0                         | 6                | 32    |
|             | Loggerhead  | 23            | 0                     | 3       | 3         | 0                       | 15                                 | 0          | 0                         | 6                | 50    |
|             | unknown     | 1             | 0                     | 0       | 0         | 0                       | 1                                  | 0          | 1                         | 2                | 5     |
| 2000 Total  |             | 28            | 5                     | 16      | 3         | 3                       | 16                                 | 1          | 1                         | 14               | 87    |
| Grand Total |             | 39            | 5                     | 35      | 3         | 6                       | 26                                 | 10         | 47                        | 28               | 199   |

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).





Appendix I. Observer comments relating to the condition of marine mammals observed caught in 1999-2000 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 animals 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.

Criteria #1-10 comprise the type of injury that is highly likely to directly prevent or impair movement or feeding, and thus should always be considered serious injury. Criteria #11-15 do not necessarily indicate that movement or feeding has been directly prevented or impaired and will not automatically be considered serious. 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, unless observers' comments suggest otherwise. Other injuries are not considered serious (S.I. = 'N') and the animal is assumed to have survived. D=dead upon retrieval.

| Trip #         | Date Landed | Common Name       | Lat (deg min) | Lon (deg min) | Est. Length (cm) | Injury Codes | S.I. | Observer Comments                                                                                                          |
|----------------|-------------|-------------------|---------------|---------------|------------------|--------------|------|----------------------------------------------------------------------------------------------------------------------------|
| MARINE MAMMALS |             |                   |               |               |                  |              |      |                                                                                                                            |
| T45            | 6/7/99      | pilot whale       | 32 21         | 77 34         | 152              | 8,10         | Y    | hooked in mouth; alive; left with ~54 ft of leader.                                                                        |
| F69            | 8/11/99     | marine mammal     | 45 56         | 41 47         | 762              | 8            | Y    | unidentified whale; hooked on gangion; mainline parted off and gangion snap slipped off; swam away.                        |
| W05            | 8/28/99     | 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     | 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     | 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     | pilot whale       | 37 27         | 74 15         | 275              | 10           | Y    | tail wrapped in mainline; swam downward immediately; too quick for picture.                                                |
| A31114         | 10/16/99    | 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 ~36 ft. from animal.          |
| S01022         | 2/14/00     | Pygmy sperm whale | 28 10         | 74 21         | 350              | 8?           | Y    | id by coloration, shape of head, shape and position of dorsal fin; hook location not known, released with ~ 60 ft. leader. |

| Trip # | Date Landed | Common Name        | Lat (deg min) | Lon   | Est. Length (cm) | Injury Codes | S.I. | Observer Comments                                                                                                                                                                                     |
|--------|-------------|--------------------|---------------|-------|------------------|--------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| W01010 | 2/24/00     | pilot whale        | 35 59         | 74 47 | 275              | 10           | Y    | entangled in mainline, 12-18 ft. of mainline wrapped around caudal peduncle at time of release; id confirmed from description, black dorsal forward on body and thick peduncle; photo poor.           |
| K02001 | 6/4/00      | pilot whale        | 27 36         | 79 49 | 240              | 10           | N    | entangled in mainline, a loop in the mouth and a tangle around the tail; released apparently unharmed; all gear removed.                                                                              |
| W01012 | 7/24/00     | pilot whale        | 37 26         | 74 18 | 300              | 8            | Y    | hooked in mouth; leader cut; ~ 24 ft. leader.                                                                                                                                                         |
| W01012 | 7/24/00     | pilot whale        | 37 26         | 74 18 | ---              | 8            | Y    | hooked in mouth; broke leader; ~ 12 ft. leader.                                                                                                                                                       |
| T01054 | 8/23/00     | pilot whale        | 40 00         | 68 59 | 183              | 8            | Y    | hooked in mouth with 24 ft. leader attached; released in excellent condition.                                                                                                                         |
| T01054 | 8/23/00     | common dolphin     | 40 29         | 67 00 | 152              | 1            | N    | tail hooked with 2 ft. of leader attached; released in excellent condition.                                                                                                                           |
| W01013 | 8/25/00     | unidentified whale | 39 52         | 70 37 | 500              | 8            | Y    | appeared to be baby finback; only saw back for instant; small dorsal to rear; didn't see head; grey; broke leader; 60 ft. leader and hook attached.                                                   |
| S01028 | 9/7/00      | Risso's dolphin    | 31 42         | 78 35 | 157              | dead         | D    | wrapped in mainline, no hook involved; all gear removed.                                                                                                                                              |
| Y01001 | 10/18/00    | pilot whale        | 35 48         | 74 34 | 240              | 1            | N    | leader hooked or wrapped around dorsal fin; very lively when released; 20 ft. line attached to hook when cut.                                                                                         |
| T01055 | 10/7/00     | Risso's dolphin    | 37 44         | 74 08 | 243              | 1            | N    | hooked near keel, cut loose with 24 ft. of 400 lb. mono leader; swam away briskly; good condition.                                                                                                    |
| T01055 | 10/7/00     | pilot whale        | 37 32         | 74 17 | 213              | 1            | N    | leader hooked around tail, cut loose with 15 ft. of 700 lb. mono mainline; swam away slowly; condition good but tired.                                                                                |
| J02005 | 11/14/00    | Risso's dolphin    | 42 17         | 51 42 | 360              | 8            | Y    | hooked in the mouth on single leader; not tangled; ~12 ft. long, dark gray with a lot of scarring on body; robust; round head, no beak; cut leader ~ 6 ft. from hook; swam down deep and seemed fine. |
| S01032 | 12/16/00    | pilot whale        | 28 25         | 78 40 | 450              | dead         | D    | mouth hooked, sect. 3 hook 350, 1230 hrs, 28°20'N 78°49'W; all mono removed, cut at hook.                                                                                                             |

Appendix II. Sea turtle life history form

TRIP  YEAR  MONTH  DAY   
SET/HAUL/TOW  GEAR: ☐ Longline ☐ Gill Net ☐ Trawl

LATITUDE  deg  min N / S LONGITUDE  deg  min E / W  
SPECIMEN NUMBER BY TRIP

Did turtle slide out/escape from gear? ☐ Y / N Was turtle brought on board? ☐ Y / N

Was light stick on hook (Y/N) ☐ Color? ☐  
If No, number of gangions to next light stick  Color? ☐  
(light stick colors: White, Pink, Black, Green, Blue, Red, Yellow, Purple, Other, Unknown)

Number of gangions to next float

IDENTIFICATION (see back)  
SPECIES: Leatherback ☐ Loggerhead ☐ Kemp's ridley ☐ Green ☐ Photos Taken? ☐ Y / N  
Hawksbill ☐ Unknown ☐

CONDITION OF TURTLE  
☐ Previously dead ☐ Fresh dead ☐ Comatose (resuscitated)  
☐ Alive, injured (describe) ☐ Alive, uninjured ☐ Other/Unknown (describe)  
If hooked, record location: ☐ Ingested (Throat/Esophagus) ☐ Beak/Mouth ☐ Head/Neck (external)  
☐ Flipper ☐ Carapace/Plastron ☐ Other Soft Tissue  
(external) ☐ Unknown

Was hook removed from this animal? ☐ Y / N  
Was animal entangled in gear? ☐ Y / N  
How much gear (linear feet) was left on turtle when released?  ft. (estimated)  
Estimated Carapace length (notch-to-tip straight line)  cm

DIMENSIONS (cm) Curved (measuring tape) Straight Line (calipers) Straight Line (calipers)  
Standard Measurements Standard Measurements  
Carapace Length  notch-to-tip  notch-to-tip  notch-to-notch  
Carapace Width

TAGS (identify address on each tag in the comments section)  
Flipper Tag Metal (1) Position (Flipper) Already Present (1) or Were Tags  
Number or Plastic (2) LF, RF, LR, RR Applied by Observer (2) Removed?  
 ☐  ☐ ☐ ☐ Y / N  
 ☐  ☐ ☐ ☐ Y / N  
 ☐  ☐ ☐ ☐ Y / N  
 ☐  ☐ ☐ ☐ Y / N  
PIT Tag  
  ☐ Scanned? ☐ Y / N

Living Tag (describe) \_\_\_\_\_ Other Tags (describe) \_\_\_\_\_

### FINAL DISPOSITION

☐ Discarded Marked Carcass      ☐ Discarded Unmarked Carcass      ☐ Salvaged Carcass  
☐ Released Alive      ☐ Taken to Holding Facility      ☐ Unknown (explain)

Release Location:      Latitude degmin N/S      Longitude degmin E/W  
Biological Samples Taken?      ☐ Y / N (itemize below)

ADDITIONAL COMMENTS (list all biological samples collected):

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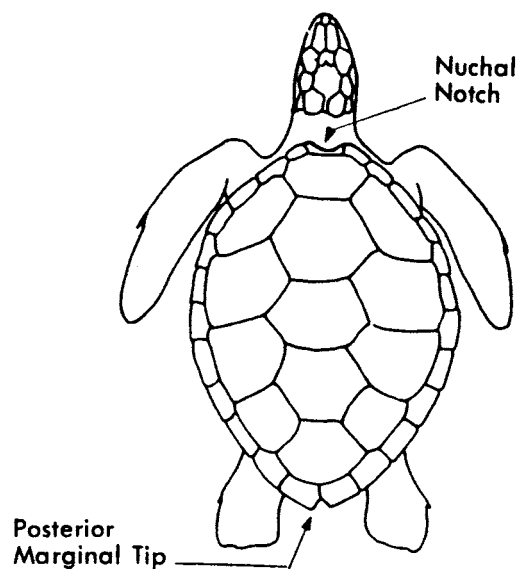
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### TURTLE KEY:

- A. Shell black and leathery with longitudinal ridges..... LEATHERBACK  
A. Shell not black and is hard..... B
- B. Costal (lateral) scutes 4.....C  
B. Costal (lateral) scutes 5.....D
- C. Two large scutes (1 pair) between eyes, shell smooth, mouth normal, shell color light brown with yellow star-burst patterns, top of flippers and head light brown..... GREEN  
C. Four scutes (2 pairs) between eyes, scutes overlapping, upper jaw has overhanging beak, shell color dark brown with light brown blotches. Top of flippers and head black..... HAWKSBILL
- D. Lower shell has 3 inframarginals, upper shell, head, and flippers are reddish brown..... LOGGERHEAD  
D. Lower shell has 4 inframarginals with pores, upper shell, head, and flippers are greenish gray..... KEMP'S RIDLEY



### IDENTIFICATION CRITERIA

Number of:

|                      |                          |                           |                                    |
|----------------------|--------------------------|---------------------------|------------------------------------|
| Left Costal Scutes   | <input type="checkbox"/> | Overlapping Scutes?       | <input type="checkbox"/> Y / N / U |
| Right Costal Scutes  | <input type="checkbox"/> | Inframarginal Pores?      | <input type="checkbox"/> Y / N / U |
| Vertebral Scutes     | <input type="checkbox"/> | 1 Pair Prefrontal Scales? | <input type="checkbox"/> Y / N / U |
| Inframarginal Scutes | <input type="checkbox"/> | Lacks Bony Shell?         | <input type="checkbox"/> Y / N     |

Dorsal Coloration      ☐ Black      ☐ Orange/Red-Brown      ☐ Brown  
☐ Gray-Green      ☐ other \_\_\_\_\_

Appendix III. Summary of information on 1999-2000 incidental takes of marine turtles in the U.S. pelagic longline fishery based on the Sea Turtle Life History Form filled out by observers for each observed take.

|      |    |    |      |         |         |         |         |             |                  |                             | No/Yes/Unknown<br>0/1/2 |           |                        |     | rear RR=right rear                                                              |  |
|------|----|----|------|---------|---------|---------|---------|-------------|------------------|-----------------------------|-------------------------|-----------|------------------------|-----|---------------------------------------------------------------------------------|--|
| trip | m  | d  | y    | lat deg | lat min | lon deg | lon min | species     | condition        | hook location               | hook removed            | entangled | line left<br>(ft) (cm) |     | additional comments                                                             |  |
| W07  | 10 | 21 | 1999 | 39      | 53      | 69      | 51      | Leatherback | alive, injured   | beak/mouth                  | 0                       | 0         | 2                      | 150 | hooked in mouth                                                                 |  |
| W07  | 10 | 21 | 1999 | 39      | 53      | 69      | 51      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 2                      | 60  | swallowed hook                                                                  |  |
| W07  | 10 | 23 | 1999 | 38      | 37      | 72      | 48      | Loggerhead  | alive, injured   | head/neck (external)        | 0                       | 0         | 2                      | 65  | hooked on side of mouth                                                         |  |
| W07  | 10 | 23 | 1999 | 38      | 37      | 72      | 48      | Leatherback | alive, injured   | unknown beak/mouth          | 1                       | 0         | 0                      | 150 | spit hook of of mouth                                                           |  |
| W07  | 10 | 26 | 1999 | 39      | 54      | 70      | 34      | Loggerhead  | alive, injured   | beak/mouth                  | 0                       | 0         | 1                      | 80  | hooked in tongue                                                                |  |
| W07  | 10 | 28 | 1999 | 39      | 25      | 69      | 31      | Leatherback | alive, injured   | not hooked                  |                         | 1         | 0                      | 125 | wrapped in mainline,untangled by crew                                           |  |
| W07  | 10 | 31 | 1999 | 39      | 49      | 69      | 53      | Loggerhead  | fresh dead       | beak/mouth                  |                         | 0         | 0                      | 57  | hooked in mouth                                                                 |  |
| W07  | 11 | 1  | 1999 | 39      | 43      | 70      | 9       | Loggerhead  | alive, injured   | beak/mouth                  | 0                       | 0         | 0                      | 60  | hooked in mouth,only hook left                                                  |  |
| W08  | 11 | 26 | 1999 | 37      | 43      | 74      | 4       | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 4                      | 60  | swallowed hook                                                                  |  |
| W08  | 11 | 27 | 1999 | 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  | 1999 | 35      | 43      | 74      | 44      | unknown     | alive, injured   | beak/mouth                  | 0                       | 0         | 5                      | 150 | hooked in mouth                                                                 |  |
| S20  | 11 | 25 | 1999 | 25      | 19      | 89      | 34      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 2                      | 180 | hooked in left front flipper                                                    |  |
| S20  | 11 | 30 | 1999 | 24      | 14      | 83      | 52      | Loggerhead  | alive, injured   | beak/mouth                  | 0                       | 0         | 2                      | 140 | hooked in mouth                                                                 |  |
| P50  | 11 | 13 | 1999 | 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 | 1999 | 32      | 39      | 72      | 49      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                      | 120 | hooked in throat                                                                |  |
| T44  | 4  | 23 | 1999 | 32      | 39      | 72      | 49      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                      | 70  | hook in throat                                                                  |  |
| F67  | 6  | 15 | 1999 | 32      | 13      | 78      | 23      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 6                      | 152 | hooked in flipper                                                               |  |
| F67  | 6  | 15 | 1999 | 32      | 13      | 78      | 23      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 6                      | 48  | hooked in mouth                                                                 |  |
| T45  | 6  | 1  | 1999 | 32      | 29      | 78      | 5       | Leatherback | alive, injured   | flipper                     | 0                       | 1         | 48                     | 182 | hook location unknown,excellent condition                                       |  |
| S14  | 5  | 30 | 1999 | 39      | 52      | 54      | 52      | Loggerhead  | alive, injured   | unknown beak/mouth          | 1                       | 0         | 0                      | 56  | Lip hooked, hook removed, released in excellent condition                       |  |
| S14  | 5  | 30 | 1999 | 39      | 52      | 54      | 52      | Loggerhead  | alive, injured   | flipper                     | 1                       | 0         | 0                      | 65  | hooked right pectoral fin, excellent condition                                  |  |
| S14  | 5  | 30 | 1999 | 39      | 52      | 54      | 52      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 0                      | 60  | mouth hooked,released in good condition                                         |  |
| S14  | 6  | 3  | 1999 | 41      | 36      | 51      | 25      | Leatherback | alive, uninjured | unknown other               | 0                       | 1         | 12                     | 170 |                                                                                 |  |
| S14  | 6  | 10 | 1999 | 42      | 22      | 51      | 27      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 2                      | 140 | mouth hooked                                                                    |  |
| S14  | 6  | 13 | 1999 | 41      | 10      | 51      | 24      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 15                     | 200 | right front flipper snagged                                                     |  |
| S14  | 6  | 16 | 1999 | 41      | 51      | 50      | 20      | Leatherback | alive, injured   | unknown beak/mouth          | 0                       | 0         |                        | 179 | mouth hooked, some line left in with hook                                       |  |
| S14  | 6  | 16 | 1999 | 41      | 51      | 50      | 20      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         |                        | 100 | mouth hooked. some line left in with                                            |  |

|      |   |    |      |         |         |         |         |             |                  |                             | No/Yes/Unknown<br>0/1/2 |           | LF=left front RF=right front LR=left<br>rear RR=right rear |         |                                                                       |                                       |
|------|---|----|------|---------|---------|---------|---------|-------------|------------------|-----------------------------|-------------------------|-----------|------------------------------------------------------------|---------|-----------------------------------------------------------------------|---------------------------------------|
| trip | m | d  | y    | lat deg | lat min | lon deg | lon min | species     | condition        | hook location               | hook removed            | entangled | line left (ft)                                             | CL (cm) | additional comments                                                   |                                       |
| hook |   |    |      |         |         |         |         |             |                  |                             |                         |           |                                                            |         |                                                                       |                                       |
| S14  | 6 | 16 | 1999 | 41      | 51      | 50      | 20      | Leatherback | alive, injured   | unknown beak/mouth          | 0                       | 0         |                                                            | 180     | mouth hooked, some line left in with hook                             |                                       |
| S14  | 6 | 17 | 1999 | 42      | 1       | 50      | 25      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 4                                                          | 90      | mouth hooked                                                          |                                       |
| S14  | 6 | 18 | 1999 | 41      | 59      | 50      | 24      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 3                                                          | 80      | hook swallowed                                                        |                                       |
| S14  | 6 | 18 | 1999 | 41      | 59      | 50      | 24      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 2                                                          | 65      | mouth hooked                                                          |                                       |
| S14  | 6 | 18 | 1999 | 41      | 59      | 50      | 24      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 4                                                          | 80      | mouth hooked                                                          |                                       |
| S14  | 6 | 18 | 1999 | 41      | 59      | 50      | 24      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 4                                                          | 100     | swallowed hook                                                        |                                       |
| S14  | 6 | 18 | 1999 | 41      | 59      | 50      | 24      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 0                                                          | 80      | mouth hooked                                                          |                                       |
| S14  | 6 | 19 | 1999 | 42      | 3       | 50      | 22      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 10                                                         | 70      | mouth hooked                                                          |                                       |
| S14  | 6 | 20 | 1999 | 42      | 14      | 50      | 44      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         |                                                            | 120     | mouth hooked, seemed in very bad shape                                |                                       |
| S14  | 6 | 22 | 1999 | 42      | 24      | 50      | 48      | Leatherback | alive, injured   | flipper                     | 0                       | 0         |                                                            | 200     | tail? hooked,swam off strong                                          |                                       |
| S14  | 6 | 22 | 1999 | 42      | 24      | 50      | 48      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         |                                                            | 90      | hook swallowed                                                        |                                       |
| S14  | 6 | 23 | 1999 | 42      | 24      | 50      | 38      | Loggerhead  | alive, injured   | flipper                     | 0                       | 0         |                                                            | 90      | tail hooked                                                           |                                       |
| S14  | 6 | 23 | 1999 | 42      | 24      | 50      | 38      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         |                                                            | 90      | hook swallowed                                                        |                                       |
| S14  | 6 | 23 | 1999 | 42      | 24      | 50      | 38      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         |                                                            | 110     | hook swallowed                                                        |                                       |
| S14  | 6 | 23 | 1999 | 42      | 24      | 50      | 38      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         |                                                            | 125     | hook swallowed, seemed in very bad shape                              |                                       |
| S10  | 1 | 27 | 1999 | 28      | 0       | 79      | 25      | Leatherback | alive, injured   | flipper                     | 0                       | 1         | 6                                                          | 200     | hooked in right pectoral fin                                          |                                       |
| S10  | 1 | 30 | 1999 | 28      | 0       | 79      | 25      | Leatherback | alive, injured   | head/neck (external)        | 0                       | 0         | 12                                                         | 200     | hooked by mouth                                                       |                                       |
| P43  | 3 | 1  | 1999 | 26      | 14      | 91      | 34      | unknown     | other, unknown   | unknown other               | 0                       | 1         | 20                                                         |         | tangled, maybe hooked but not in mouth                                |                                       |
| N34  | 2 | 27 | 1999 | 20      | 29      | 73      | 50      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 1                                                          | 70      | hooked in mouth                                                       |                                       |
| N34  | 2 | 28 | 1999 | 20      | 25      | 75      | 50      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 3                                                          | 80      | hooked in mouth                                                       |                                       |
| N34  | 2 | 28 | 1999 | 20      | 25      | 75      | 50      | Loggerhead  | alive, uninjured | not hooked                  |                         |           | 1                                                          | 0       | 85                                                                    | entangled in flipper,all line removed |
| N34  | 3 | 1  | 1999 | 20      | 27      | 73      | 50      | Leatherback | alive, injured   | unknown beak/mouth          | 0                       | 0         | 2                                                          | 100     | hooked in mouth                                                       |                                       |
| N34  | 3 | 4  | 1999 | 20      | 25      | 73      | 52      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 2                                                          | 100     | hooked in mouth                                                       |                                       |
| N34  | 3 | 4  | 1999 | 20      | 27      | 73      | 50      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 2                                                          | 110     | hooked in left front flipper                                          |                                       |
| N34  | 3 | 9  | 1999 | 20      | 25      | 73      | 52      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 3                                                          | 65      | hooked in mouth                                                       |                                       |
| W03  | 4 | 22 | 1999 | 28      | 37      | 79      | 29      | Leatherback | alive, injured   | unknown beak/mouth          | 0                       | 0         | 9                                                          | 160     | hooked in mouth                                                       |                                       |
| Q09  | 8 | 11 | 1999 | 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 | 1999 | 45      | 45      | 43      | 1       | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 6                                                          | 71      | mouth hooked                                                          |                                       |
| F69  | 7 | 16 | 1999 | 45      | 45      | 43      | 0       | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 6                                                          | 56      | mouth hooked                                                          |                                       |
| F69  | 7 | 16 | 1999 | 45      | 45      | 43      | 4       | Loggerhead  | alive, injured   | unknown beak/mouth          | 1                       | 0         | 0                                                          | 51      | mouth hooked                                                          |                                       |
| F69  | 7 | 17 | 1999 | 46      | 4       | 43      | 35      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 4                                                          | 64      | mouth hooked                                                          |                                       |
| F69  | 7 | 17 | 1999 | 46      | 4       | 43      | 35      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 6                                                          | 71      | mouth hooked                                                          |                                       |
| F69  | 7 | 17 | 1999 | 46      | 4       | 43      | 35      | Loggerhead  | alive, injured   | flipper                     | 0                       | 0         | 0                                                          | 48      |                                                                       |                                       |

|      |   |    |      |         |         |         |         |             |                  |                      | No/Yes/Unknown<br>0/1/2 |           | LF=left front RF=right front LR=left<br>rear RR=right rear |            |                                                                                                                             |  |
|------|---|----|------|---------|---------|---------|---------|-------------|------------------|----------------------|-------------------------|-----------|------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------|--|
| trip | m | d  | y    | lat deg | lat min | lon deg | lon min | species     | condition        | hook location        | hook<br>removed         | entangled | line left<br>(ft)                                          | CL<br>(cm) | additional comments                                                                                                         |  |
| F69  | 7 | 19 | 1999 | 46      | 6       | 43      | 14      | Loggerhead  | alive, injured   | unknown beak/mouth   | 1                       | 0         | 0                                                          | 46         | mouth hooked                                                                                                                |  |
| F69  | 7 | 19 | 1999 | 46      | 6       | 43      | 14      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 3                                                          | 66         | mouth hooked                                                                                                                |  |
| F69  | 7 | 19 | 1999 | 46      | 6       | 43      | 14      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 3                                                          | 71         | mouth hooked                                                                                                                |  |
| F69  | 7 | 19 | 1999 | 46      | 6       | 43      | 14      | Leatherback | alive, injured   | unknown beak/mouth   | 0                       | 0         | 12                                                         | 183        | mouth hooked                                                                                                                |  |
| F69  | 7 | 19 | 1999 | 46      | 6       | 43      | 14      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 6                                                          | 71         | mouth hooked                                                                                                                |  |
| F69  | 7 | 20 | 1999 | 46      | 6       | 43      | 1       | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 6                                                          | 69         | mouth hooked                                                                                                                |  |
| F69  | 7 | 20 | 1999 | 46      | 6       | 43      | 1       | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 6                                                          | 69         | mouth hooked                                                                                                                |  |
| F69  | 7 | 20 | 1999 | 46      | 6       | 43      | 1       | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 2                                                          | 71         | mouth hooked                                                                                                                |  |
| F69  | 7 | 20 | 1999 | 46      | 6       | 43      | 1       | Leatherback | alive, uninjured | not hooked           |                         | 1         | 0                                                          | 168        | tangled in radio buoy drop rope,<br>untangled completely                                                                    |  |
| F69  | 7 | 21 | 1999 | 45      | 59      | 42      | 46      | Leatherback | alive, injured   | flipper              | 0                       | 0         | 9                                                          | 183        |                                                                                                                             |  |
| F69  | 7 | 21 | 1999 | 45      | 59      | 42      | 46      | Leatherback | alive, injured   | unknown beak/mouth   | 0                       | 0         | 10                                                         | 152        | mouth hooked                                                                                                                |  |
| F69  | 7 | 21 | 1999 | 45      | 59      | 42      | 46      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 4                                                          | 69         | mouth hooked                                                                                                                |  |
| F69  | 7 | 21 | 1999 | 45      | 59      | 42      | 46      | Leatherback | alive, injured   | flipper              | 0                       | 1         | 12                                                         | 168        |                                                                                                                             |  |
| F69  | 7 | 22 | 1999 | 42      | 2       | 42      | 36      | Loggerhead  | other, unknown   | unknown other        |                         |           |                                                            | 66         | did not see capture or release                                                                                              |  |
| F69  | 7 | 22 | 1999 | 46      | 2       | 42      | 36      | Leatherback | other, unknown   | unknown other        |                         |           |                                                            | 168        | did not see capture or release, id by<br>captain                                                                            |  |
| F69  | 7 | 22 | 1999 | 46      | 2       | 42      | 36      | Leatherback | other, unknown   | unknown other        |                         |           |                                                            | 168        | did not see capture or release                                                                                              |  |
| F69  | 7 | 22 | 1999 | 46      | 2       | 42      | 36      | Leatherback | alive, injured   | unknown beak/mouth   | 0                       | 0         | 12                                                         | 183        | mouth hooked                                                                                                                |  |
| F69  | 7 | 22 | 1999 | 46      | 2       | 42      | 36      | Leatherback | other, unknown   | unknown other        |                         |           |                                                            | 183        | did not see capture or release                                                                                              |  |
| F69  | 7 | 22 | 1999 | 46      | 2       | 42      | 36      | Leatherback | alive, uninjured | not hooked           |                         | 1         | 0                                                          | 168        | tangled in mainline, line cut                                                                                               |  |
| F69  | 7 | 26 | 1999 | 46      | 18      | 42      | 39      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 4                                                          | 66         | mouth hooked                                                                                                                |  |
| F69  | 7 | 27 | 1999 | 46      | 9       | 42      | 21      | Loggerhead  | alive, injured   | head/neck (external) | 0                       | 0         | 8                                                          | 183        |                                                                                                                             |  |
| F69  | 7 | 28 | 1999 | 46      | 9       | 41      | 53      | Loggerhead  | alive, injured   | unknown other        | 0                       | 0         | 18                                                         | 183        | did not see capture                                                                                                         |  |
| F69  | 7 | 28 | 1999 | 46      | 9       | 41      | 53      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 3                                                          | 66         | mouth hooked                                                                                                                |  |
| F69  | 7 | 28 | 1999 | 46      | 9       | 41      | 53      | Leatherback | other, unknown   | unknown other        |                         |           |                                                            | 168        | did not see capture or release                                                                                              |  |
| F69  | 7 | 28 | 1999 | 46      | 9       | 41      | 53      | Leatherback | other, unknown   | unknown other        |                         |           |                                                            | 122        | did not see capture or release                                                                                              |  |
| F69  | 7 | 28 | 1999 | 46      | 9       | 41      | 53      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 6                                                          | 64         | mouth hooked                                                                                                                |  |
| F69  | 7 | 28 | 1999 | 46      | 9       | 41      | 53      | Leatherback | alive, uninjured | not hooked           |                         | 1         | 24                                                         | 168        | tangled in mainline and buoy<br>drop;untangled from mainline,but<br>bullet buoy and buoy drop remained<br>tangled on animal |  |
| F69  | 7 | 29 | 1999 | 46      | 0       | 41      | 33      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 4                                                          | 69         | mouth hooked                                                                                                                |  |
| F69  | 7 | 29 | 1999 | 46      | 0       | 41      | 33      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 4                                                          | 61         | mouth hooked                                                                                                                |  |
| F69  | 7 | 29 | 1999 | 46      | 0       | 41      | 33      | Loggerhead  | other, unknown   | unknown other        |                         |           |                                                            | 64         | did not see capture or release                                                                                              |  |
| F69  | 7 | 29 | 1999 | 46      | 0       | 41      | 33      | Loggerhead  | alive, injured   | unknown beak/mouth   | 0                       | 0         | 3                                                          | 56         | mouth hooked, animal remained on<br>the surface of the water                                                                |  |
| F69  | 7 | 29 | 1999 | 46      | 0       | 41      | 33      | Leatherback | alive, uninjured | not hooked           |                         | 1         | 0                                                          | 152        | mainline tangled around<br>neck,untangled from                                                                              |  |

|        |    |    |      |         |         |         |         |             |                  |                             | No/Yes/Unknown<br>0/1/2 |           |                |         | LF=left front RF=right front LR=left<br>rear RR=right rear                                         |                                                                      |
|--------|----|----|------|---------|---------|---------|---------|-------------|------------------|-----------------------------|-------------------------|-----------|----------------|---------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| trip   | m  | d  | y    | lat deg | lat min | lon deg | lon min | species     | condition        | hook location               | hook removed            | entangled | line left (ft) | CL (cm) | additional comments                                                                                |                                                                      |
|        |    |    |      |         |         |         |         |             |                  |                             |                         |           |                |         | mainline,remained on the surface with head above surface                                           |                                                                      |
| F69    | 7  | 29 | 1999 | 46      | 0       | 41      | 33      | Leatherback | alive, injured   | unknown other               | 0                       | 0         | 12             | 168     | hooked unknown, remained just below surface                                                        |                                                                      |
| F69    | 7  | 29 | 1999 | 46      | 0       | 41      | 33      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 12             | 183     |                                                                                                    |                                                                      |
| F69    | 7  | 29 | 1999 | 46      | 0       | 41      | 33      | Leatherback | alive, uninjured | not hooked                  |                         |           | 1              | 0       | 168                                                                                                | tangled in mainline around neck and flipper, untangled completely    |
| F69    | 7  | 29 | 1999 | 46      | 0       | 41      | 33      | Leatherback | alive, injured   | flipper                     | 0                       |           | 12             | 168     |                                                                                                    |                                                                      |
| F69    | 7  | 29 | 1999 | 46      | 0       | 41      | 33      | Leatherback | other, unknown   | unknown other               |                         |           |                | 168     | did not see capture or release                                                                     |                                                                      |
| F69    | 7  | 29 | 1999 | 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 | 1999 | 46      | 11      | 41      | 51      | Leatherback | alive, injured   | unknown beak/mouth          | 0                       | 0         | 10             | 183     | mouth hooked                                                                                       |                                                                      |
| F69    | 7  | 30 | 1999 | 46      | 11      | 41      | 51      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 6              | 66      | mouth hooked                                                                                       |                                                                      |
| F69    | 7  | 30 | 1999 | 46      | 11      | 41      | 51      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 5              | 183     | flipper hooked                                                                                     |                                                                      |
| F69    | 7  | 30 | 1999 | 46      | 11      | 41      | 51      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 6              | 183     | flipper hooked                                                                                     |                                                                      |
| F69    | 7  | 31 | 1999 | 46      | 5       | 41      | 33      | Leatherback | other, unknown   | unknown other               |                         |           |                | 168     | did not see capture or release                                                                     |                                                                      |
| F69    | 7  | 31 | 1999 | 46      | 5       | 41      | 33      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 15             | 168     | flipper hooked                                                                                     |                                                                      |
| F69    | 7  | 31 | 1999 | 46      | 5       | 41      | 33      | Leatherback | alive, uninjured | not hooked                  |                         |           | 1              | 0       | 183                                                                                                | tangled in drop buoy, cut loose completely                           |
| F69    | 8  | 3  | 1999 | 46      | 15      | 41      | 54      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 6              | 152     | flipper hooked                                                                                     |                                                                      |
| F69    | 8  | 3  | 1999 | 46      | 15      | 41      | 54      | Loggerhead  | alive, injured   | unknown beak/mouth          | 0                       | 0         | 5              | 71      | mouth hooked                                                                                       |                                                                      |
| S17    | 10 | 2  | 1999 | 28      | 1       | 79      | 38      | Loggerhead  | alive, injured   | beak/mouth                  | 0                       | 0         | 6              | 100     | hooked in mouth                                                                                    |                                                                      |
| S18    | 10 | 22 | 1999 | 31      | 36      | 78      | 50      | Loggerhead  | alive, injured   | beak/mouth                  | 0                       | 0         | 6              | 110     | hooked in mouth                                                                                    |                                                                      |
| W07    | 10 | 21 | 1999 | 39      | 53      | 69      | 51      | Loggerhead  | alive, injured   | beak/mouth                  | 0                       | 0         | 2              | 75      | hooked in tongue                                                                                   |                                                                      |
| W07    | 10 | 21 | 1999 | 39      | 53      | 69      | 51      | Loggerhead  | alive, injured   | unknown beak/mouth          | 1                       | 0         | 0              | 75      | spit hook out of mouth                                                                             |                                                                      |
| W07    | 10 | 21 | 1999 | 39      | 53      | 69      | 51      | Leatherback | alive, injured   | flipper                     | 0                       | 0         | 2              | 135     | hooked in right front flipper                                                                      |                                                                      |
|        |    |    |      |         |         |         |         |             |                  |                             |                         |           |                |         |                                                                                                    |                                                                      |
| M01018 | 1  | 16 | 2000 | 18      | 6       | 54      | 52      | Loggerhead  | alive, injured   | head/beak                   | 0                       | 0         | 0.5            | 95      | beak hooked;swam away strongly                                                                     |                                                                      |
| M01018 | 1  | 18 | 2000 | 17      | 52      | 53      | 45      | Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 1              | 90      | gut hooked;swam away strongly                                                                      |                                                                      |
| T01049 | 1  | 19 | 2000 | 27      | 50      | 91      | 21      | Loggerhead  | alive, injured   | unknown other               | 0                       | 0         | 210            |         | condition unknown                                                                                  |                                                                      |
| M01018 | 1  | 22 | 2000 | 17      | 55      | 53      | 8       | Loggerhead  | alive, injured   | flipper                     | 0                       | 0         | 0.5            | 90      | LF flipper hooked;swam away strongly                                                               |                                                                      |
| M01018 | 1  | 22 | 2000 | 17      | 56      | 53      | 8       | Loggerhead  | alive, injured   | head/beak                   | 0                       | 0         | 0.2            | 90      | beak hooked;swam away strongly                                                                     |                                                                      |
| M01018 | 1  | 23 | 2000 | 18      | 20      | 53      | 20      | Leatherback | alive, injured   | unknown other               | 0                       | 0         | 20             | 180     | large turtle could not be brought alongside;not hooked in head                                     |                                                                      |
| S01022 | 2  | 12 | 2000 | 28      | 15.5    | 74      | 10.7    | Loggerhead  | alive, injured   | unknown other               | 2                       | 0         | ?              | 60      | minor injury caused by hook;hook in mouth,not past cavity,lengths estimated; ventral side not seen |                                                                      |
| S01023 | 3  | 8  | 2000 | 31      | 54.2    | 78      | 50.1    | Leatherback | alive, injured   | beak/mouth                  | 0                       | 0         | 10             | 150     | hooked in mouth;swam off readily                                                                   |                                                                      |



|        |   |    |      |         |         |         |         |             |                |                             | No/Yes/Unknown<br>0/1/2 |           | line left<br>(ft) (cm) |     | LF=left front RF=right front LR=left<br>rear RR=right rear                                                                                                         |  |
|--------|---|----|------|---------|---------|---------|---------|-------------|----------------|-----------------------------|-------------------------|-----------|------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|        | m | d  | y    | lat deg | lat min | lon deg | lon min | species     | condition      | hook location               | hook<br>removed         | entangled |                        |     | additional comments                                                                                                                                                |  |
| S01023 | 3 | 9  | 2000 | 31      | 51.2    | 78      | 42.1    | Leatherback | alive, injured | beak/mouth                  | 0                       | 0         | 30                     | 170 | hooked in mouth;lip shank visible;<br>released alive and energetic                                                                                                 |  |
| Q02005 | 3 | 21 | 2000 | 27      | 35.3    | 90      | 9.9     | Leatherback | alive, injured | flipper                     | 0                       | 0         | 5                      | 122 | hooked in RF flipper                                                                                                                                               |  |
| Q02005 | 3 | 22 | 2000 | 27      | 38.2    | 90      | 3.6     | Loggerhead  | alive, injured | head/beak                   | 0                       | 0         | 3                      | 90  | released with hook inside of beak                                                                                                                                  |  |
| R01005 | 4 | 15 | 2000 | 28      | 28      | 79      | 3       | unknown     | alive, injured | ingested (throat/esophagus) | 0                       | 0         | 0                      | 0   | unidentified due to dangerous<br>weather and conditions;fairly sure it<br>was loggerhead                                                                           |  |
| R01005 | 4 | 17 | 2000 | 28      | 16      | 78      | 55      | Loggerhead  | alive, injured | ingested (throat/esophagus) | 0                       | 0         | 6                      | 125 |                                                                                                                                                                    |  |
| S01025 | 4 | 18 | 2000 | 28      | 39.1    | 79      | 3.8     | Loggerhead  | alive, injured | ingested (throat/esophagus) | 0                       | 0         | 6                      | 100 | hooked in throat;exhibited some<br>difficulty breathing;swam off readily                                                                                           |  |
| S01025 | 4 | 21 | 2000 | 28      | 43.1    | 78      | 45.7    | Loggerhead  | alive, injured | beak/mouth                  | 0                       | 0         | 2                      | 140 | hooked in mouth;shank fully visible;<br>seemed fine                                                                                                                |  |
| A25006 | 4 | 22 | 2000 | 36      | 8       | 74      | 39      | Loggerhead  | alive, injured | unknown other               | 1                       | 0         | 0                      | 61  | came off hook and swam away as it<br>was pulled to boat head first                                                                                                 |  |
| P01055 | 5 | 16 | 2000 | 26      | 50      | 89      | 34      | Leatherback | alive, injured | carapace/plastron           | 0                       | 0         | 1                      | 0   | very strong;appeared healthy; hooked<br>under edge of shell midway,right side                                                                                      |  |
| J02001 | 5 | 28 | 2000 | 31      | 40      | 78      | 40      | unknown     | alive, injured | unknown other               | 0                       | 1         | 6                      | 90  | leader was wrapped around LR<br>flipper; when it broke there was ~6' of<br>line and a dead dolphin fish attached<br>but turtle swam away fine;unsure<br>about i.d. |  |
| J02001 | 5 | 29 | 2000 | 31      | 45      | 79      | 40      | Loggerhead  | alive, injured | beak/mouth                  | 0                       | 0         | 1                      | 70  | hooked in top of mouth;line cut as<br>close to mouth as possible but could<br>not remove hook without further<br>injuring turtle;swam away and<br>seemed fine      |  |
| K02001 | 5 | 31 | 2000 | 28      | 5       | 79      | 30      | unknown     | alive, injured | beak/mouth                  | 1                       | 0         | 0                      | 90  | hooked in mouth;not entangled;freed<br>itself at boat;no gear attached when<br>dove                                                                                |  |
| P01056 | 6 | 5  | 2000 | 27      | 11      | 91      | 22      | Leatherback | alive, injured | beak/mouth                  | 0                       | 0         | 1                      | 140 |                                                                                                                                                                    |  |
| P01056 | 6 | 7  | 2000 | 27      | 7       | 89      | 30      | unknown     | alive, injured | unknown beak/mouth          | 0                       | 0         | 12                     | 0   | turtle pulled hard against leader                                                                                                                                  |  |
| P01056 | 6 | 11 | 2000 | 26      | 29      | 90      | 11      | unknown     | alive, injured | unknown other               | 0                       | 0         | 20                     | 0   | turtle not brought close enough to<br>ascertain condition,except it was alive                                                                                      |  |
| B56038 | 6 | 11 | 2000 | 37      | 56      | 68      | 46      | Leatherback | alive, injured | unknown other               | 0                       | 1         | 45                     | 120 | turtle surfaced ~15 yds from<br>vessel;cannot see where hooked; line<br>cut;swam away uninjured                                                                    |  |
| P01056 | 6 | 12 | 2000 | 26      | 58      | 89      | 46      | Leatherback | alive, injured | carapace/plastron           | 0                       | 0         | 3                      | 120 | released at boat; short line; swam<br>away strongly                                                                                                                |  |
| P01056 | 6 | 14 | 2000 | 27      | 23      | 89      | 50      | Leatherback | alive, injured | beak/mouth                  | 0                       | 0         | 2                      | 120 | hook in joint of jaws                                                                                                                                              |  |
| J02003 | 7 | 12 | 2000 | 43      | 35      | 45      | 30      | Loggerhead  | alive, injured | beak/mouth                  | 0                       | 0         | 0                      | 53  | hooked in front of beak;netted and<br>brought on board;biopsy punch                                                                                                |  |

|        |   |    |         |         |         |         |                  |                  |                             | No/Yes/Unknown<br>0/1/2 |           | line left<br>(ft) (cm) |      | LF=left front RF=right front LR=left<br>rear RR=right rear                                                                                                                        |  |
|--------|---|----|---------|---------|---------|---------|------------------|------------------|-----------------------------|-------------------------|-----------|------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| m      | d | y  | lat deg | lat min | lon deg | lon min | species          | condition        | hook location               | hook<br>removed         | entangled | line left<br>(ft)      | (cm) | additional comments                                                                                                                                                               |  |
| J02003 | 7 | 12 | 2000    | 43      | 31      | 45      | 37 Loggerhead    | alive, injured   | flipper                     | 1                       | 0         | 0                      | 51   | sample of RR flipper;cut line from hook and left hook in turtle;swam away strongly                                                                                                |  |
| J02003 | 7 | 12 | 2000    | 43      | 31      | 45      | 38 Loggerhead    | alive, injured   | beak/mouth                  | 1                       | 0         | 0                      | 59   | hooked in RF flipper;biopsy in RR flipper;tagged,measured;removed hook and line;seemed fine at release                                                                            |  |
| J02003 | 7 | 15 | 2000    | 43      | 11      | 51      | 20 Leatherback   | alive, injured   | flipper                     | 0                       | 0         | 4                      | 120  | hooked in beak;biopsied and tagged RR flipper;hook and line removed;swam away strong                                                                                              |  |
| J02003 | 7 | 15 | 2000    | 43      | 13      | 51      | 24 Leatherback   | alive, injured   | flipper                     | 0                       | 0         | 0                      | 150  | caused a large tangle in the gear;hooked in the RF flipper and was pulling hard;swam away quickly                                                                                 |  |
| J02003 | 7 | 30 | 2000    | 48      | 40      | 43      | 4 Leatherback    | alive, injured   | flipper                     | 0                       | 0         | 2                      | 120  | hooked in right shoulder;leader broke at hook;quickly swam away                                                                                                                   |  |
| J02003 | 7 | 30 | 2000    | 48      | 40      | 43      | 4 Leatherback    | alive, injured   | flipper                     | 0                       | 0         | 2                      | 120  | hooked in right front shoulder;swam away quickly                                                                                                                                  |  |
| Q02009 | 7 | 31 | 2000    | 26      | 39      | 92      | 29.1 Leatherback | alive, injured   | head/neck (external)        | 0                       | 0         | 4                      | 122  | injury considered minor;likely to survive;hooked in ventral neck area near carapace;swam away actively;no tags noticed;sub-adult                                                  |  |
| J02003 | 8 | 2  | 2000    | 49      | 25      | 42      | 27 Loggerhead    | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                      | 55   | swallowed bait (squid);brought on board in net; measured, tagged, biopsied each rear flipper;line cut even with mouth; id according to guide book                                 |  |
| J02003 | 8 | 2  | 2000    | 49      | 25      | 42      | 24 Leatherback   | alive, injured   | unknown other               | 0                       | 0         | 5                      | 150  | came up for air during haul-in; positive id; swam under boat and did not resurface; broke leader ~3' below swivel and swam away; believed foul hooked from the way it was pulling |  |
| P01057 | 8 | 4  | 2000    | 26      | 19      | 90      | 58 Leatherback   | alive, injured   | carapace/plastron           | 0                       | 0         | 2                      | 130  | turtle was very strong;had difficulty bringing close enough to release                                                                                                            |  |
| O02008 | 8 | 7  | 2000    | 40      | 51.9    | 66      | 9.2 Loggerhead   | alive, uninjured | beak/mouth                  | 1                       | 0         | 0                      | 72   | F1 tagged and released;sample LR flipper; hook easily removed as it was held in the mouth; no hook penetration; no gear attached; swam away strongly                              |  |
| P01057 | 8 | 7  | 2000    | 26      | 51      | 92      | 13.2 Leatherback | alive, injured   | carapace/plastron           | 0                       | 0         | 20                     | 130  | turtle extremely strong and heavy;could not get turtle to surface                                                                                                                 |  |
| P01057 | 8 | 7  | 2000    | 26      | 51      | 92      | 13 Leatherback   | alive, injured   | carapace/plastron           | 0                       | 0         | 2                      | 130  | turtle released by side of vessel; very good condition; did not set this area again                                                                                               |  |

|        |   |    |         |         |         |         |                 |                  |                             | No/Yes/Unknown<br>0/1/2 |           |                   | LF=left front RF=right front LR=left<br>rear RR=right rear |                                                                                                                                                                                                                                                                            |
|--------|---|----|---------|---------|---------|---------|-----------------|------------------|-----------------------------|-------------------------|-----------|-------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| m      | d | y  | lat deg | lat min | lon deg | lon min | species         | condition        | hook location               | hook<br>removed         | entangled | line left<br>(ft) | (cm)                                                       | additional comments                                                                                                                                                                                                                                                        |
| T01054 | 8 | 9  | 2000    | 39      | 54      | 68      | 48 Loggerhead   | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                 | 1 61                                                       | throat hooked;6" leader left attached                                                                                                                                                                                                                                      |
| W01013 | 8 | 9  | 2000    | 39      | 55      | 69      | 20 Loggerhead   | alive, uninjured | unknown other               | 0                       | 0         | 0                 | 45                                                         | believed not hooked;just feeding on<br>bait,or spat out hook;turtle closely<br>associated with gear;believed initially<br>on the leader,came to surface at the<br>stern because vessel stopped to pull<br>on leader;spat out bait or escaped<br>gear;swam away             |
| T01054 | 8 | 10 | 2000    | 40      | 4       | 68      | 40 Loggerhead   | alive, injured   | beak/mouth                  | 0                       | 0         | 0                 | 80                                                         | no leader;9/0 hook left                                                                                                                                                                                                                                                    |
| T01054 | 8 | 11 | 2000    | 40      | 1       | 68      | 37 Leatherback  | alive, injured   | flipper                     | 0                       | 0         | 0                 | 152                                                        | excellent condition;no leader                                                                                                                                                                                                                                              |
| W01013 | 8 | 11 | 2000    | 39      | 52      | 70      | 28 Loggerhead   | alive, injured   | beak/mouth                  | 0                       | 0         | 60                | 60                                                         |                                                                                                                                                                                                                                                                            |
| T01054 | 8 | 12 | 2000    | 40      | 0       | 68      | 59 Loggerhead   | other, unknown   | unknown other               | 2                       | 2         | 0                 | 76                                                         | recorded on individual animal log;life<br>history form not filled out at time of<br>data submission;observer could not<br>remember details of gear interaction<br>during followup questioning                                                                              |
| T01054 | 8 | 16 | 2000    | 40      | 36      | 66      | 50 Loggerhead   | alive, injured   | beak/mouth                  | 0                       | 0         | 2                 | 90                                                         |                                                                                                                                                                                                                                                                            |
| W01013 | 8 | 20 | 2000    | 39      | 40      | 72      | 3 Loggerhead    | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 1                 | 50                                                         |                                                                                                                                                                                                                                                                            |
| W01013 | 8 | 22 | 2000    | 39      | 47      | 71      | 36 Loggerhead   | alive, injured   | ingested (throat/esophagus) | 0                       | 2         | 45                | 0                                                          |                                                                                                                                                                                                                                                                            |
| M01020 | 8 | 25 | 2000    | 46      | 17.1    | 44      | 54.3 Loggerhead | alive, injured   | ingested (throat/esophagus) | 1                       | 0         | 0                 | 0                                                          | biopsy collected from rear flipper;<br>hook removed; very little bleeding;<br>swam away strongly                                                                                                                                                                           |
| M01020 | 8 | 27 | 2000    | 44      | 54.8    | 47      | 3.3 Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                 | 0                                                          | biopsy collected from rear flipper; gut<br>hooked beyond view in oesophagus;<br>no bleeding; leader cut inside mouth;<br>swam away strongly                                                                                                                                |
| M01020 | 8 | 28 | 2000    | 44      | 42.5    | 47      | 23 Loggerhead   | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                 | 0                                                          | biopsy "C-10" collected from rear<br>flipper;hook beyond view in<br>oesophagus;no bleeding;leader cut<br>deep inside mouth;swam away<br>vigorously                                                                                                                         |
| M01020 | 8 | 30 | 2000    | 44      | 44.2    | 48      | 23 Loggerhead   | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                 | 0                                                          | hook in oesophagus,unseen;no<br>bleeding;leader cut as far down throat<br>as could be reached with<br>cutters;biopsy "C-1" collected from<br>rear flipper;more lethargic than turtles<br>taken in warmer water;temp@ take<br>60.2F; temp@ release 61.2F;swam<br>vigorously |
| M01020 | 9 | 3  | 2000    | 43      | 20.6    | 51      | 30.5 Loggerhead | alive, injured   | beak/mouth                  | 1                       | 0         | 0                 | 0                                                          | dipnetted aboard;lightly hooked in<br>beak;hook easily removed with no<br>bleeding with little injury;biopsy "C-                                                                                                                                                           |

|        |   |    |         |         |         |         |                  |                  |                             | No/Yes/Unknown<br>0/1/2 |           | line left<br>(ft) (cm) |      | LF=left front RF=right front LR=left<br>rear RR=right rear                                                                                                                                                                                                  |  |
|--------|---|----|---------|---------|---------|---------|------------------|------------------|-----------------------------|-------------------------|-----------|------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| m      | d | y  | lat deg | lat min | lon deg | lon min | species          | condition        | hook location               | hook removed            | entangled | line left<br>(ft)      | (cm) | additional comments                                                                                                                                                                                                                                         |  |
| S01028 | 9 | 4  | 2000    | 31      | 28      | 79      | 1 Loggerhead     | other, unknown   | unknown other               | 2                       | 2         | 40                     | 90   | 8";take temp 69.8F;release temp 69.9F;swam away vigorously<br>leader broke before turtle was close enough to accurately assess condition or hook location;alive and appeared robust                                                                         |  |
| M01020 | 9 | 4  | 2000    | 43      | 13.7    | 51      | 28.9 Loggerhead  | alive, injured   | ingested (throat/esophagus) | 0                       | 0         | 0                      | 0    | gut hooked; unseen in oesophagus;no bleeding;leader cut deep inside mouth;biopsy "C-3";dipnetted aboard;swam away vigorously;take temp 68F;release temp 68.8F                                                                                               |  |
| Q02010 | 9 | 4  | 2000    | 26      | 59.5    | 93      | 46.9 Leatherback | alive, injured   | unknown other               | 0                       | 0         | 30                     | 0    | no time to estimate size before captain cut leader                                                                                                                                                                                                          |  |
| M01020 | 9 | 5  | 2000    | 43      | 23.7    | 51      | 39.3 Leatherback | alive, injured   | flipper                     | 0                       | 1         | 0                      | 120  | hooked in leading edge of RF flipper;several wraps of monofilament around flipper were untangled and removed before leader cut at hook;swam strongly;little injury;2 hooks adjacent to each other on flipper;not clear if hooks from same or different sets |  |
| M01020 | 9 | 5  | 2000    | 43      | 14.1    | 51      | 14.5 Leatherback | alive, injured   | flipper                     | 0                       | 1         | 0                      | 110  | released at surface by cutting leader at hook; hooked RF flipper;several wraps of monofilament were removed before cutting leader;swam away vigorously with little injury                                                                                   |  |
| S01028 | 9 | 6  | 2000    | 31      | 22      | 78      | 55 Leatherback   | alive, uninjured | not hooked                  | 0                       | 1         | 0                      | 170  | entangled in mainline;no hook involved;all mono removed at release                                                                                                                                                                                          |  |
| M01020 | 9 | 12 | 2000    | 43      | 13.9    | 51      | 27.5 Leatherback | alive, injured   | flipper                     | 0                       | 0         | 0                      | 130  | RF flipper hooked;released at the surface by cutting leader at the hook;little injury;swam away vigorously                                                                                                                                                  |  |
| J02004 | 9 | 20 | 2000    | 39      | 56      | 70      | 41 Loggerhead    | alive, injured   | beak/mouth                  | 0                       | 0         | 1                      | 60   | saw hooked through in lower jaw;line cut close to hook;swam away;~60-70 lbs;hooked on single leader with no entanglement;positive id                                                                                                                        |  |
| J02004 | 9 | 21 | 2000    | 39      | 47      | 71      | 20 Loggerhead    | alive, injured   | beak/mouth                  | 0                       | 0         | 1                      | 60   | turtle came up on single leader and was hooked in the mouth;brown on top;yellow on bottom;square head;positive I.d.;~2' carapace length;line cut close to mouth;swam away                                                                                   |  |

|        |    |    |      |         |         |         |         |             |                | No/Yes/Unknown<br>0/1/2     |              |           |                   | LF=left front RF=right front LR=left<br>rear RR=right rear |                                                                                                                                                                                                            |
|--------|----|----|------|---------|---------|---------|---------|-------------|----------------|-----------------------------|--------------|-----------|-------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | m  | d  | y    | lat deg | lat min | lon deg | lon min | species     | condition      | hook location               | hook removed | entangled | line left<br>(ft) | (cm)                                                       | additional comments                                                                                                                                                                                        |
| J02004 | 9  | 21 | 2000 | 39      | 46      | 71      | 34      | Loggerhead  | alive, injured | beak/mouth                  | 0            | 0         | 1                 | 45                                                         | hooked in the mouth on single leader;brown on top and yellow on bottom;hook stuck out from bottom of jaw;line cut and swam away;positive id                                                                |
| W01014 | 9  | 22 | 2000 | 39      | 53      | 68      | 27      | Loggerhead  | alive, injured | beak/mouth                  | 0            | 0         | 1                 | 50                                                         | swam away strongly upon release                                                                                                                                                                            |
| J02004 | 9  | 22 | 2000 | 39      | 49      | 71      | 44      | Loggerhead  | alive, injured | beak/mouth                  | 0            | 0         | 1                 | 60                                                         | hooked in the mouth on single leader;swam away looking fine                                                                                                                                                |
| J02004 | 9  | 23 | 2000 | 39      | 50      | 71      | 48      | Loggerhead  | alive, injured | beak/mouth                  | 0            | 0         | 1                 | 75                                                         | hooked in right lower jaw;swam away quickly with short piece of line sticking out of mouth                                                                                                                 |
| T01055 | 10 | 6  | 2000 | 37      | 20      | 74      | 20      | Leatherback | alive, injured | flipper                     | 0            | 0         | 3                 | 152                                                        | right flipper hooked; 3' 400lb mono leader left attached;swam off in excellent condition                                                                                                                   |
| T01055 | 10 | 6  | 2000 | 37      | 22      | 74      | 20      | Loggerhead  | alive, injured | beak/mouth                  | 0            | 0         | 6                 | 120                                                        | swam away in good condition with 6' 400 lb line and leader                                                                                                                                                 |
| T01055 | 10 | 6  | 2000 | 37      | 25      | 74      | 20      | Loggerhead  | alive, injured | beak/mouth                  | 0            | 0         | 5                 | 100                                                        | swam off in excellent condition with 5' 400 lb line and leader attached                                                                                                                                    |
| J02005 | 10 | 19 | 2000 | 45      | 29      | 45      | 21      | Loggerhead  | alive, injured | ingested (throat/esophagus) | 0            | 0         | 0                 | 61                                                         | swallowed single hook;line cut even with mouth and released;swam away quickly;took 2 bio-tissue samples,one from each rear flipper                                                                         |
| J02005 | 10 | 19 | 2000 | 45      | 26      | 45      | 20      | Loggerhead  | alive, injured | ingested (throat/esophagus) | 0            | 0         | 0                 | 65                                                         | swallowed hook of single leader;reddish brown with algae al over shell;square head and 2 claws on each rear flipper;tissue sample from LR flipper;line cut even with mouth and released;swam straight down |
| J02005 | 10 | 19 | 2000 | 45      | 23      | 45      | 18      | Leatherback | alive, injured | head/neck (external)        | 0            | 0         | 3                 | 120                                                        | foul hooked under mouth;swam away as soon as leader cut                                                                                                                                                    |
| J02005 | 10 | 19 | 2000 | 45      | 24      | 45      | 18      | Loggerhead  | alive, injured | beak/mouth                  | 1            | 0         | 0                 | 59                                                         | hooked in the mouth on a single leader;hook removed, tagged, sample removed from RR flipper;seemed fine;swam away                                                                                          |
| J02005 | 10 | 19 | 2000 | 45      | 23      | 45      | 18      | Loggerhead  | alive, injured | beak/mouth                  | 1            | 0         | 0                 | 55                                                         | hooked on a single leader with hook in mouth;swam away quickly and seemed unharmed                                                                                                                         |
| J02005 | 10 | 24 | 2000 | 46      | 1       | 44      | 3       | Loggerhead  | alive, injured | beak/mouth                  | 1            | 0         | 0                 | 56                                                         | biopsy sample from RR flipper;seemed fine as it swam away                                                                                                                                                  |
| J02005 | 10 | 24 | 2000 | 46      | 0       | 44      | 3       | Loggerhead  | alive, injured | ingested (throat/esophagus) | 0            | 0         | 0                 | 61                                                         | swallowed hook of single leader:sampled RR flipper;cut leader                                                                                                                                              |

|        |    |    |      |         |         |         |         |             |                  | No/Yes/Unknown<br>0/1/2 |                 |           |                   | LF=left front RF=right front LR=left<br>rear RR=right rear |                                                                                                                                                                                                                                                                      |
|--------|----|----|------|---------|---------|---------|---------|-------------|------------------|-------------------------|-----------------|-----------|-------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| trip   | m  | d  | y    | lat deg | lat min | lon deg | lon min | species     | condition        | hook location           | hook<br>removed | entangled | line left<br>(ft) | CL<br>(cm)                                                 | additional comments                                                                                                                                                                                                                                                  |
| J02005 | 10 | 24 | 2000 | 45      | 59      | 44      | 7       | Loggerhead  | alive, injured   | beak/mouth              | 1               | 0         | 0                 | 41                                                         | inside mouth and released;swam<br>away fast                                                                                                                                                                                                                          |
| J02005 | 10 | 31 | 2000 | 41      | 36      | 51      | 9       | Leatherback | alive, injured   | flipper                 | 0               | 0         | 1                 | 120                                                        | hooked in the mouth on single<br>leader;turtle missing lower right part<br>of dorsal shell,but the skin underneath<br>was healed with no open<br>wounds;bottom shell not<br>damaged;might have been hit by boat<br>in the past;hook easily<br>removed;swam away fine |
| J02005 | 10 | 31 | 2000 | 41      | 38      | 51      | 14      | Leatherback | alive, injured   | flipper                 | 0               | 0         | 3                 | 150                                                        | hooked in RF flipper; caught on single<br>leader;leader cut;swam away                                                                                                                                                                                                |
| J02005 | 10 | 31 | 2000 | 41      | 39      | 51      | 17      | Leatherback | alive, injured   | flipper                 | 0               | 0         | 1                 | 120                                                        | very large;foul hooked in the right<br>shoulder on a single leader;pulled<br>hard on line;line cut and it dove<br>under boat immediately                                                                                                                             |
| J02005 | 10 | 31 | 2000 | 41      | 39      | 51      | 17      | Leatherback | alive, injured   | flipper                 | 0               | 0         | 1                 | 120                                                        | hooked in bottom of RF flipper on<br>single leader;line cut and swam away<br>fine                                                                                                                                                                                    |
| S01031 | 11 | 6  | 2000 | 26      | 46.2    | 79      | 53.8    | Loggerhead  | alive, injured   | beak/mouth              | 0               | 0         | 3                 | 80                                                         | hooked in side of beak; entire hook<br>visible; leader cut close to animal;<br>swam away strongly                                                                                                                                                                    |
| S01031 | 11 | 8  | 2000 | 31      | 54      | 79      | 40.1    | Loggerhead  | alive, injured   | flipper                 | 0               | 0         | 6                 | 80                                                         | hooked in LF flipper;leader cut;swam<br>away strongly                                                                                                                                                                                                                |
| S01031 | 11 | 10 | 2000 | 31      | 39.1    | 79      | 15.3    | Leatherback | alive, uninjured | unknown other           | 1               | 0         | 0                 | 150                                                        | turtle escapes,pulling out hook;no<br>gear left on turtle;little apparent<br>injury;associated with leader but<br>leader unhooked while pulled towards<br>the boat;swam away strongly                                                                                |
| J02005 | 11 | 10 | 2000 | 40      | 47      | 66      | 36      | Leatherback | alive, injured   | head/neck (external)    | 0               | 1         | 1                 | 120                                                        | foul hooked in the neck and tangled in<br>a bullet drop; removed all tangled line;<br>swam away                                                                                                                                                                      |
| J02005 | 11 | 13 | 2000 | 40      | 49      | 66      | 35      | Leatherback | alive, injured   | unknown other           | 0               | 0         | 1                 | 150                                                        | unable to confirm id from photos;foul<br>hooked in LF flipper;swam away<br>strongly; seemed unharmed                                                                                                                                                                 |
| K02003 | 12 | 11 | 2000 | 40      | 32      | 66      | 59      | Loggerhead  | alive, injured   | beak/mouth              | 0               | 0         | 0                 | 45                                                         | brought to boat side on hook;line cut<br>at eye of hook which was in<br>beak;swam away quickly                                                                                                                                                                       |
| S01032 | 12 | 13 | 2000 | 28      | 24.3    | 78      | 15.1    | Leatherback | alive, injured   | flipper                 | 0               | 0         | 6                 | 160                                                        | hooked LF flipper;released in good<br>condition;black                                                                                                                                                                                                                |