Winter Right Whale Surveys

Savannah, Georgia to Chesapeake Bay, Virginia

January 22, 2002 – March 19, 2002

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Contract Report #50WCNF2060001 for
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Acknowledgements

These surveys were funded by the National Marine Fisheries Service. We thank Steve Swartz for his support. Amy Knowlton and Beth Page (NEAq) were very helpful in getting right whale identifications back to us and getting data out of us. Bob Murphy (EAS) was, as usual, at his best providing planes and pilots to burn up those tracklines. Thanks to Buzz Krauss (EAS) for keeping the wayward observers in line and finding our way home each day. Michelle Barbieri helped with ground support and coordinating sightings into FASCFAXJAX. Thanks to the members of the VAB LAB for their assistance and support.

Executive Summary

The northern right whale, *Balaena glacialis*, is one of the most endangered large whales in the world. Right whales are known to annually migrate from northern temperate to sub-tropical waters. Large-scale survey efforts for right whales are conducted in the Bay of Fundy/Gulf of Maine during the summers and near-shore and offshore waters of northern Florida and southern Georgia in the winters. Until 2001 little was known about the distribution and calving potential of right whales and/or human impacts on them outside of these areas. During UNCW's aerial survey effort in Feb 2001, four mother/calf pairs were observed in the SE US waters. These observations highlighted the importance of continued survey efforts in this region.

The results reported below are for surveys conducted in the waters from Savannah, GA to Chesapeake Bay, VA from January 22 to March 19, 2002 and additional survey effort on April 17-18, 2002 to search for an entangled right whale. This survey was designed to be consistent with those concurrently flown in the waters of northern Florida and southern Georgia by the New England Aquarium and the State of Georgia.

The resulting additional effort added to our current understanding of right whale winter distribution patterns. Six sightings of right whales occurred during this survey effort, including four mother/calf pairs and one single animal. The surveys highlight the potential that some right whales may be attenuating their migration to northern Florida/southern Georgia and stopping in waters of the mid-Atlantic. Sightings of right whales during these survey efforts suggest that an increase in the scope of the Early Warning System should be investigated.

Sightings of two fin whales, four humpback whales, a sperm whale, two species of small odontocetes and three species of sea turtles were also recorded during these surveys.

Introduction

This final report describes the sightings of right whales (*Balaena glacialis*) during aerial surveys in the mid-Atlantic from 22 January to19 March, 2002. Our previous surveys in this region have yielded sightings of individual and mother/calf pairs of right whales, and highlighted the potential that whales may be attenuating their migration to traditional calving grounds in northern Florida/southern Georgia. We have also shown that humpback whales are found in mid-Atlantic waters throughout most of the year. While there, these whales enter regions of heavy shipping and fishing activities, and individuals of both species have been entangled in fishing gear. Continued efforts to understand the distribution of these whales is warranted, given the threats to them from human activities while they inhabit mid-Atlantic waters.

The western north Atlantic right whale is critically endangered (Clapham *et al.* 1999), with an estimated minimum population size of 291 individuals (Kraus *et al.* 2001). Although the past two years have yielded large numbers of calves (31 from November 2000 to March 2001 and 21 from November 2001 to March 2002, data from *Right Whale News*, Volume 9, No. 2, May 2002), this population is considered to be well below its Optimum Sustainable Population size (OSP)(Waring *et al.* 2001). Right whales occur in the summer in northern waters off New England and north to the Scotian Shelf (Waring *et al.* 2001). Some right whales migrate south to the coastal waters off Georgia and Florida during the winter. It is not known where the majority of all right whales spend winter months, and their distribution and abundance patterns in the mid-Atlantic are not well known. The current population estimates for this species are under 300 individuals, and declining at apparently 4%/year (Caswell, *et al.* 1999). Any potentially negative interaction with a right whale could have severe impacts for the species as a whole.

In addition to right whales, we also report here all sightings of other cetaceans and sea turtles. Of particular interest are humpback whale (*Megaptera novaeangliae*) sightings because this species is currently listed as endangered under the Endangered Species Act (ESA). Humpback whales traditionally migrate from the summer feeding grounds in the northeastern U.S., Canada, Greenland, and Iceland to winter breeding grounds in the Greater and Lesser Antilles (Martin *et al.* 1984). Since 1990, juvenile humpbacks have been sighted

from the mouth of the Chesapeake Bay south to Cape Hatteras (Swingle *et al.* 1993). Concurrent with this occurrence of juvenile humpbacks into mid-Atlantic waters, there has been a four-fold increase in juvenile humpback strandings (Wiley *et al.* 1995). Between 1990-2000, the number of stranded humpbacks in the mid-Atlantic alone has been at levels equal to or over one half of the Potential Biological Removal (PBR) in each of five years. Strandings even exceeded PBR (which was 9.7 in the 1996 stock assessment) in 1992. Survey efforts in the mid-Atlantic have demonstrated humpback whale sightings from the air as far south as Cape Hatteras, NC (Swingle *et al.* 1993), with occasional sightings to Cape Fear, NC (UNCW Marine Mammal Program, unpubl. data). Little aerial survey effort has been conducted in the offshore waters of the lower mid-Atlantic to elucidate humpback distribution.

Two fin whales (*Balaenoptera physalus*), which are also listed as endangered under the ESA, were sighted during this survey. The most abundant cetacean species sighted (n=1,889 individuals counted) was bottlenose dolphin (*Tursiops truncatus*). The "coastal migratory" stock of this species (now considered as part of the western north Atlantic coastal stock) is considered depleted under provisions of the Marine Mammal Protection Act (Waring *et al.* 2001). Common dolphins (*Delphinus delphis*), considered to be members of NMFS-identified "strategic" stocks in the western north Atlantic, were also sighted (Waring *et al.* 2001). The endangered leatherback (*Dermochelys coriacea*) and Kemp's ridley (*Lepidochelys kempii*) and the threatened loggerhead (*Caretta caretta*) sea turtles were also sighted.

Methodology

Logistics

For this project, the University of North Carolina at Wilmington (UNCW) provided observers and contracted with Environmental Aviation Services Inc. (EAS) of Jacksonville, FL to provide planes and pilots for surveys. The planes were the military version of Cessna 337. They were fixed, over-wing, twin-engine aircraft with retractable landing gear. The planes were outfitted for offshore use with emergency position indicating radio beacon (EPIRB), life raft, VHF radio and inflatable life jackets, which were worn by the observers throughout the survey.

The surveys were scheduled to begin in mid-January, 2002 and continue for two months. EAS located a plane and housed a pilot in Wilmington, NC for the duration of the surveys. The entire team was based out of Charleston, SC to survey the southern-most tracklines, and out of Virginia Beach, VA to survey the northern-most lines. All flights were coordinated with the Air Defense Identification Zone (ADIZ).

The surveys consisted of 111 tracklines of 35 nm in total length (Figure 1). The tracklines began at 32° north, at the level of Savannah, Georgia, and ran at 4 nm intervals north to 37° north, at the level of the Chesapeake Bay (Table 1). The plane carried a pilot and three observers. A left and right observer surveyed from each side of the plane, and the third acted as data recorder. Track lines were flown at 1000 feet of altitude at approximately 100 knots ground speed. Each trackline was flown up to four times during the survey effort.

Effort was only conducted when wind/water conditions were below Beaufort 5. With this weather constraint in place, the survey tracklines were not flown in any systematic order, but in an order that permitted surveying in the best weather possible at any place along the coast (Table 2). The first set of tracklines began off of Wilmington, NC and was completed with the northern tracklines during the first week of March. The second set of tracklines was started off of Savannah, GA and was completed north of Cape Hatteras, NC in the middle of March. Tracklines 1-66 (from Savannah, GA to Cape Lookout, NC) were flown a third time during March and tracklines 62-63 were flown a fourth time on March 19. During each of the sets of surveys, effort at any individual trackline could be separated by as much as 17 days from an adjacent trackline.

An additional survey was conducted from April 17-18, 2002 to search for an entangled right whale. This survey paralleled the coast at distances of 5, 10 and 15 miles offshore and ran from Wrightsville Beach, NC to Ocean City, Maryland. The survey was conducted over two consecutive days. A total of 213.2 hours were flown during all survey efforts (Table 3)

Data Collection

Weather and sea conditions were collected for each trackline. Glare was recorded for each side of the plane on each track. Location was recorded using a global positioning system (GPS). The plane carried at least two GPSs during each survey. One GPS was used by the pilot to follow track lines, the other was used to store position data for the survey. The GPS stored each position in memory as a waypoint. Waypoint data were downloaded directly to a computer following surveys.

Positions were recorded for the beginning and end of each trackline, changes in weather condition, location of vessels, fishing gear, and sightings of animals. When an animal was sighted, the time and location on the trackline were recorded. The plane then left the track and circled the animal(s) to collect actual position, species and number. After identifying the animal(s), the plane returned to the trackline at the position where it had left and continued the survey. Because large vessels were visible for many miles, they were not recorded until their position fell within 1.5 nm of the plane.

Data Analysis

Data were downloaded from the hand-held GPS unit and imported into a spreadsheet for editing, which included checks of waypoints to specific sightings and time on and off effort, etc. On effort and transit times were calculated directly from the GPS readouts. Once an individual survey's data were edited, they were added to the total survey data spreadsheet. The total survey data could then be sorted by species, for example, for further analysis and geographic mapping. All geographic maps were generated in ArcView.

Results and Discussion

The following references the sighting histories and locations presented graphically and in data tables. These data include only the sightings collected while conducting dedicated aerial surveys on the generated tracklines. They do not include sightings from the April survey that was mounted to find an entangled right whale. This survey did not locate the whale.

Right Whale (*Balaena glacialis*)

The north Atlantic right whale is one of the most endangered large whales in the world with a current population estimate of under 300 individuals. Right whales migrate from the summer feeding grounds in the Bay of Fundy and Gulf of Maine and off the Scotian shelf to the winter calving grounds off Georgia and Florida. The aerial survey reported here was designed specifically to census any right whales that might be "wintering" in the mid-Atlantic waters.

Four mother/calf pairs of right whales and one single animal were observed during this aerial survey effort (Figure 2 and sightings Table 4). The first mother/calf pair (#2040) was seen on 4 February in the shallow waters east of Georgetown, South Carolina. The animals were re-sighted later on the same day and had moved only slightly southwest. The second mother/calf pair (#1240) was sighted on 8 February southeast of Charleston, South Carolina. The whale was re-sighted the next afternoon, 9 February, and had moved slightly to the north. The third whale, a single animal (#1246), was observed on 12 February southeast of Savannah, Georgia. The fourth sighting, a mother/calf pair, occurred on 22 February in the waters northeast of Georgetown, South Carolina. As of 15 June, 2002 this mother/calf pair has not been identified by the NEAq and is being considered a new animal to the catalogue. A final pair of right whales (#1241) was observed on 6 March in the shallow waters off Cape Fear, North Carolina.

The combined right whale sightings from 2001 and 2002 are presented in Figure 3. No right whales have been sighted north of Cape Fear, NC during the period of the surveys. Right whales have been consistently sighted in the nearshore waters from Savannah, GA to Cape Fear, NC suggesting a habitat preference.

Humpback Whale (*Megaptera novaeangliae*)

The Gulf of Maine stock of humpback whales is considered endangered, with an estimated minimum population size of 568 individuals (Waring *et al.* 2001). The best estimate for the entire North Atlantic population is 10,600 (CV=0.067) (Smith *et al.* 1999). The estimated growth rate of the Gulf of Maine stock is 6.5% (Barlow and Clapham 1997). PBR for the Gulf of Maine stock is 1.8, but estimated annual, human-induced mortality and serious impact is 4.2 individuals (Waring *et al.* 2001). Humpback whales traditionally migrate from the summer feeding grounds in the northeastern U.S., Canada, Greenland, and Iceland to winter breeding grounds in the Greater and Lesser Antilles (Martin *et al.* 1984). Since 1990, it has been documented that juvenile humpbacks have been sighted from the mouth of the Chesapeake Bay south to Cape Hatteras (Swingle *et al.* 1993). Apparently humpbacks are also seen during the winter in southeastern coastal waters (unpublished data cited in Waring *et al.* 2001). The stock identity(ies) of humpback whales in the mid-Atlantic is not yet known.

A total of 4 humpback whales were observed during the surveys in 3 separate sightings on two different survey days (Figure 4 and sightings Table 5). Numbers of humpbacks in each sighting ranged from 1 to 2. Fisheries entanglements and vessel strikes continues to be a concern with humpback whales in the waters of the mid-Atlantic (McLellan, large whale necropsy reports to OPR, NMFS).

The combined right whale sightings from 2001 and 2002 are presented in Figure 5. Humpback whales have been sighted in the waters surrounding Cape Hatteras, NC up to the mouth of the Chesapeake Bay. It is interesting to note the observation of one small humpback off Port Royal Sound, SC.

For the following marine mammals, sighting data are also compiled in Table 6.

Fin Whale (*Balaenoptera physalus*)

The western north Atlantic stock of fin whales is considered endangered under the Endangered Species Act (MMPA Annual Report 1997). The fin whale is commonly sighted in the U.S. Atlantic Exclusive Economic Zone, and accounted for 46% of all the large whale sightings during CETAP (Waring *et al.* 2001). The NMFS currently recognizes 2,814 individuals as the best available population estimate for the western north Atlantic stock.

During this survey two fin whales were sighted on 1 March east of the Chesapeake Bay, Virginia (Figure 6).

Sperm Whale (*Physeter macrocephalus*)

Sperm whales are listed as endangered under the Endangered Species Act. A population estimate and population trend for this species in the northwest Atlantic is currently unknown (Waring *et al.* 2001). Sperm whales are distributed over the continental shelf, slope and mid-oceanic regions.

One sperm whale was sighted on 29 Jan in the deep waters east of Cape Hatteras, North Carolina (Figure 7).

Common Dolphin (*Delphinus delphis*)

The common dolphin is considered one of the most widely distributed of all cetaceans and common to the continental shelf waters between Cape Hatteras to Georges Banks. The NMFS, though, currently recognizes 30,768 individuals as the best population estimate for this stock, based upon 1998 surveys (Waring *et al.* 2001). This stock is considered strategic.

A total of 64 common dolphins were sighted in the surveys. Common dolphins were seen in the waters from Cape Romaine, SC to the North Carolina/Virginia border. Common dolphins were sighted in groups of 2 to 20 animals.

Bottlenose Dolphin (*Tursiops truncatus*)

In the western north Atlantic, at least two distinct inshore and offshore stocks are currently recognized. CETAP demonstrated that these forms appear to be geographically separated north of Cape Hatteras, North Carolina. In offshore waters, dolphins are distributed in waters greater than 25 meters in depth, whereas in coastal waters dolphins are often observed within a kilometer of shore. Most bottlenose dolphins are distributed south of Cape Hatteras in the winter, where the geographic separation between the two groups of dolphins becomes less clear (Wang *et al.* 1994).

The "coastal migratory stock" of bottlenose dolphins along the U.S. east coast was designated as depleted under provisions of the Marine Mammal Protection Act on April 6, 1993. The NMFS 2001 Stock Assessment Report no longer names this stock, but defines all coastal dolphins within the western north Atlantic coastal stock (Waring *et al.* 2001). This stock, whose structure is uncertain, currently has a minimum population estimate of 2,482 and is considered depleted. The current population estimate has been revised for use by the Bottlenose Dolphin Take Reduction Team, though those numbers remain un-reviewed.

A total of 1,889 bottlenose dolphins were sighted during the surveys. Bottlenose dolphin sightings ranged from single animals up to groups of approximately 135 dolphins.

Un-idenitifed delphinid sightings

A total of 41 un-identified delphinids were encountered in nine separate sightings during the survey.

OTHER SIGHTINGS

For the following sea turtles, sighting data are also compiled in Table 7.

Loggerhead Sea Turtle (*Caretta caretta*)

The loggerhead sea turtle is listed as threatened under the Endangered Species Act. Loggerhead sea turtles have a nearshore distribution as adults, and are found worldwide. They are known to occur in the waters north of Cape Hatteras from May to October, and are

thought to winter in more southern latitudes (Plotkin 1995). It remains difficult to estimate the world's population of loggerhead turtles.

A total of 322 loggerhead turtles were sighted. Loggerheads were seen virtually throughout the whole geographic range of the surveys.

Leatherback Sea Turtle (*Dermochelys coriacea*)

The leatherback sea turtle is considered endangered under the Endangered Species Act. Leatherback turtles, which have a predominantly pelagic distribution, are found worldwide. They are known to occur in waters north of Cape Hatteras from June to October, and are thought to winter in more southern latitudes. Strandings are known to occur in North Carolina in November (Epperly, *et al.* 1996).

During the surveys, 10 leatherback turtles were counted in separate sightings.

Kemp's Ridley Sea Turtle (*Lepidochelys kempii*)

Kemp's Ridley sea turtles are listed as endangered under the Endangered Species Act as of December 2, 1970. The species has undergone a marked decline in population in the past 50 years and a minimum population estimate is currently not available (USFWS & NMFS 1992). The species is known to occur in the Gulf of Mexico and northwestern Atlantic coastal waters.

During the surveys, 107 Kemp's Ridley sea turtles were counted.

Un-identified Sea Turtles

During the surveys, 28 un-identified sea turtles were counted.

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Figure 1.
Right Whale Aerial Surveys
January - March 2002

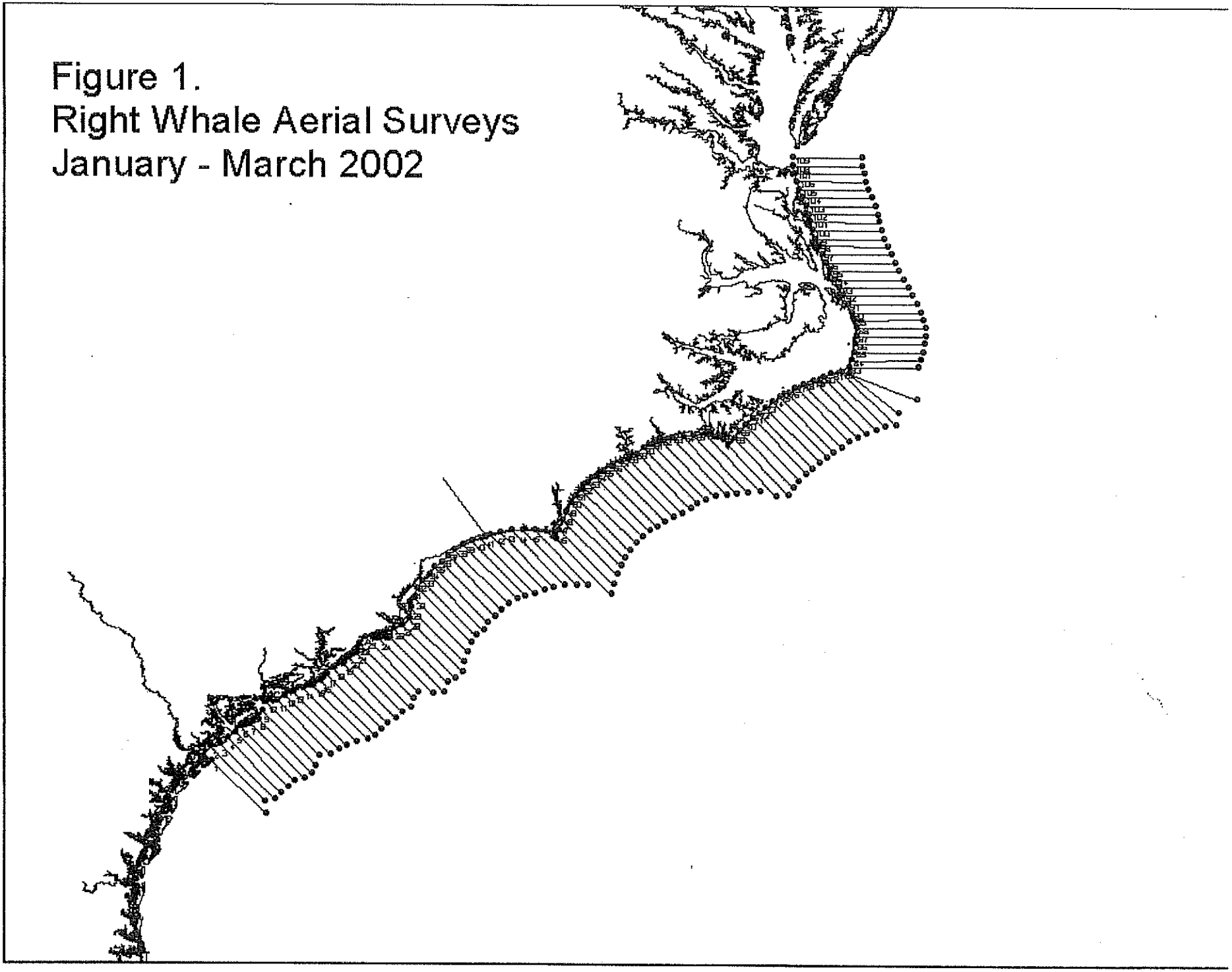

Figure 2.
Balaena glacialis Sightings
Right Whale Aerial Surveys
January - March 2002

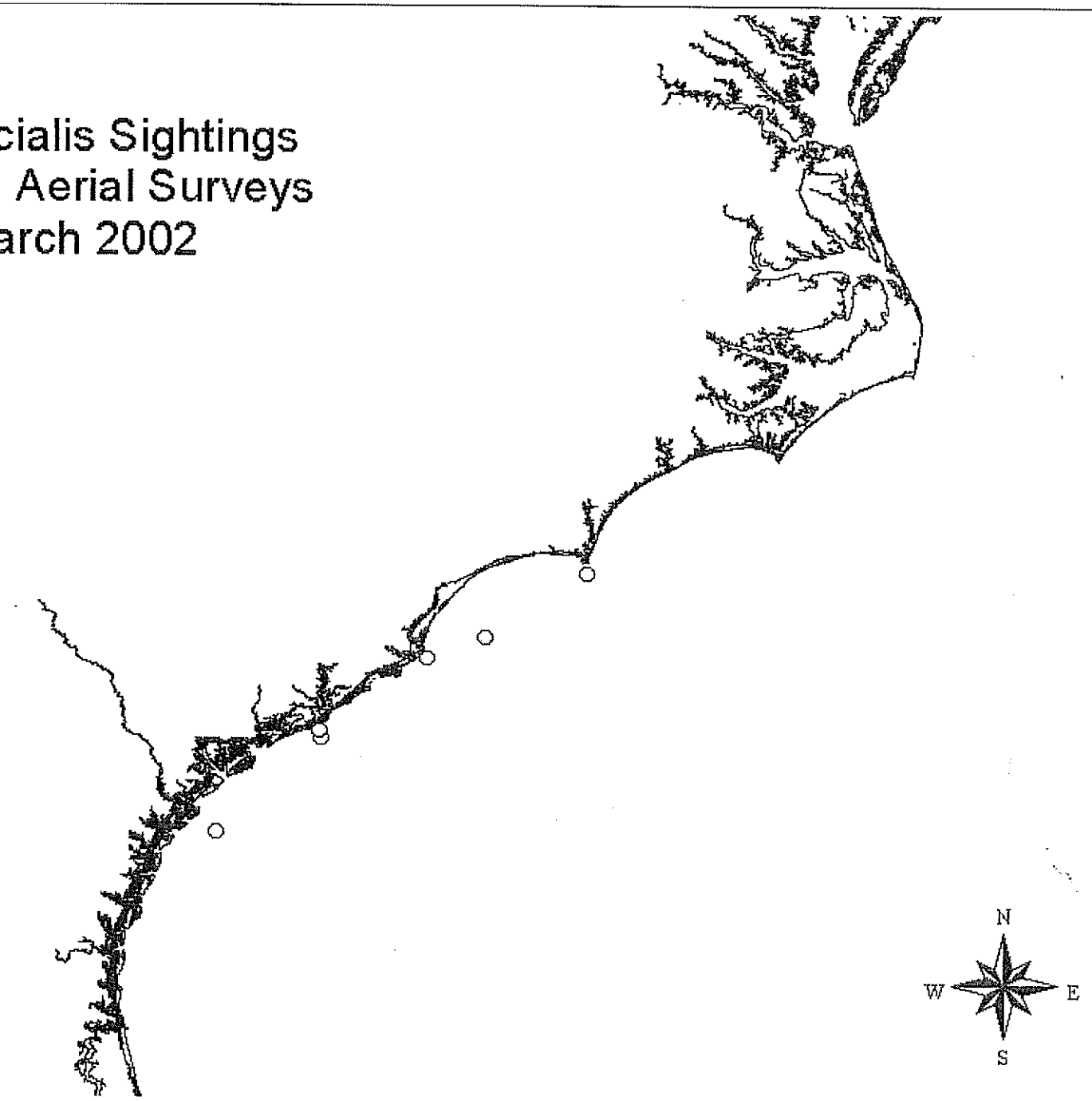

Figure 3.
Balaena glacialis Sightings
Right Whale Aerial Surveys

○ 2002
△ 2001

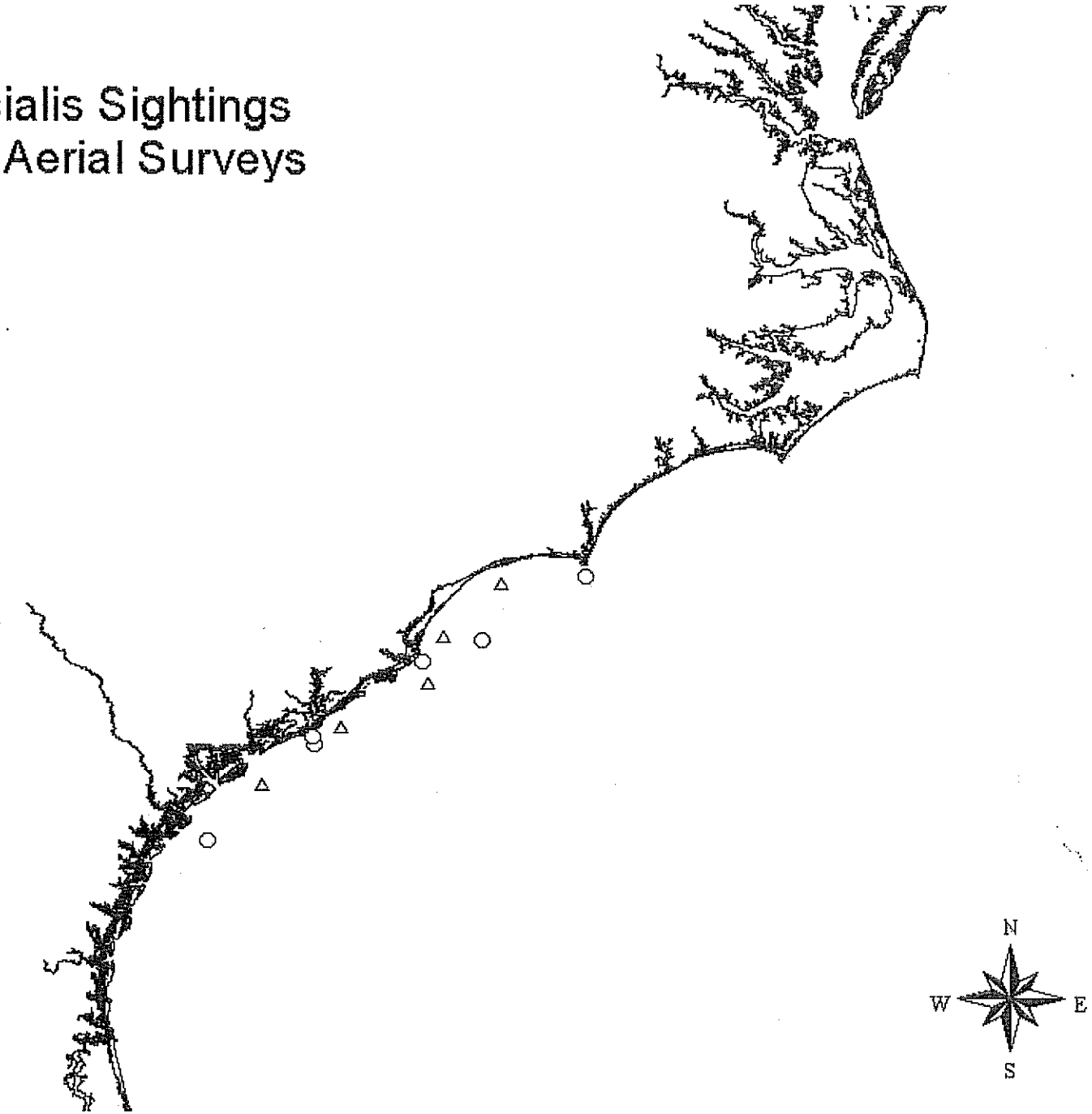

Figure 5.
Megaptera novaeangliae Sightings
Right Whale Aerial Surveys

○ 2002
△ 2001

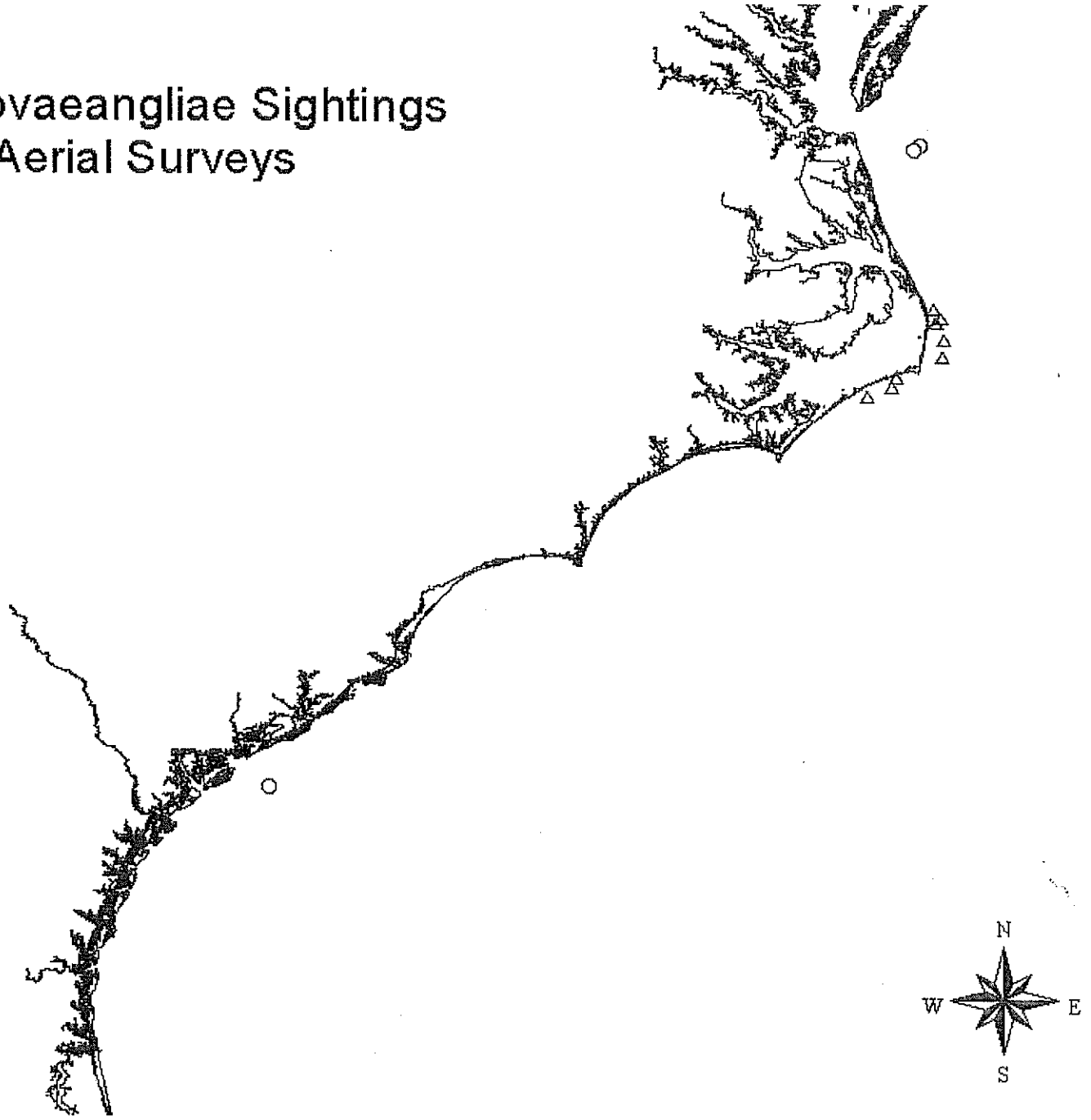

Table 1. Trackline Coordinates

Table 1. Tracklines

Track Line	Latitude West	Longitude West	Latitude East	Longitude East
1	32.00	80.84	31.55	80.39
2	32.11	80.85	31.66	80.40
3	32.13	80.77	31.68	80.32
4	32.18	80.71	31.73	80.26
5	32.23	80.65	31.78	80.20
6	32.28	80.60	31.83	80.15
7	32.30	80.52	31.85	80.07
8	32.34	80.45	31.89	80.00
9	32.41	80.42	31.96	79.97
10	32.49	80.39	32.04	79.94
11	32.50	80.30	32.05	79.85
12	32.54	80.23	32.09	79.78
13	32.57	80.16	32.12	79.71
14	32.60	80.08	32.15	79.63
15	32.62	79.99	32.17	79.54
16	32.66	79.93	32.21	79.48
17	32.71	79.88	32.26	79.43
18	32.76	79.82	32.31	79.37
19	32.80	79.75	32.35	79.30
20	32.85	79.70	32.40	79.25
21	32.89	79.63	32.44	79.18
22	32.97	79.61	32.52	79.16
23	33.02	79.56	32.57	79.11
24	33.01	79.44	32.56	78.99
25	33.02	79.35	32.57	78.90
26	33.10	79.32	32.65	78.87
27	33.13	79.25	32.68	78.80
28	33.18	79.19	32.73	78.74
29	33.27	79.18	32.82	78.73
30	33.35	79.15	32.90	78.70
31	33.43	79.12	32.98	78.67
32	33.49	79.08	33.04	78.63
33	33.54	79.02	33.09	78.57
34	33.60	78.98	33.15	78.53
35	33.65	78.92	33.20	78.47
36	33.70	78.87	33.25	78.42
37	33.75	78.81	33.30	78.36
38	33.79	78.74	33.34	78.29
39	33.82	78.67	33.37	78.22
40	33.84	78.59	33.39	78.14
41	33.87	78.51	33.42	78.06
42	33.89	78.43	33.44	77.98
43	33.91	78.34	33.46	77.89
44	33.91	78.24	33.46	77.79
45	33.91	78.14	33.46	77.69
46	33.84	77.96	33.39	77.51
47	33.92	77.94	33.47	77.49
48	34.00	77.91	33.55	77.46
49	34.07	77.88	33.62	77.43
50	34.14	77.84	33.69	77.39
51	34.20	77.80	33.75	77.35
52	34.26	77.75	33.81	77.30
53	34.31	77.70	33.86	77.25
54	34.36	77.64	33.91	77.19

Table 1. Trackline Coordinates

Track Line	Latitude West	Longitude West	Latitude East	Longitude East
55	34.40	77.58	33.95	77.13
56	34.44	77.51	33.99	77.06
57	34.48	77.44	34.03	76.99
58	34.51	77.37	34.06	76.92
59	34.55	77.30	34.10	76.85
60	34.59	77.24	34.14	76.79
61	34.62	77.17	34.17	76.72
62	34.65	77.09	34.20	76.64
63	34.67	77.00	34.22	76.55
64	34.68	76.91	34.23	76.46
65	34.69	76.82	34.24	76.37
66	34.70	76.72	34.25	76.27
67	34.66	76.58	34.21	76.13
68	34.67	76.48	34.22	76.03
69	34.73	76.44	34.28	75.99
70	34.78	76.39	34.33	75.94
71	34.84	76.33	34.39	75.88
72	34.88	76.28	34.43	75.83
73	34.93	76.22	34.48	75.77
74	34.98	76.16	34.53	75.71
75	35.02	76.10	34.57	75.65
76	35.05	76.03	34.6	75.58
77	35.10	75.97	34.65	75.52
78	35.13	75.90	34.68	75.45
79	35.16	75.82	34.71	75.37
80	35.19	75.74	34.74	75.29
81	35.22	75.67	34.77	75.22
82	35.23	75.58	34.78	75.13
82A	35.22	75.52	35.00	74.95
82B	35.22	75.52	34.89	75.10
83	35.27	75.52	35.27	74.94
84	35.33	75.50	35.33	74.92
85	35.40	75.48	35.40	74.90
86	35.47	75.47	35.47	74.89
87	35.53	75.46	35.53	74.88
88	35.60	75.46	35.60	74.88
89	35.67	75.48	35.67	74.90
90	35.73	75.50	35.73	74.92
91	35.80	75.53	35.80	74.95
92	35.87	75.57	35.87	74.99
93	35.93	75.60	35.93	75.02
94	36.00	75.64	36.00	75.06
95	36.07	75.68	36.07	75.10
96	36.13	75.72	36.13	75.14
97	36.20	75.75	36.20	75.17
98	36.27	75.78	36.27	75.20
99	36.33	75.81	36.33	75.23
100	36.40	75.83	36.40	75.25
101	36.47	75.85	36.47	75.27
102	36.53	75.86	36.53	75.28
103	36.60	75.88	36.60	75.30
104	36.67	75.91	36.67	75.33
105	36.73	75.94	36.73	75.36
106	36.80	75.96	36.80	75.38
107	36.87	75.98	36.87	75.40
108	36.93	76.00	36.93	75.42

Table 1. Trackline Coordinates

109	37.00	76.00	37.00	75.42

Table 2. Trackline effort dates

Table 2. Dates of tracklines flown				
Track Line #	Date 1st Flown	Date 2nd Flown	Date 3rd Flown	Date 4th Flown
1	12-Feb-02	13-Feb-02	7-Mar-02	
2	12-Feb-02	13-Feb-02	7-Mar-02	
3	12-Feb-02	13-Feb-02	7-Mar-02	
4	12-Feb-02	13-Feb-02	7-Mar-02	
5	12-Feb-02	13-Feb-02	7-Mar-02	
6	12-Feb-02	13-Feb-02	7-Mar-02	
7	12-Feb-02	13-Feb-02	7-Mar-02	
8	12-Feb-02	13-Feb-02	7-Mar-02	
9	12-Feb-02	13-Feb-02	7-Mar-02	
10	12-Feb-02	13-Feb-02	7-Mar-02	
11	12-Feb-02	13-Feb-02	7-Mar-02	
12	9-Feb-02	13-Feb-02	7-Mar-02	
13	9-Feb-02	26-Feb-02	8-Mar-02	
14	9-Feb-02	26-Feb-02	8-Mar-02	
15	9-Feb-02	26-Feb-02	8-Mar-02	
16	8-Feb-02	26-Feb-02	8-Mar-02	
17	8-Feb-02	25-Feb-02	8-Mar-02	
18	8-Feb-02	25-Feb-02	8-Mar-02	
19	8-Feb-02	25-Feb-02	8-Mar-02	
20	8-Feb-02	25-Feb-02	8-Mar-02	
21	8-Feb-02	25-Feb-02	8-Mar-02	
22	6-Feb-02	25-Feb-02	8-Mar-02	
23	6-Feb-02	25-Feb-02	8-Mar-02	
24	6-Feb-02	25-Feb-02	8-Mar-02	
25	6-Feb-02	25-Feb-02	9-Mar-02	
26	6-Feb-02	25-Feb-02	9-Mar-02	
27	6-Feb-02	25-Feb-02	9-Mar-02	
28	4-Feb-02	25-Feb-02	9-Mar-02	
29	4-Feb-02	22-Feb-02	9-Mar-02	
30	4-Feb-02	22-Feb-02	9-Mar-02	
31	4-Feb-02	22-Feb-02	9-Mar-02	
32	4-Feb-02	22-Feb-02	9-Mar-02	
33	4-Feb-02	22-Feb-02	6-Mar-02	
34	3-Feb-02	22-Feb-02	6-Mar-02	
35	3-Feb-02	22-Feb-02	6-Mar-02	
36	3-Feb-02	22-Feb-02	6-Mar-02	
37	3-Feb-02	22-Feb-02	6-Mar-02	
38	3-Feb-02	22-Feb-02	6-Mar-02	
39	3-Feb-02	22-Feb-02	6-Mar-02	
40	3-Feb-02	22-Feb-02	6-Mar-02	
41	3-Feb-02	22-Feb-02	6-Mar-02	
42	3-Feb-02	22-Feb-02	6-Mar-02	
43	3-Feb-02	20-Feb-02	6-Mar-02	
44	3-Feb-02	20-Feb-02	6-Mar-02	
45	3-Feb-02	20-Feb-02	6-Mar-02	
46	3-Feb-02	20-Feb-02	6-Mar-02	
47	3-Feb-02	20-Feb-02	18-Mar-02	
48	22-Jan-02	20-Feb-02	18-Mar-02	
49	22-Jan-02	20-Feb-02	18-Mar-02	
50	22-Jan-02	20-Feb-02	18-Mar-02	
51	22-Jan-02	19-Feb-02	18-Mar-02	
52	27-Jan-02	19-Feb-02	18-Mar-02	
53	27-Jan-02	19-Feb-02	18-Mar-02	
54	27-Jan-02	19-Feb-02	18-Mar-02	

Table 2. Trackline effort dates

Track Line #	Date 1st Flown	Date 2nd Flown	Date 3rd Flown	Date 4th Flown
55	27-Jan-02	19-Feb-02	19-Mar-02	
56	27-Jan-02	19-Feb-02	19-Mar-02	
57	27-Jan-02	19-Feb-02	19-Mar-02	
58	27-Jan-02	19-Feb-02	19-Mar-02	
59	27-Jan-02	19-Feb-02	19-Mar-02	
60	28-Jan-02	19-Feb-02	19-Mar-02	
61	28-Jan-02	19-Feb-02	19-Mar-02	
62	28-Jan-02	19-Feb-02	11-Mar-02	19-Mar-02
63	28-Jan-02	16-Feb-02	11-Mar-02	19-Mar-02
64	28-Jan-02	16-Feb-02	19-Mar-02	
65	28-Jan-02	16-Feb-02	19-Mar-02	
66	28-Jan-02	16-Feb-02	19-Mar-02	
67	28-Jan-02	16-Feb-02		
68	28-Jan-02	16-Feb-02		
69	28-Jan-02	5-Mar-02		
70	28-Jan-02	5-Mar-02		
71	28-Jan-02	5-Mar-02		
72	29-Jan-02	5-Mar-02		
73	29-Jan-02	5-Mar-02		
74	29-Jan-02	5-Mar-02		
75	29-Jan-02	5-Mar-02		
76	29-Jan-02	5-Mar-02		
77	29-Jan-02	5-Mar-02		
78	29-Jan-02	5-Mar-02		
79	29-Jan-02	5-Mar-02		
80	29-Jan-02	5-Mar-02		
81	29-Jan-02	5-Mar-02		
82	29-Jan-02	5-Mar-02		
82A	29-Jan-02	15-Feb-02		
82B	15-Feb-02			
83	15-Feb-02	16-Mar-02		
84	15-Feb-02	16-Mar-02		
85	15-Feb-02	16-Mar-02		
86	15-Feb-02	16-Mar-02		
87	15-Feb-02	16-Mar-02		
88	15-Feb-02	16-Mar-02		
89	28-Feb-02	16-Mar-02		
90	28-Feb-02	16-Mar-02		
91	28-Feb-02	16-Mar-02		
92	28-Feb-02	16-Mar-02		
93	28-Feb-02	16-Mar-02		
94	28-Feb-02	15-Mar-02		
95	28-Feb-02	15-Mar-02		
96	28-Feb-02	15-Mar-02		
97	28-Feb-02	15-Mar-02		
98	28-Feb-02	15-Mar-02		
99	1-Mar-02	15-Mar-02		
100	1-Mar-02	15-Mar-02		
101	1-Mar-02	15-Mar-02		
102	1-Mar-02	15-Mar-02		
103	1-Mar-02	15-Mar-02		
104	1-Mar-02	15-Mar-02		
105	1-Mar-02	15-Mar-02		
106	1-Mar-02	15-Mar-02		
107	1-Mar-02	15-Mar-02		
108	1-Mar-02	15-Mar-02		

Table 2. Trackline effort dates

109	1-Mar-02	15-Mar-02		

Table 3. Total Hours Flown

	Hours
Total flown (on survey effort and with transits to tracklines)	179.8
Total transit for pilot to/from Wilmington	20.2
Total for entangled right whale survey	13.2
Total Hours	**213.2**

Table 4. Right whale sightings

Balaena glacialis Sightings															
	start position			end position											
DATE	TIME	LATITUDE N	LONGITUDE W	TIME	LATITUDE N	LONGITUDE W	VISIBILITY	BEAUFORT SS	CLOUD	GLARE L	GLARE R	RELIABILITY	BEST #	CALVES	COMMENTS
4-Feb-02	12:19	33.140	79.166	12:39	33.136	79.171	2	4	2	3	2	1	2	Y	RW#2040 and calf
4-Feb-02	14:16	33.131	79.178	14:32	33.134	79.176	1	5	1	1	3	1	2	Y	resight of RW #2040 from earlier in the day
8-Feb-02	13:35	32.540	79.944				1	2	1	1	2	1	2	Y	RW#1240 and calf
9-Feb-02	14:28	32.594	79.951	14:34	32.595	79.951	2	4	2	1	3	1	2	Y	RW#1240 and calf
12-Feb-02	10:24	31.851	80.720				1	2	2	2	2	1	1	N	RW#1246
22-Feb-02	14:49	33.304	78.733	15:07	33.306	78.736	1	1	3	1	1	1	2	Y	unid. right whale and calf
6-Mar-02	09:55	33.767	77.977				1	1	1	2	2	1	2	Y	RW#1241 and calf

Table 5. Humpback whale sightings

Megaptera novaeangliae Sightings											
		position									
DATE	TIME	LATITUDE N	LONGITUDE W	VISIBILITY	BEAUFORT SS	CLOUD	GLARE L	GLARE R	RELIABILITY	BEST #	CALVES
1-Mar-02	12:47	36.833	75.520	1	2	1	4	2	1	1	N
1-Mar-02	13:03	36.801	75.564	1	2	1	4	2	1	2	N
7-Mar-02	11:01	32.275	80.168	1	3	2	2	2	1	1	N

Table 6. Other marine mammal sightings

DATE	TIME	LATITUDE N	LONGITUDE W	VISIBILITY	BEAUFORT SS	CLOUD	GLARE L	GLARE R	RELIABILITY	BEST #	CALVES
Balaenoptera physalus Sightings											
1-Mar-02	12:47	36.833	75.520	1	2	1	4	2	1	2	N
Physeter macrocephalus Sightings											
29-Jan-02	15:42	34.857	75.212	1	4	5	1	4	1	1	N
Delphinus delphis Sightings											
16-Feb-02	16:02	34.326	76.363	2	2	2	1	3	2	18	N
22-Feb-02	16:31	33.011	78.788	1	0	3	1	1	3	2	N
28-Feb-02	11:44	35.671	75.066	1	3	2	1	4	2	5	N
1-Mar-02	14:31	36.468	75.750	1	1	1	2	3	1	19	Y
5-Mar-02	16:37	34.917	75.256	1	3	1	4	2	2	20	NE
Stenella frontalis Sightings											
22-Feb-02	10:20	33.626	78.378	2	2	3	2	2	2	6	N
Tursiops truncatus Sightings											
22-Jan-02	17:13	33.964	77.873	1	3	1	3	1	1	2	N
27-Jan-02	10:04	34.244	77.634	1	2	1	1	1	1	3	NE
27-Jan-02	10:04	34.249	77.640	1	2	1	1	1	1	8	NE
27-Jan-02	10:11	34.333	77.612	1	1	1	1	2	1	1	NE
27-Jan-02	10:55	34.390	77.570	1	1	1	2	1	1	1	NE
27-Jan-02	10:55	34.395	77.576	1	1	1	2	1	1	4	NE
27-Jan-02	10:56	34.411	77.580	1	1	1	2	1	1	8	NE
27-Jan-02	11:02	34.365	77.432	1	1	1	1	2	2	1	NE
27-Jan-02	11:02	34.354	77.422	1	1	1	1	2	2	1	NE
28-Jan-02	09:23	34.178	76.726	2	1	2	2	1	2	7	N
28-Jan-02	09:56	34.639	77.087	2	1	2	2	1	1	3	N
28-Jan-02	10:06	34.478	76.923	2	1	2	2	1	1	6	Y
28-Jan-02	10:21	34.201	76.640	2	1	2	2	1	1	55	N
28-Jan-02	10:36	34.355	76.676	1	3	2	2	2	1	21	N
28-Jan-02	10:37	34.359	76.688	1	3	2	2	2	1	5	NE
28-Jan-02	10:38	34.374	76.703	1	3	2	2	2	1	11	N
28-Jan-02	11:14	34.279	76.526	1	3	2	2	3	1	65	Y
28-Jan-02	11:38	34.576	76.701	1	1	2	2	1	1	1	N
28-Jan-02	14:54	34.663	76.470	2	2	3	1	1	1	25	N
28-Jan-02	15:02	34.526	76.334	1	2	3	1	1	1	10	Y
28-Jan-02	15:41	34.733	76.431	1	2	3	3	1	1	17	NE
28-Jan-02	15:42	34.730	76.425	1	2	3	3	1	1	5	NE
29-Jan-02	10:27	34.924	76.218	2	2	5	2	2	1	7	N
29-Jan-02	10:32	34.941	76.104	2	2	5	2	2	1	12	N
29-Jan-02	11:12	35.000	76.086	2	2	5	3	2	1	10	N
29-Jan-02	11:14	35.005	76.087	2	2	5	3	2	1	4	N

Table 6. Other marine mammal sightings

29-Jan-02	11:57	35.025	75.904	2	3	5	3	2	1	4	N
29-Jan-02	11:59	35.084	75.953	2	2	5	3	2	1	4	Y
29-Jan-02	12:00	35.092	75.966	2	2	5	3	2	1	4	N
29-Jan-02	12:00	35.093	75.967	2	2	5	3	2	1	6	N
29-Jan-02	13:46	35.136	75.887	1	2	1	1	4	1	11	N
29-Jan-02	14:35	35.164	75.818	1	2	1	2	1	1	19	N
29-Jan-02	15:14	35.099	75.548	1	3	5	3	1	1	135	N
29-Jan-02	15:17	35.124	75.572	1	3	5	3	1	1	35	N
29-Jan-02	15:28	35.143	75.481	1	2	5	1	4	1	3	N
03-Feb-02	10:45	33.800	77.920	1	3	3	1	1	1	1	N
03-Feb-02	16:34	33.579	78.969	1	2	3	1	1	1	8	N
03-Feb-02	16:36	33.585	78.977	1	2	3	1	1	1	1	N
08-Feb-02	11:28	32.650	79.818	2	2	1	1	2	1	1	N
08-Feb-02	12:08	32.595	79.861	2	2	1	2	2	2	1	N
08-Feb-02	12:10	32.625	79.892	2	2	1	2	2	1	2	N
08-Feb-02	13:33	32.579	79.933	1	2	1	1	2	1	1	N
08-Feb-02	13:40	32.531	79.938	1	2	1	1	2	1	1	N
9-Feb-02	10:41	32.563	79.930	2	3	1	2	2	2	2	N
9-Feb-02	11:10	32.315	79.796	2	5	1	2	2	2	4	N
9-Feb-02	14:30	32.590	79.950	2	4	2	1	3	1	2	N
9-Feb-02	15:44	33.793	78.379	1	2	2	3	2	1	2	N
9-Feb-02	15:47	33.815	78.263	1	2	2	3	2	1	1	N
9-Feb-02	15:49	33.813	78.231	1	2	2	3	2	1	4	N
9-Feb-02	15:50	33.825	78.207	1	2	2	3	2	1	2	N
9-Feb-02	15:51	33.817	78.209	1	2	2	3	2	1	9	N
12-Feb-02	10:13	31.964	80.786	1	2	2	2	1	1	7	N
12-Feb-02	11:12	32.018	80.757	1	2	2	2	2	1	1	N
12-Feb-02	11:22	32.068	80.709	1	2	2	1	2	1	2	Y
12-Feb-02	11:24	32.024	80.665	1	2	2	1	2	1	1	N
12-Feb-02	11:24	32.012	80.652	1	2	2	1	2	1	1	N
12-Feb-02	11:32	31.854	80.486	1	2	2	1	2	1	7	N
12-Feb-02	11:48	31.853	80.377	1	2	2	2	2	1	7	N
12-Feb-02	11:59	32.035	80.541	1	2	2	2	2	1	3	N
12-Feb-02	12:00	32.065	80.587	1	2	2	2	2	1	3	N
12-Feb-02	12:01	32.074	80.595	1	2	2	2	2	1	1	N
12-Feb-02	12:01	32.078	80.598	1	2	2	2	2	1	1	N
12-Feb-02	12:01	32.085	80.605	1	2	2	2	2	1	1	N
12-Feb-02	12:01	32.090	80.610	1	2	2	2	2	1	1	N
12-Feb-02	12:02	32.097	80.620	1	2	2	2	2	1	1	N
12-Feb-02	12:02	32.103	80.628	1	2	2	2	2	1	2	N
12-Feb-02	12:05	32.175	80.707	1	2	2	2	2	1	2	N
12-Feb-02	13:40	32.119	80.538	1	2	2	1	3	1	2	N
12-Feb-02	13:42	32.086	80.502	1	2	2	1	3	1	1	N
12-Feb-02	14:22	32.299	80.516	1	2	3	1	4	1	1	N
12-Feb-02	14:24	32.260	80.483	1	2	3	1	4	1	1	N
12-Feb-02	15:06	32.318	80.427	1	2	3	4	2	1	3	N
12-Feb-02	15:56	32.453	80.252	1	2	3	1	4	1	2	N
12-Feb-02	15:58	32.413	80.213	1	2	3	1	4	1	1	N
13-Feb-02	09:59	31.755	80.604	2	3	3	1	1	1	1	N

Table 6. Other marine mammal sightings

13-Feb-02	10:19	31.819	80.562	2	3	3	1	1	1	3	N
13-Feb-02	10:36	32.125	80.765	2	2	3	1	1	1	1	N
13-Feb-02	10:36	32.105	80.748	2	2	3	1	1	1	1	N
13-Feb-02	10:42	31.983	80.621	2	2	3	1	1	1	1	N
13-Feb-02	11:15	32.086	80.614	2	2	3	1	1	1	1	N
13-Feb-02	11:16	32.118	80.648	2	2	3	1	1	1	1	N
13-Feb-02	11:16	32.124	80.655	2	2	3	1	1	1	1	N
13-Feb-02	11:17	32.143	80.671	2	2	3	1	1	1	3	N
13-Feb-02	11:18	32.156	80.684	2	2	3	1	1	1	1	N
13-Feb-02	11:18	32.161	80.689	2	2	3	1	1	1	2	N
13-Feb-02	11:18	32.161	80.689	2	2	3	1	1	1	4	N
13-Feb-02	11:24	32.171	80.591	2	2	3	1	1	1	1	N
13-Feb-02	12:02	32.233	80.549	2	1	3	1	1	1	1	N
13-Feb-02	12:03	32.245	80.564	2	1	3	1	1	1	2	N
13-Feb-02	13:53	32.206	80.414	3	1	3	1	1	1	1	N
13-Feb-02	13:57	32.123	80.310	3	1	3	1	1	1	2	N
13-Feb-02	14:15	31.951	80.061	3	2	4	1	1	1	1	N
13-Feb-02	14:27	32.221	80.331	3	2	4	1	1	1	1	N
13-Feb-02	14:49	32.084	80.095	3	1	3	1	1	1	2	Y
13-Feb-02	14:50	32.080	80.089	3	1	3	1	1	1	1	N
13-Feb-02	14:57	32.014	79.940	3	2	3	1	1	1	4	N
13-Feb-02	15:09	32.303	80.205	3	1	3	1	1	1	3	N
13-Feb-02	15:23	32.427	80.228	3	4	3	1	1	1	1	N
13-Feb-02	15:29	32.292	80.092	3	3	3	1	1	1	2	N
13-Feb-02	15:37	32.112	79.909	3	2	3	1	1	1	1	N
13-Feb-02	15:46	32.144	79.831	3	2	3	1	1	1	4	N
13-Feb-02	15:51	32.255	79.939	3	2	3	1	1	1	1	N
15-Feb-02	08:54	35.178	75.461	1	3	2	2	2	1	1	N
15-Feb-02	08:54	35.175	75.456	1	3	2	2	2	1	3	N
15-Feb-02	08:55	35.167	75.445	1	3	2	2	2	1	8	N
15-Feb-02	09:42	35.176	75.409	1	3	2	3	2	1	2	N
15-Feb-02	09:42	35.177	75.411	1	3	2	3	2	1	1	N
15-Feb-02	09:43	35.185	75.423	1	3	2	3	2	1	2	N
15-Feb-02	09:44	35.206	75.486	1	3	2	3	2	1	3	N
15-Feb-02	09:44	35.208	75.492	1	3	2	3	2	1	3	N
15-Feb-02	09:45	35.212	75.501	1	3	2	3	2	1	15	N
15-Feb-02	09:47	35.270	75.508	1	3	2	2	3	1	6	N
15-Feb-02	09:48	35.270	75.486	1	3	2	2	3	1	2	N
15-Feb-02	09:48	35.270	75.480	1	3	2	2	3	1	6	N
15-Feb-02	09:48	35.270	75.471	1	3	2	2	3	1	3	N
15-Feb-02	09:49	35.269	75.466	1	3	2	2	3	1	6	N
15-Feb-02	09:51	35.270	75.376	1	3	2	2	3	1	3	N
15-Feb-02	09:51	35.270	75.369	1	3	2	2	3	1	3	N
15-Feb-02	10:17	35.331	75.324	1	2	2	3	2	1	1	N
15-Feb-02	10:18	35.330	75.353	1	2	2	3	2	1	4	N
15-Feb-02	10:19	35.330	75.395	1	2	2	3	2	1	1	N
15-Feb-02	10:26	35.397	75.451	1	2	2	1	3	1	2	N
15-Feb-02	10:27	35.396	75.415	1	2	2	1	3	1	5	N
15-Feb-02	10:28	35.399	75.376	1	2	2	1	3	1	1	N

Table 6. Other marine mammal sightings

15-Feb-02	10:30	35.397	75.299	1	2	2	1	3	1	1	N
15-Feb-02	10:59	35.470	75.434	1	2	2	3	1	1	1	N
15-Feb-02	10:59	35.470	75.439	1	2	2	3	1	1	2	N
15-Feb-02	11:04	35.529	75.427	1	2	2	1	3	1	1	N
15-Feb-02	11:04	35.529	75.414	1	2	2	1	3	1	1	N
15-Feb-02	11:36	35.606	75.358	1	2	2	3	1	1	1	N
16-Feb-02	11:32	34.274	77.702	2	1	5	1	2	1	7	N
16-Feb-02	11:36	34.372	77.577	2	1	5	1	2	1	2	N
16-Feb-02	11:37	34.375	77.572	2	1	5	1	2	1	1	N
16-Feb-02	11:38	34.391	77.536	2	1	5	1	2	1	1	N
16-Feb-02	11:38	34.393	77.532	2	1	5	1	2	1	2	N
16-Feb-02	11:47	34.494	77.227	2	1	5	2	3	1	2	N
16-Feb-02	11:48	34.509	77.200	2	1	5	2	3	1	2	N
16-Feb-02	11:48	34.514	77.191	2	1	5	2	3	1	2	N
16-Feb-02	11:49	34.523	77.173	2	1	5	2	3	1	3	Y
16-Feb-02	11:49	34.523	77.173	2	1	5	2	3	1	2	N
16-Feb-02	11:49	34.526	77.168	2	1	5	2	3	1	1	N
16-Feb-02	11:49	34.530	77.161	2	1	5	2	3	1	1	N
16-Feb-02	11:55	34.635	77.029	2	1	5	2	3	1	2	Y
16-Feb-02	12:02	34.669	76.777	2	1	5	2	3	1	1	N
16-Feb-02	12:03	34.669	76.772	2	1	5	2	3	1	1	N
16-Feb-02	12:03	34.669	76.735	2	1	5	2	3	1	5	N
16-Feb-02	12:49	34.726	76.670	2	3	5	4	4	1	7	N
16-Feb-02	15:02	34.575	76.382	2	1	2	1	3	1	1	N
16-Feb-02	15:02	34.562	76.371	2	1	2	1	3	1	2	N
16-Feb-02	15:02	34.558	76.366	2	1	2	1	3	1	1	N
16-Feb-02	15:33	34.495	76.418	2	1	2	3	2	1	1	N
16-Feb-02	15:38	34.598	76.517	2	1	2	3	2	1	2	Y
16-Feb-02	15:38	34.606	76.525	2	1	2	3	2	1	1	N
16-Feb-02	15:41	34.668	76.590	2	1	2	3	2	1	2	N
16-Feb-02	17:02	34.297	76.526	2	2	1	1	3	2	1	N
19-Feb-02	09:53	34.627	77.070	1	1	1	2	1	1	2	N
19-Feb-02	09:53	34.622	77.062	1	1	1	2	1	1	3	N
19-Feb-02	09:54	34.617	77.055	1	1	1	2	1	1	4	N
19-Feb-02	09:54	34.614	77.051	1	1	1	2	1	1	2	N
19-Feb-02	09:54	34.611	77.048	1	1	1	2	1	1	3	N
19-Feb-02	09:54	34.611	77.048	1	1	1	2	1	1	1	N
19-Feb-02	09:54	34.603	77.039	1	1	1	2	1	1	3	N
19-Feb-02	10:08	34.320	76.733	1	2	1	2	2	1	25	N
19-Feb-02	10:09	34.306	76.723	1	2	1	2	2	1	4	N
19-Feb-02	10:27	34.202	76.691	1	2	1	2	2	1	3	N
19-Feb-02	10:35	34.205	76.695	1	2	1	2	2	3	3	N
19-Feb-02	11:03	34.577	77.128	1	1	1	2	2	1	7	N
19-Feb-02	11:23	34.288	76.949	1	1	1	2	2	1	49	Y
19-Feb-02	11:37	34.160	76.912	1	1	1	2	1	1	2	N
19-Feb-02	11:54	34.543	77.293	1	1	1	2	1	1	2	Y
19-Feb-02	11:54	34.548	77.298	1	1	1	2	1	1	5	N
19-Feb-02	11:54	34.548	77.298	1	1	1	2	1	1	16	N
19-Feb-02	12:00	34.459	77.316	1	1	1	1	3	1	1	N

Table 6. Other marine mammal sightings

19-Feb-02	12:00	34.459	77.316	1	1	1	1	3	1	1	N
19-Feb-02	12:00	34.453	77.311	1	1	1	1	3	1	1	N
19-Feb-02	12:00	34.453	77.311	1	1	1	1	3	1	1	N
19-Feb-02	12:04	34.382	77.221	1	1	1	1	3	1	3	N
19-Feb-02	12:06	34.386	77.226	1	1	1	1	3	1	8	N
19-Feb-02	12:11	34.276	77.137	1	1	1	1	3	1	1	N
19-Feb-02	12:14	34.215	77.073	1	1	1	1	3	1	12	N
19-Feb-02	12:14	34.194	77.054	1	1	1	1	3	1	1	N
19-Feb-02	12:14	34.194	77.054	1	1	1	1	3	1	1	N
19-Feb-02	12:18	34.137	76.999	1	1	1	1	3	1	70	Y
19-Feb-02	14:13	34.444	77.512	1	3	2	1	4	1	1	N
19-Feb-02	15:30	33.939	77.336	1	1	2	4	1	1	18	N
20-Feb-02	11:19	33.713	77.958	2	3	3	2	2	1	7	N
20-Feb-02	11:38	33.763	78.091	2	3	3	2	2	1	2	N
20-Feb-02	11:40	33.728	78.058	2	3	3	2	2	1	7	N
20-Feb-02	11:40	33.728	78.058	2	3	3	2	2	1	1	N
20-Feb-02	11:40	33.713	78.042	2	3	3	2	2	1	2	N
20-Feb-02	11:44	33.631	77.964	2	3	3	2	2	1	3	N
22-Feb-02	09:35	33.544	78.109	2	2	3	2	1	1	11	N
22-Feb-02	09:36	33.538	78.104	2	2	3	2	1	1	16	Y
22-Feb-02	10:14	33.730	78.476	2	2	3	2	2	1	1	N
22-Feb-02	10:33	33.536	78.288	2	2	3	2	2	1	7	N
22-Feb-02	10:39	33.407	78.169	2	2	3	2	2	1	6	N
22-Feb-02	14:19	33.548	78.928	1	1	3	1	1	1	2	N
22-Feb-02	14:34	33.205	78.579	1	1	3	1	1	1	1	N
22-Feb-02	14:35	33.192	78.576	1	1	3	1	1	1	3	N
22-Feb-02	15:57	33.230	78.918	1	0	3	2	1	1	1	N
22-Feb-02	16:21	33.080	78.880	1	0	3	1	1	1	1	N
25-Feb-02	10:16	32.729	78.741	2	2	1	2	2	1	10	Y
25-Feb-02	10:22	32.693	78.829	2	2	1	2	2	1	4	N
25-Feb-02	10:37	32.962	79.101	2	2	1	2	2	1	2	N
25-Feb-02	10:44	33.092	79.223	2	1	1	2	2	1	2	N
25-Feb-02	10:57	32.917	79.135	2	1	1	2	2	1	5	Y
25-Feb-02	11:11	32.701	78.924	2	2	1	2	2	1	3	N
25-Feb-02	11:12	32.684	78.910	2	2	1	2	2	1	2	N
25-Feb-02	11:22	32.700	79.019	2	2	1	2	2	1	2	N
25-Feb-02	11:23	32.712	79.033	2	2	1	2	2	1	3	N
25-Feb-02	11:28	32.843	79.152	2	1	1	2	2	1	1	N
25-Feb-02	11:30	32.880	79.189	2	1	1	2	2	1	2	N
25-Feb-02	11:41	32.993	79.427	2	1	1	2	2	1	2	N
25-Feb-02	11:44	32.923	79.360	2	1	1	2	2	1	1	N
25-Feb-02	11:45	32.904	79.343	2	1	1	2	2	1	1	N
25-Feb-02	15:12	32.403	79.264	1	2	1	1	4	1	1	N
25-Feb-02	15:48	32.486	79.554	1	2	1	1	4	2	20	NE
25-Feb-02	15:53	32.486	79.553	1	2	1	1	4	1	11	N
28-Feb-02	11:36	35.671	75.374	1	3	2	1	4	1	3	N
28-Feb-02	12:18	35.730	75.492	1	3	2	4	2	1	7	N
28-Feb-02	13:16	35.932	75.054	1	3	2	1	4	1	6	N
28-Feb-02	13:26	35.996	75.165	1	3	2	4	2	1	5	N

Table 6. Other marine mammal sightings

28-Feb-02	13:50	36.072	75.576	1	2	1	1	4	1	4	N
28-Feb-02	13:59	36.078	75.250	1	2	1	1	4	1	1	N
28-Feb-02	14:03	36.070	75.121	1	3	1	1	4	1	3	N
28-Feb-02	14:12	36.134	75.338	1	3	1	4	1	1	5	N
1-Mar-02	12:06	37.001	75.435	1	2	1	1	4	3	10	N
1-Mar-02	14:38	36.467	75.535	1	1	1	2	3	1	5	N
1-Mar-02	14:51	36.399	75.407	1	2	1	3	2	1	21	Y
1-Mar-02	14:57	36.400	75.411	1	2	1	3	2	1	6	N
5-Mar-02	09:15	34.729	76.429	1	4	1	3	2	1	3	N
5-Mar-02	13:51	34.785	75.850	1	3	1	2	4	1	6	N
5-Mar-02	14:11	34.763	75.743	1	3	1	4	2	1	1	N
5-Mar-02	14:29	35.099	75.964	1	2	1	2	4	1	3	N
5-Mar-02	14:30	35.074	75.944	1	2	1	2	4	1	3	N
5-Mar-02	14:30	35.074	75.944	1	2	1	2	4	1	1	N
5-Mar-02	14:30	35.064	75.931	1	2	1	2	4	1	4	N
5-Mar-02	14:30	35.064	75.931	1	2	1	2	4	1	15	N
5-Mar-02	14:40	34.861	75.720	1	3	1	2	4	1	20	Y
5-Mar-02	14:44	34.793	75.662	1	3	1	2	4	1	4	N
5-Mar-02	15:06	34.947	75.716	1	3	1	4	2	1	1	N
5-Mar-02	15:11	35.058	75.829	1	2	1	4	2	1	1	N
5-Mar-02	15:12	35.080	75.848	1	2	1	4	2	1	1	N
5-Mar-02	15:12	35.092	75.861	1	1	1	4	2	1	2	N
5-Mar-02	15:12	35.094	75.864	1	1	1	4	2	1	4	N
5-Mar-02	15:13	35.104	75.873	1	1	1	4	2	1	5	N
5-Mar-02	15:13	35.108	75.876	1	1	1	4	2	1	1	N
5-Mar-02	15:13	35.116	75.882	1	1	1	4	2	1	5	N
5-Mar-02	15:14	35.123	75.892	1	1	1	4	2	1	2	N
5-Mar-02	15:17	35.162	75.821	1	1	1	1	4	1	8	N
5-Mar-02	15:20	35.098	75.756	1	1	1	1	4	1	1	N
5-Mar-02	15:21	35.072	75.731	1	2	1	1	4	1	5	N
5-Mar-02	15:55	35.079	75.635	1	2	1	4	2	1	2	N
5-Mar-02	15:56	35.095	75.647	1	2	1	4	2	1	3	N
5-Mar-02	15:57	35.109	75.658	1	2	1	4	2	1	2	N
5-Mar-02	15:57	35.116	75.664	1	2	1	4	2	1	3	N
5-Mar-02	15:57	35.120	75.668	1	2	1	4	2	1	2	N
5-Mar-02	15:58	35.131	75.679	1	2	1	4	2	1	5	N
5-Mar-02	15:58	35.140	75.688	1	2	1	4	2	1	2	N
5-Mar-02	15:59	35.163	75.710	1	2	1	4	2	1	6	N
5-Mar-02	16:04	35.202	75.655	1	1	1	1	4	1	4	N
5-Mar-02	16:04	35.187	75.642	1	1	1	1	4	1	1	N
5-Mar-02	16:05	35.177	75.636	1	1	1	1	4	1	1	N
5-Mar-02	16:05	35.175	75.635	1	1	1	1	4	1	23	N
5-Mar-02	16:05	35.166	75.624	1	1	1	1	4	1	4	N
5-Mar-02	16:05	35.162	75.618	1	1	1	1	4	1	11	N
5-Mar-02	16:06	35.156	75.610	1	1	1	1	4	1	9	N
5-Mar-02	16:06	35.150	75.603	1	1	1	1	4	1	2	N
5-Mar-02	16:06	35.148	75.601	1	1	1	1	4	1	6	N
5-Mar-02	16:07	35.129	75.581	1	1	1	1	4	1	3	N
5-Mar-02	16:07	35.122	75.574	1	1	1	1	4	1	5	Y

Table 6. Other marine mammal sightings

5-Mar-02	16:10	35.055	75.505	1	1	1	1	4	1	22	N
5-Mar-02	16:10	35.055	75.505	1	1	1	1	4	1	6	N
5-Mar-02	16:12	35.013	75.461	1	2	1	1	4	1	8	N
5-Mar-02	16:20	34.819	75.267	1	4	1	1	4	1	3	N
5-Mar-02	16:20	34.815	75.263	1	4	1	1	4	1	5	N
5-Mar-02	16:31	34.887	75.237	1	4	1	4	2	1	6	N
5-Mar-02	16:45	35.099	75.443	1	2	1	4	2	1	3	N
5-Mar-02	16:46	35.104	75.451	1	2	1	4	2	1	17	N
5-Mar-02	16:46	35.109	75.457	1	2	1	4	2	1	3	N
5-Mar-02	16:46	35.109	75.457	1	2	1	4	2	1	5	N
5-Mar-02	16:46	35.112	75.461	1	2	1	4	2	1	8	N
5-Mar-02	16:47	35.126	75.480	1	2	1	4	2	1	4	N
5-Mar-02	16:47	35.134	75.492	1	2	1	4	2	1	2	N
5-Mar-02	16:48	35.153	75.502	1	2	1	4	2	1	1	N
5-Mar-02	16:49	35.173	75.521	1	2	1	4	2	1	11	N
5-Mar-02	16:50	35.193	75.541	1	2	1	4	2	1	1	N
5-Mar-02	16:50	35.193	75.541	1	2	1	4	2	1	3	N
5-Mar-02	16:50	35.197	75.546	1	2	1	4	2	1	2	N
5-Mar-02	16:50	35.203	75.553	1	2	1	4	2	1	2	N
5-Mar-02	16:51	35.213	75.561	1	2	1	4	2	1	1	N
5-Mar-02	16:51	35.215	75.563	1	2	1	4	2	1	5	N
5-Mar-02	16:51	35.220	75.568	1	2	1	4	2	1	9	N
6-Mar-02	09:14	33.802	77.920	1	1	1	2	2	1	1	N
6-Mar-02	09:14	33.800	77.918	1	1	1	2	2	1	1	N
6-Mar-02	09:15	33.761	77.879	1	1	1	2	2	1	1	N
6-Mar-02	09:16	33.741	77.858	1	1	1	2	2	1	2	Y
6-Mar-02	09:37	33.448	77.674	1	2	1	2	2	1	11	N
6-Mar-02	09:40	33.504	77.734	1	2	1	2	2	1	41	N
6-Mar-02	09:43	33.513	77.743	1	2	1	2	2	1	12	N
6-Mar-02	10:14	33.801	78.028	1	1	1	2	2	1	3	N
6-Mar-02	10:14	33.813	78.042	1	1	1	2	2	1	5	N
6-Mar-02	10:23	33.894	78.225	1	1	1	2	2	1	1	N
6-Mar-02	10:25	33.853	78.201	1	1	1	2	2	1	6	Y
6-Mar-02	10:39	33.554	77.885	1	2	1	2	2	1	9	N
6-Mar-02	10:53	33.541	77.967	1	2	1	2	2	1	2	N
6-Mar-02	10:54	33.555	77.984	1	2	1	2	2	1	2	N
6-Mar-02	12:35	33.715	78.563	1	1	1	3	2	1	3	Y
6-Mar-02	15:12	33.216	78.485	1	1	1	4	1	1	3	N
6-Mar-02	15:12	33.225	78.490	1	1	1	4	1	1	2	N
6-Mar-02	15:28	33.574	78.842	1	1	1	4	1	1	2	Y
6-Mar-02	15:36	33.555	78.964	1	1	1	1	4	1	9	N
6-Mar-02	15:39	33.521	78.903	1	1	1	1	4	1	2	N
6-Mar-02	15:39	33.513	78.895	1	1	1	1	4	1	1	N
6-Mar-02	15:39	33.509	78.891	1	1	1	1	4	1	1	N
6-Mar-02	15:40	33.506	78.887	1	1	1	1	4	1	1	N
6-Mar-02	15:48	33.312	78.692	1	1	1	1	4	1	1	N
6-Mar-02	15:52	33.225	78.606	1	1	1	1	4	1	1	N
6-Mar-02	15:59	33.108	78.586	1	1	1	4	1	1	1	N
7-Mar-02	09:59	32.515	80.204	1	2	2	2	2	1	3	N

Table 6. Other marine mammal sightings

7-Mar-02	09:59	32.512	80.201	1	2	2	2	2	1	1	N
7-Mar-02	09:59	32.505	80.195	1	2	2	2	2	1	1	N
8-Mar-02	10:41	32.569	80.045	2	3	2	2	2	1	1	N
9-Mar-02	10:27	33.001	79.341	2	2	2	2	2	1	7	Y
9-Mar-02	11:13	33.062	79.181	2	2	2	2	2	1	3	N
9-Mar-02	12:05	32.980	78.874	2	2	2	2	2	1	11	N
9-Mar-02	12:38	33.378	79.069	2	2	2	2	2	1	2	N
9-Mar-02	12:47	33.168	78.869	2	2	2	2	2	1	3	N
15-Mar-02	11:36	36.991	75.714	3	2	5	1	4	1	7	N
15-Mar-02	16:35	36.202	75.744	3	3	2	1	2	1	4	N
15-Mar-02	16:36	36.201	75.738	3	3	2	1	2	1	4	N
15-Mar-02	16:36	36.201	75.733	3	3	2	1	2	1	1	N
16-Mar-02	10:25	35.331	75.391	3	3	5	4	2	1	5	N
16-Mar-02	12:37	35.722	75.463	3	3	5	4	2	1	5	N
16-Mar-02	13:44	35.802	75.482	2	3	2	1	4	1	4	N
16-Mar-02	13:44	35.802	75.475	2	3	2	1	4	1	7	N
16-Mar-02	15:21	35.930	75.544	2	3	2	1	4	1	8	N
16-Mar-02	15:21	35.931	75.527	2	3	2	1	4	1	2	N
16-Mar-02	15:21	35.931	75.516	2	3	2	1	4	1	5	N
16-Mar-02	15:22	35.931	75.509	2	3	2	1	4	1	4	N
16-Mar-02	15:22	35.931	75.509	2	3	2	1	4	1	5	N
16-Mar-02	15:22	35.930	75.497	2	3	2	1	4	1	3	N
18-Mar-02	14:42	33.869	77.888	3	2	99	1	3	1	3	N
18-Mar-02	14:44	33.814	77.821	3	2	99	1	3	1	2	N
18-Mar-02	15:05	33.945	77.867	3	2	99	3	1	1	1	N
18-Mar-02	15:21	33.815	77.627	3	1	99	1	3	1	11	Y
18-Mar-02	15:21	33.815	77.627	3	1	99	1	3	1	9	N
18-Mar-02	15:39	33.895	77.591	3	1	99	4	1	1	15	N
18-Mar-02	16:10	33.866	77.452	3	2	5	1	3	1	1	N
18-Mar-02	16:21	33.845	77.334	3	2	5	4	1	1	4	N
18-Mar-02	16:47	34.301	77.704	3	1	5	1	2	1	15	N
18-Mar-02	16:54	34.125	77.527	3	1	5	1	2	1	7	Y
18-Mar-02	16:55	34.110	77.520	3	1	5	1	2	1	6	N
18-Mar-02	16:58	34.029	77.420	3	1	99	1	2	1	1	N
18-Mar-02	17:31	34.348	77.627	3	1	99	4	1	1	2	Y
19-Mar-02	10:49	34.149	77.219	3	5	5	2	2	1	6	N
Unidentified delphinid Sightings											
27-Jan-02	09:48	33.971	77.361	1	2	1	1	1	1	5	NE
28-Jan-02	09:21	34.159	76.718	2	1	2	2	1	1	3	NE
15-Feb-02	09:21	35.051	75.046	1	3	2	3	2	1	15	N
22-Feb-02	16:35	32.951	78.765	1	1	3	1	1	1	5	N
25-Feb-02	10:59	32.899	79.125	2	1	1	2	2	1	1	N
6-Mar-02	15:04	33.279	78.448	1	1	1	1	4	1	2	N
6-Mar-02	15:07	33.280	78.451	1	1	1	1	4	1	1	N
9-Mar-02	10:54	32.761	78.978	2	3	2	2	2	1	2	N
19-Mar-02	15:11	34.551	76.675	3	4	3	1	1	1	7	N

Table 7. Sea turtle sightings

DATE	TIME	LATITUDE N	LONGITUDE W	VISIBILITY	BEAUFORT SS	CLOUD	GLARE L	GLARE R	RELIABILITY	BEST #
Caretta caretta Sightings										
27-Jan-02	09:20	34.224	77.714	1	1	1	1	1	2	1
27-Jan-02	10:43	34.127	77.308	1	2	1	2	1	2	1
27-Jan-02	11:08	34.221	77.291	1	2	1	1	2	2	1
27-Jan-02	12:08	34.129	76.872	1	3	1	3	1	1	1
27-Jan-02	12:15	34.308	77.037	1	2	1	3	1	1	1
27-Jan-02	12:17	34.363	77.101	1	2	1	3	1	2	1
27-Jan-02	12:19	34.425	77.160	1	2	1	3	1	1	1
28-Jan-02	09:03	34.462	77.114	2	1	2	2	1	1	1
28-Jan-02	09:30	34.197	76.745	2	1	2	2	1	1	1
28-Jan-02	09:34	34.287	76.835	2	1	2	2	1	1	1
28-Jan-02	10:07	34.466	76.906	2	1	2	2	1	1	2
28-Jan-02	10:14	34.331	76.774	2	1	2	2	1	1	1
28-Jan-02	10:29	34.233	76.563	1	2	2	2	2	1	1
28-Jan-02	10:32	34.307	76.636	1	3	2	2	2	1	1
28-Jan-02	14:20	34.339	76.365	1	2	3	1	1	1	1
28-Jan-02	14:22	34.300	76.323	1	2	3	1	1	1	1
28-Jan-02	15:31	34.560	76.268	1	2	3	3	1	1	1
28-Jan-02	15:31	34.567	76.273	1	2	3	3	1	1	1
03-Feb-02	14:25	33.603	78.450	1	2	3	1	1	1	1
03-Feb-02	16:14	33.289	78.672	1	2	3	1	1	1	1
08-Feb-02	10:27	32.616	79.468	2	3	1	2	3	1	1
08-Feb-02	11:08	32.448	79.507	2	4	1	2	2	1	1
9-Feb-02	10:52	32.363	79.717	2	5	1	2	2	2	1
12-Feb-02	11:11	31.996	80.734	1	2	2	2	2	1	1
12-Feb-02	11:24	32.006	80.646	1	2	2	1	2	1	1
12-Feb-02	13:49	31.920	80.332	1	2	2	1	4	1	1
12-Feb-02	13:52	31.855	80.274	1	2	2	1	4	1	1
12-Feb-02	14:04	31.938	80.258	1	2	3	4	1	1	1
12-Feb-02	15:00	32.163	80.272	1	2	3	4	2	1	1
12-Feb-02	15:25	32.061	80.073	1	3	3	1	4	1	1
12-Feb-02	15:45	32.345	80.246	1	2	3	4	1	1	1
13-Feb-02	10:13	31.699	80.440	2	3	3	1	1	1	1
13-Feb-02	10:27	32.007	80.744	2	3	3	1	1	1	1
13-Feb-02	10:47	31.872	80.509	2	3	3	1	1	1	1
13-Feb-02	10:52	31.741	80.381	2	3	3	1	1	1	1
13-Feb-02	11:03	31.825	80.354	2	3	3	1	1	1	1
13-Feb-02	11:14	32.067	80.596	2	2	3	1	1	1	1
13-Feb-02	11:31	31.994	80.419	2	2	3	1	1	1	1
13-Feb-02	11:44	31.845	80.166	2	2	3	1	1	1	1
13-Feb-02	11:46	31.897	80.211	2	2	3	1	1	1	1
13-Feb-02	11:47	31.912	80.228	2	2	3	1	1	1	2

Table 7. Sea turtle sightings

13-Feb-02	11:49	31.951	80.265	2	2	3	1	1	1	1
13-Feb-02	11:53	32.047	80.361	2	2	3	1	1	1	1
13-Feb-02	14:00	32.053	80.255	3	2	3	1	1	1	1
13-Feb-02	14:04	31.962	80.177	3	2	3	1	1	1	1
13-Feb-02	14:06	31.913	80.130	3	2	3	1	1	1	1
13-Feb-02	14:06	31.911	80.127	3	2	3	1	1	1	1
13-Feb-02	14:15	31.943	80.053	3	2	4	1	1	1	1
13-Feb-02	14:20	32.062	80.172	3	2	4	1	1	1	1
13-Feb-02	14:48	32.106	80.118	3	1	3	1	1	1	1
13-Feb-02	14:50	32.069	80.076	3	1	3	1	1	1	1
13-Feb-02	14:51	32.056	80.065	3	1	3	1	1	1	1
13-Feb-02	15:03	32.166	80.065	3	2	3	1	1	1	1
13-Feb-02	15:30	32.284	80.081	3	3	3	1	1	1	1
15-Feb-02	09:40	35.150	75.337	1	3	2	3	2	1	1
15-Feb-02	10:10	35.331	75.035	1	3	2	3	2	1	1
15-Feb-02	10:10	35.331	75.059	1	2	2	3	2	1	1
15-Feb-02	10:16	35.330	75.255	1	2	2	3	2	1	1
15-Feb-02	10:17	35.331	75.324	1	2	2	3	2	1	1
15-Feb-02	10:18	35.331	75.336	1	2	2	3	2	1	1
15-Feb-02	10:39	35.400	74.952	1	2	2	1	3	1	1
15-Feb-02	10:45	35.469	74.955	1	2	2	3	1	1	1
15-Feb-02	10:46	35.471	74.992	1	2	2	3	1	1	1
15-Feb-02	10:47	35.471	75.009	1	2	2	3	1	1	1
15-Feb-02	10:47	35.471	75.013	1	2	2	3	1	1	1
15-Feb-02	10:49	35.471	75.068	1	2	2	3	1	1	1
15-Feb-02	10:50	35.472	75.104	1	2	2	3	1	1	1
15-Feb-02	10:50	35.471	75.133	1	2	2	3	1	1	1
15-Feb-02	11:09	35.530	75.221	1	2	2	1	3	1	1
15-Feb-02	11:15	35.530	75.012	1	1	2	1	3	1	1
15-Feb-02	11:16	35.530	74.974	1	1	2	1	3	1	1
15-Feb-02	11:17	35.530	74.964	1	1	2	1	3	1	1
15-Feb-02	11:29	35.599	75.090	1	2	2	3	1	1	1
15-Feb-02	11:29	35.600	75.096	1	2	2	3	1	1	1
16-Feb-02	12:21	34.509	76.455	2	3	5	2	4	1	1
16-Feb-02	15:29	34.395	76.316	2	2	2	3	2	1	1
16-Feb-02	16:01	34.345	76.368	2	2	2	1	3	1	1
16-Feb-02	16:02	34.326	76.363	2	2	2	1	3	1	1
19-Feb-02	10:07	34.327	76.745	1	2	1	2	2	1	1
19-Feb-02	10:14	34.245	76.674	1	2	1	2	2	1	1
19-Feb-02	10:27	34.201	76.697	1	2	1	2	2	1	1
19-Feb-02	10:33	34.200	76.698	1	2	1	2	2	1	1
19-Feb-02	10:45	34.198	76.747	1	2	1	2	2	1	1
19-Feb-02	10:46	34.212	76.764	1	2	1	2	2	1	2
19-Feb-02	10:46	34.218	76.768	1	2	1	2	2	1	1
19-Feb-02	10:47	34.232	76.776	1	2	1	2	2	1	1
19-Feb-02	10:47	34.239	76.781	1	2	1	2	2	1	2
19-Feb-02	10:48	34.256	76.806	1	2	1	2	2	1	1
19-Feb-02	10:49	34.272	76.820	1	2	1	2	2	1	1
19-Feb-02	10:49	34.273	76.821	1	2	1	2	2	1	1

Table 7. Sea turtle sightings

19-Feb-02	10:51	34.308	76.858	1	2	1	2	2	1	1
19-Feb-02	10:51	34.315	76.864	1	2	1	2	2	1	1
19-Feb-02	10:52	34.341	76.890	1	2	1	2	2	1	1
19-Feb-02	10:54	34.373	76.922	1	2	1	2	2	1	1
19-Feb-02	11:20	34.325	76.974	1	1	1	2	2	1	1
19-Feb-02	11:21	34.310	76.958	1	1	1	2	2	1	1
19-Feb-02	11:26	34.258	76.905	1	1	1	2	2	1	1
19-Feb-02	11:27	34.239	76.886	1	1	1	2	2	1	1
19-Feb-02	11:29	34.197	76.847	1	1	1	2	2	1	3
19-Feb-02	11:29	34.186	76.836	1	1	1	2	2	1	1
19-Feb-02	11:35	34.107	76.856	1	1	1	2	1	1	2
19-Feb-02	11:35	34.120	76.869	1	1	1	2	1	1	1
19-Feb-02	11:37	34.168	76.919	1	1	1	2	1	1	1
19-Feb-02	11:38	34.175	76.927	1	1	1	2	1	1	1
19-Feb-02	11:40	34.228	76.977	1	1	1	2	1	1	1
19-Feb-02	11:45	34.334	77.087	1	1	1	2	1	1	1
19-Feb-02	12:09	34.315	77.174	1	1	1	1	3	1	1
19-Feb-02	12:10	34.305	77.163	1	1	1	1	3	1	1
19-Feb-02	12:14	34.202	77.061	1	1	1	1	3	1	1
19-Feb-02	12:18	34.126	76.986	1	1	1	1	3	1	1
19-Feb-02	12:21	34.073	76.933	1	1	1	1	3	1	2
19-Feb-02	12:24	34.040	77.000	1	1	1	2	1	1	1
19-Feb-02	12:25	34.058	77.015	1	1	1	2	1	1	1
19-Feb-02	12:27	34.090	77.054	1	1	1	2	1	1	1
19-Feb-02	12:27	34.097	77.059	1	1	1	2	1	1	1
19-Feb-02	12:27	34.102	77.063	1	1	1	2	1	1	1
19-Feb-02	14:33	34.010	77.077	1	1	2	1	4	1	1
19-Feb-02	14:38	33.958	77.139	1	1	2	4	1	1	1
19-Feb-02	14:42	34.060	77.245	1	1	2	4	1	1	1
19-Feb-02	15:19	33.976	77.257	1	1	2	1	4	1	1
19-Feb-02	15:25	33.873	77.263	1	1	2	4	1	1	1
19-Feb-02	15:34	34.018	77.408	1	1	2	4	1	1	1
20-Feb-02	09:20	33.831	77.533	2	2	3	2	2	1	1
20-Feb-02	09:24	33.766	77.464	2	3	3	2	2	1	1
20-Feb-02	10:10	33.637	77.547	2	3	3	2	2	1	1
20-Feb-02	11:44	33.627	77.962	2	3	3	2	2	1	1
22-Feb-02	09:38	33.492	78.051	2	2	3	2	1	1	1
22-Feb-02	09:47	33.490	78.131	2	2	3	2	2	1	1
22-Feb-02	10:37	33.445	78.196	2	2	3	2	2	1	1
22-Feb-02	10:46	33.412	78.264	2	2	3	2	2	1	1
22-Feb-02	11:21	33.453	78.402	2	2	3	2	2	1	1
22-Feb-02	11:23	33.414	78.364	2	2	3	2	2	1	1
22-Feb-02	11:23	33.406	78.357	2	2	3	2	2	1	1
22-Feb-02	11:40	33.518	78.566	2	2	3	2	2	1	1
22-Feb-02	12:03	33.455	78.624	2	2	3	2	2	1	1
22-Feb-02	12:16	33.217	78.486	2	2	3	2	2	1	1
22-Feb-02	14:36	33.167	78.547	1	1	3	1	1	1	1
22-Feb-02	14:40	33.115	78.593	1	1	3	1	1	1	1
22-Feb-02	14:45	33.231	78.686	1	1	3	1	1	1	1

Table 7. Sea turtle sightings

22-Feb-02	15:37	33.180	78.770	1	0	3	1	2	1	1
22-Feb-02	15:47	32.997	78.685	1	1	3	1	2	1	1
22-Feb-02	15:48	33.026	78.713	1	1	3	1	2	1	1
22-Feb-02	15:52	33.111	78.811	1	0	3	2	1	1	1
22-Feb-02	16:24	33.005	78.805	1	0	3	1	1	1	1
22-Feb-02	16:26	33.018	78.800	1	0	3	1	1	1	1
22-Feb-02	16:46	32.838	78.749	1	1	3	1	1	1	1
25-Feb-02	10:07	32.939	78.945	2	2	1	2	2	1	1
25-Feb-02	10:09	32.882	78.891	2	2	1	2	2	1	1
25-Feb-02	10:23	32.711	78.847	2	2	1	2	2	1	1
25-Feb-02	10:25	32.752	78.888	2	2	1	2	2	1	1
25-Feb-02	10:30	32.858	78.993	2	2	1	2	2	1	1
25-Feb-02	11:04	32.856	79.075	2	1	1	2	2	1	1
25-Feb-02	11:19	32.628	78.966	2	2	1	2	2	1	1
25-Feb-02	11:24	32.744	79.070	2	2	1	2	2	1	1
25-Feb-02	11:24	32.747	79.073	2	2	1	2	2	1	1
25-Feb-02	11:25	32.761	79.085	2	2	1	2	2	1	1
25-Feb-02	11:53	32.723	79.166	2	1	1	2	2	1	1
25-Feb-02	11:54	32.692	79.151	2	1	1	2	2	1	1
25-Feb-02	11:57	32.686	79.127	2	1	1	2	2	1	1
25-Feb-02	12:01	32.593	79.039	2	1	1	2	2	1	1
25-Feb-02	12:10	32.595	79.126	2	1	1	3	1	1	1
25-Feb-02	12:13	32.656	79.183	2	1	1	3	1	1	2
25-Feb-02	14:12	32.726	79.335	1	2	1	1	4	1	1
25-Feb-02	14:14	32.676	79.283	1	2	1	1	4	1	1
25-Feb-02	14:15	32.648	79.253	1	2	1	1	4	1	1
25-Feb-02	14:17	32.613	79.215	1	2	1	1	4	1	1
25-Feb-02	14:21	32.520	79.119	1	2	1	1	4	1	1
25-Feb-02	14:32	32.558	79.309	1	2	1	4	1	1	1
25-Feb-02	14:33	32.580	79.341	1	2	1	4	1	1	1
25-Feb-02	14:36	32.642	79.435	1	2	1	4	1	1	1
25-Feb-02	14:37	32.663	79.452	1	2	1	4	1	1	1
25-Feb-02	14:57	32.724	79.549	1	2	1	1	4	1	1
25-Feb-02	15:02	32.602	79.442	1	2	1	1	4	1	1
25-Feb-02	15:03	32.588	79.432	1	2	1	1	4	1	1
25-Feb-02	15:04	32.578	79.423	1	2	1	1	4	1	1
25-Feb-02	15:04	32.561	79.405	1	2	1	1	4	1	1
25-Feb-02	15:06	32.539	79.384	1	2	1	1	4	1	1
25-Feb-02	15:09	32.468	79.321	1	2	1	1	4	1	1
25-Feb-02	15:19	32.457	79.408	1	2	1	4	1	1	1
25-Feb-02	15:22	32.514	79.483	1	2	1	4	1	1	1
25-Feb-02	15:23	32.540	79.511	1	2	1	4	1	1	1
25-Feb-02	15:23	32.551	79.522	1	2	1	4	1	1	1
25-Feb-02	15:24	32.561	79.530	1	2	1	4	1	1	1
25-Feb-02	16:08	32.371	79.553	1	2	1	4	1	1	1
26-Feb-02	10:44	32.233	79.603	2	5	2	2	2	1	1
28-Feb-02	11:57	35.732	74.933	1	3	2	4	2	1	1
28-Feb-02	12:35	35.803	75.045	1	3	2	1	4	1	1
28-Feb-02	13:18	35.930	75.016	1	3	2	1	4	1	1

Table 7. Sea turtle sightings

5-Mar-02	09:49	34.596	76.209	1	5	1	2	3	1	1
5-Mar-02	11:12	34.607	75.791	1	5	1	2	3	1	1
5-Mar-02	13:54	34.741	75.816	1	3	1	2	4	1	1
5-Mar-02	13:55	34.720	75.793	1	3	1	2	4	1	1
5-Mar-02	14:10	34.744	75.723	1	3	1	4	2	1	1
5-Mar-02	14:16	34.833	75.812	1	3	1	4	2	1	1
5-Mar-02	14:39	34.871	75.741	1	3	1	2	4	1	1
5-Mar-02	14:39	34.864	75.732	1	3	1	2	4	1	1
5-Mar-02	14:42	34.849	75.717	1	3	1	2	4	1	1
5-Mar-02	14:42	34.840	75.708	1	3	1	2	4	1	1
5-Mar-02	15:03	34.885	75.662	1	3	1	4	2	1	1
5-Mar-02	15:04	34.917	75.691	1	3	1	4	2	1	1
5-Mar-02	15:05	34.922	75.693	1	3	1	4	2	1	1
5-Mar-02	15:05	34.940	75.707	1	3	1	4	2	1	1
5-Mar-02	15:08	34.986	75.757	1	3	1	4	2	1	1
5-Mar-02	15:22	35.048	75.708	1	2	1	1	4	1	1
5-Mar-02	15:24	34.987	75.647	1	3	1	1	4	1	1
5-Mar-02	15:52	35.004	75.551	1	3	1	4	2	1	1
5-Mar-02	16:11	35.036	75.485	1	1	1	1	4	1	1
5-Mar-02	16:11	35.030	75.477	1	1	1	1	4	1	1
5-Mar-02	16:12	35.003	75.452	1	2	1	1	4	1	1
5-Mar-02	16:13	34.971	75.422	1	3	1	1	4	1	1
5-Mar-02	16:42	35.020	75.375	1	3	1	4	2	1	1
6-Mar-02	09:32	33.399	77.521	1	2	1	2	2	1	1
6-Mar-02	09:32	33.394	77.518	1	2	1	2	2	1	1
6-Mar-02	09:40	33.509	77.727	1	2	1	2	2	1	1
6-Mar-02	10:51	33.543	77.973	1	2	1	2	2	1	1
6-Mar-02	12:25	33.444	78.294	1	2	1	3	2	1	1
6-Mar-02	14:20	33.299	78.359	1	2	1	1	3	1	1
6-Mar-02	14:23	33.369	78.429	1	2	1	4	1	1	1
6-Mar-02	14:25	33.408	78.469	1	1	1	4	1	1	1
6-Mar-02	14:29	33.479	78.537	1	1	1	4	1	1	1
6-Mar-02	14:56	33.433	78.604	1	1	1	1	4	1	1
6-Mar-02	14:56	33.426	78.598	1	1	1	1	4	1	1
6-Mar-02	14:56	33.414	78.586	1	1	1	1	4	1	1
6-Mar-02	14:57	33.411	78.582	1	1	1	1	4	1	1
6-Mar-02	15:00	33.326	78.497	1	1	1	1	4	1	1
6-Mar-02	15:01	33.320	78.491	1	1	1	1	4	1	1
6-Mar-02	15:08	33.259	78.426	1	1	1	1	4	1	1
6-Mar-02	15:12	33.209	78.482	1	1	1	4	1	1	1
6-Mar-02	15:13	33.228	78.495	1	1	1	4	1	1	1
6-Mar-02	15:14	33.260	78.528	1	1	1	4	1	1	1
6-Mar-02	15:15	33.274	78.544	1	1	1	4	1	1	1
6-Mar-02	15:16	33.307	78.577	1	1	1	4	1	1	1
6-Mar-02	15:55	33.161	78.540	1	1	1	1	4	1	1
6-Mar-02	15:55	33.153	78.534	1	1	1	1	4	1	1
6-Mar-02	15:55	33.152	78.533	1	1	1	1	4	1	1
6-Mar-02	15:59	33.099	78.581	1	1	1	4	1	1	1
6-Mar-02	16:00	33.115	78.591	1	1	1	4	1	1	1

Table 7. Sea turtle sightings

6-Mar-02	16:01	33.139	78.621	1	1	1	4	1	1	2
6-Mar-02	16:01	33.140	78.616	1	1	1	4	1	1	1
7-Mar-02	14:09	31.850	80.169	1	4	2	2	3	1	1
7-Mar-02	15:03	31.803	80.443	2	4	3	4	1	1	1
8-Mar-02	10:13	32.242	79.835	2	4	2	2	2	1	1
8-Mar-02	10:17	32.159	79.749	2	4	2	2	2	1	1
8-Mar-02	10:33	32.386	79.873	2	4	2	2	2	1	1
8-Mar-02	12:14	32.533	79.596	2	4	2	3	2	1	1
8-Mar-02	12:16	32.558	79.617	2	4	2	3	2	1	1
8-Mar-02	12:16	32.573	79.632	2	4	2	3	2	1	1
8-Mar-02	14:04	32.567	79.518	2	4	2	2	4	1	1
8-Mar-02	14:24	32.571	79.419	2	4	2	4	2	1	1
8-Mar-02	14:27	32.633	79.481	2	4	2	4	2	1	1
8-Mar-02	14:49	32.660	79.398	2	4	2	2	4	1	1
9-Mar-02	10:32	32.882	79.221	2	2	2	2	2	1	1
9-Mar-02	10:59	32.893	79.106	2	3	2	2	2	1	1
9-Mar-02	11:00	32.922	79.135	2	3	2	2	2	1	1
9-Mar-02	11:00	32.925	79.138	2	3	2	2	2	1	1
9-Mar-02	11:18	32.959	79.081	2	2	2	2	2	1	1
9-Mar-02	11:19	32.925	79.048	2	2	2	2	2	1	1
9-Mar-02	11:20	32.898	79.021	2	2	2	2	2	1	1
9-Mar-02	11:24	32.819	78.949	2	2	2	2	2	1	1
9-Mar-02	11:42	32.990	78.990	2	2	2	2	2	1	1
9-Mar-02	12:02	33.051	78.944	2	2	2	2	2	1	1
9-Mar-02	12:08	32.931	78.825	2	2	2	2	2	1	1
9-Mar-02	12:19	32.999	78.787	2	2	2	2	2	1	1
9-Mar-02	12:29	33.287	79.046	2	2	2	2	2	1	1
9-Mar-02	12:50	33.097	78.796	2	2	2	2	2	1	1
9-Mar-02	12:52	33.052	78.755	2	2	2	2	2	1	2
9-Mar-02	12:53	33.015	78.721	2	2	2	2	2	1	1
9-Mar-02	13:02	33.079	78.659	2	2	2	3	2	1	1
9-Mar-02	13:05	33.159	78.747	2	2	2	3	2	1	1
9-Mar-02	13:07	33.192	78.778	2	2	2	3	2	1	1
11-Mar-02	10:39	34.254	76.691	1	5	2	2	2	1	1
15-Mar-02	16:45	36.197	75.322	3	3	2	1	1	1	1
15-Mar-02	16:55	36.129	75.215	3	3	2	2	2	1	1
16-Mar-02	10:24	35.330	75.330	3	3	5	4	2	1	1
16-Mar-02	10:58	35.398	75.233	3	3	5	2	4	1	1
16-Mar-02	11:13	35.467	75.003	3	4	5	4	2	1	1
16-Mar-02	11:32	35.534	75.313	3	3	5	2	4	1	1
16-Mar-02	11:34	35.532	75.222	3	3	5	2	4	1	1
16-Mar-02	11:53	35.601	75.106	3	4	5	4	2	1	1
16-Mar-02	12:33	35.731	75.299	3	3	5	4	2	1	1
16-Mar-02	14:09	35.871	75.309	2	3	2	4	2	1	1
16-Mar-02	15:24	35.932	75.398	2	3	2	1	4	1	1
16-Mar-02	15:25	35.933	75.383	2	3	2	1	4	1	1
16-Mar-02	15:26	35.938	75.322	2	3	2	1	4	1	1
18-Mar-02	14:41	33.902	77.919	3	2	99	1	3	1	1
18-Mar-02	15:24	33.743	77.555	3	1	99	1	3	1	1

Table 7. Sea turtle sightings

18-Mar-02	15:35	33.810	77.516	3	1	99	4	1	1	1
18-Mar-02	16:03	34.018	77.617	3	1	5	1	3	1	1
18-Mar-02	16:05	33.990	77.588	3	1	5	1	3	1	1
18-Mar-02	16:05	33.976	77.563	3	1	5	1	3	1	1
18-Mar-02	16:10	33.863	77.439	3	2	5	1	3	1	1
18-Mar-02	16:12	33.852	77.398	3	2	5	1	3	1	1
18-Mar-02	16:12	33.848	77.380	3	2	5	1	3	1	1
18-Mar-02	16:26	33.935	77.424	3	2	5	4	1	1	1
18-Mar-02	16:57	34.061	77.443	3	1	5	1	2	1	1
18-Mar-02	16:59	34.003	77.385	3	1	99	1	2	1	1
18-Mar-02	17:04	33.873	77.261	3	2	99	1	2	1	1
18-Mar-02	17:13	34.023	77.305	3	2	99	4	1	1	1
18-Mar-02	17:15	34.038	77.325	3	2	99	4	1	1	1
18-Mar-02	17:18	34.075	77.350	3	2	99	4	1	1	1
18-Mar-02	17:23	34.200	77.473	3	1	99	4	1	1	1
18-Mar-02	17:28	34.292	77.574	3	1	99	4	1	1	1
19-Mar-02	10:30	34.123	77.302	3	5	5	2	2	1	1
19-Mar-02	10:30	34.120	77.299	3	5	5	2	2	1	1
19-Mar-02	10:44	34.037	77.101	3	5	5	2	2	1	1
19-Mar-02	10:50	34.164	77.235	3	5	5	2	2	1	1
19-Mar-02	11:29	34.271	77.232	3	5	5	2	2	1	1
19-Mar-02	15:04	34.402	76.532	3	5	3	3	1	1	1
19-Mar-02	15:28	34.546	76.778	3	4	3	1	2	1	1
19-Mar-02	16:22	34.220	76.659	3	5	3	2	2	1	1
19-Mar-02	16:31	34.281	76.829	3	5	3	1	1	1	1
Dermochelys coriacea Sightings										
12-Feb-02	13:33	32.190	80.606	1	2	2	1	3	3	1
25-Feb-02	11:54	32.695	79.141	2	1	1	2	2	2	1
25-Feb-02	12:13	32.652	79.178	2	1	1	3	1	1	1
25-Feb-02	16:09	32.394	79.577	1	2	1	4	1	1	1
6-Mar-02	15:06	33.281	78.446	1	1	1	1	4	1	1
6-Mar-02	15:54	33.186	78.567	1	1	1	1	4	1	1
6-Mar-02	15:54	33.186	78.567	1	1	1	1	4	1	1
6-Mar-02	15:55	33.158	78.538	1	1	1	1	4	1	1
6-Mar-02	16:02	33.145	78.626	1	1	1	4	1	1	1
18-Mar-02	16:32	34.043	77.535	3	1	5	4	1	1	1
Lepidochelys kempii Sightings										
28-Jan-02	15:32	34.587	76.299	1	2	3	3	1	1	1
12-Feb-02	11:37	31.742	80.380	1	2	2	2	2	1	1
12-Feb-02	11:37	31.737	80.375	1	2	2	2	2	1	1
12-Feb-02	11:38	31.732	80.371	1	2	2	2	2	1	1
12-Feb-02	11:43	31.742	80.271	1	2	2	2	2	1	1
12-Feb-02	11:44	31.752	80.280	1	2	2	2	2	1	1
12-Feb-02	11:45	31.778	80.298	1	2	2	2	2	1	1
12-Feb-02	14:07	32.014	80.336	1	2	3	4	1	1	1
12-Feb-02	14:30	32.136	80.352	1	2	3	1	4	1	1
12-Feb-02	14:30	32.134	80.349	1	2	3	1	4	1	1
13-Feb-02	10:44	31.936	80.577	2	3	3	1	1	1	1

Table 7. Sea turtle sightings

13-Feb-02	11:06	31.896	80.424	2	3	3	1	1	1	1
13-Feb-02	11:47	31.927	80.239	2	2	3	1	1	1	1
13-Feb-02	11:49	31.956	80.269	2	2	3	1	1	1	1
13-Feb-02	13:58	32.092	80.296	3	1	3	1	1	1	1
13-Feb-02	14:00	32.043	80.248	3	2	3	1	1	1	1
13-Feb-02	14:05	31.920	80.140	3	2	3	1	1	1	1
13-Feb-02	14:09	31.846	80.064	3	2	3	1	1	1	1
13-Feb-02	14:13	31.913	80.024	3	2	4	1	1	1	1
13-Feb-02	14:13	31.920	80.032	3	2	4	1	1	1	1
13-Feb-02	14:14	31.923	80.034	3	2	4	1	1	1	1
13-Feb-02	14:14	31.934	80.044	3	2	4	1	1	1	1
13-Feb-02	14:15	31.955	80.065	3	2	4	1	1	1	1
13-Feb-02	14:49	32.099	80.109	3	1	3	1	1	1	1
13-Feb-02	14:52	32.013	80.026	3	1	3	1	1	1	1
13-Feb-02	15:02	32.142	80.040	3	2	3	1	1	1	1
13-Feb-02	15:39	32.066	79.864	3	2	3	1	1	1	1
15-Feb-02	09:41	35.165	75.369	1	3	2	3	2	1	1
15-Feb-02	10:09	35.337	75.010	1	3	2	3	2	1	1
15-Feb-02	10:34	35.398	75.157	1	2	2	1	3	1	1
15-Feb-02	10:34	35.398	75.133	1	2	2	1	3	1	1
15-Feb-02	10:35	35.399	75.108	1	2	2	1	3	1	1
15-Feb-02	11:26	35.599	74.983	1	2	2	3	1	1	1
15-Feb-02	11:27	35.600	75.024	1	2	2	3	1	1	1
15-Feb-02	11:27	35.601	75.045	1	2	2	3	1	1	1
15-Feb-02	11:29	35.600	75.099	1	2	2	3	1	1	1
16-Feb-02	11:49	34.525	77.171	2	1	5	2	3	1	1
16-Feb-02	15:08	34.442	76.254	2	2	2	1	3	1	1
16-Feb-02	16:21	34.321	76.452	2	2	2	3	2	1	2
16-Feb-02	16:23	34.381	76.512	2	2	2	3	2	1	1
19-Feb-02	10:06	34.343	76.760	1	2	1	2	2	1	1
19-Feb-02	10:07	34.324	76.742	1	2	1	2	2	1	2
19-Feb-02	10:10	34.302	76.726	1	2	1	2	2	1	1
19-Feb-02	10:48	34.252	76.797	1	2	1	2	2	1	1
19-Feb-02	10:51	34.309	76.859	1	2	1	2	2	1	1
19-Feb-02	10:51	34.315	76.864	1	2	1	2	2	1	1
19-Feb-02	10:52	34.338	76.888	1	2	1	2	2	1	1
19-Feb-02	10:53	34.358	76.911	1	2	1	2	2	1	1
19-Feb-02	11:20	34.318	76.965	1	1	1	2	2	1	1
19-Feb-02	11:27	34.254	76.899	1	1	1	2	2	1	1
19-Feb-02	11:29	34.204	76.854	1	1	1	2	2	1	1
19-Feb-02	11:30	34.175	76.824	1	1	1	2	2	1	2
19-Feb-02	11:35	34.125	76.875	1	1	1	2	1	1	1
19-Feb-02	11:36	34.128	76.878	1	1	1	2	1	1	1
19-Feb-02	11:37	34.142	76.893	1	1	1	2	1	1	1
19-Feb-02	11:41	34.252	77.002	1	1	1	2	1	1	1
19-Feb-02	12:16	34.150	77.010	1	1	1	1	3	1	2
19-Feb-02	12:18	34.126	76.986	1	1	1	1	3	1	1
19-Feb-02	12:26	34.068	77.026	1	1	1	2	1	1	1
19-Feb-02	12:26	34.071	77.031	1	1	1	2	1	1	1

Table 7. Sea turtle sightings

19-Feb-02	12:34	34.280	77.243	1	1	1	2	1	1	1
19-Feb-02	14:41	34.017	77.196	1	1	2	4	1	1	1
19-Feb-02	15:32	33.969	77.359	1	1	2	4	1	1	1
19-Feb-02	15:33	34.006	77.396	1	1	2	4	1	1	1
19-Feb-02	16:16	33.873	77.474	1	1	2	4	1	1	1
22-Feb-02	09:49	33.525	78.166	2	2	3	2	2	1	1
22-Feb-02	10:30	33.571	78.319	2	2	3	2	2	1	1
22-Feb-02	11:15	33.589	78.538	2	1	3	2	2	1	1
22-Feb-02	11:26	33.344	78.294	2	2	3	2	2	1	1
22-Feb-02	11:33	33.373	78.432	2	2	3	2	2	1	1
22-Feb-02	11:34	33.384	78.445	2	2	3	2	2	1	1
22-Feb-02	11:34	33.385	78.447	2	2	3	2	2	1	1
22-Feb-02	11:34	33.401	78.461	2	2	3	2	2	1	1
22-Feb-02	11:38	33.475	78.533	2	2	3	2	2	1	1
22-Feb-02	12:08	33.349	78.519	2	2	3	2	2	1	1
22-Feb-02	12:10	33.302	78.466	2	2	3	2	2	1	1
22-Feb-02	12:10	33.294	78.457	2	2	3	2	2	1	1
22-Feb-02	12:11	33.285	78.449	2	2	3	2	2	1	1
22-Feb-02	12:19	33.269	78.536	2	2	3	2	2	1	1
22-Feb-02	14:33	33.225	78.588	1	1	3	1	1	1	1
22-Feb-02	14:34	33.215	78.579	1	1	3	1	1	1	1
22-Feb-02	14:35	33.192	78.576	1	1	3	1	1	1	1
22-Feb-02	14:45	33.220	78.679	1	1	3	1	1	1	1
22-Feb-02	15:38	33.156	78.746	1	0	3	1	2	1	1
22-Feb-02	16:23	33.043	78.841	1	0	3	1	1	1	1
22-Feb-02	16:47	32.856	78.767	1	1	3	1	1	1	1
25-Feb-02	10:11	32.846	78.860	2	2	1	2	2	1	1
25-Feb-02	10:25	32.754	78.889	2	2	1	2	2	1	1
25-Feb-02	14:20	32.548	79.152	1	2	1	1	4	1	1
25-Feb-02	16:05	32.309	79.483	1	2	1	4	1	1	1
25-Feb-02	16:06	32.346	79.523	1	2	1	4	1	1	1
6-Mar-02	14:26	33.430	78.489	1	1	1	4	1	1	1
8-Mar-02	15:40	32.688	79.226	2	3	2	2	4	1	1
9-Mar-02	10:59	32.910	79.123	2	3	2	2	2	1	1
9-Mar-02	11:41	32.969	78.970	2	2	2	2	2	1	1
9-Mar-02	12:45	33.211	78.908	2	2	2	2	2	1	1
16-Mar-02	15:28	35.936	75.258	2	3	2	1	4	1	1
18-Mar-02	16:01	34.069	77.674	3	1	5	1	3	1	1
18-Mar-02	16:23	33.891	77.376	3	2	5	4	1	1	1
18-Mar-02	16:27	33.944	77.434	3	2	5	4	1	1	1
18-Mar-02	16:27	33.950	77.436	3	2	5	4	1	1	1
18-Mar-02	16:32	34.043	77.535	3	1	5	4	1	1	1
19-Mar-02	16:22	34.234	76.676	3	5	3	2	2	1	1
Unidentified sea turtle Sightings										
28-Jan-02	09:17	34.192	76.843	2	1	2	2	1	1	1
28-Jan-02	09:18	34.150	76.799	2	1	2	2	1	1	1
28-Jan-02	09:19	34.140	76.789	2	1	2	2	1	1	1
28-Jan-02	09:24	34.187	76.720	2	1	2	2	1	1	1

Table 7. Sea turtle sightings

28-Jan-02	09:26	34.192	76.727	2	1	2	2	1	1	2
28-Jan-02	09:34	34.283	76.831	2	1	2	2	1	1	1
28-Jan-02	09:35	34.315	76.865	2	1	2	2	1	1	1
28-Jan-02	09:35	34.322	76.871	2	1	2	2	1	1	1
28-Jan-02	09:35	34.325	76.874	2	1	2	2	1	1	1
28-Jan-02	10:14	34.324	76.768	2	1	2	2	1	1	1
28-Jan-02	10:15	34.319	76.760	2	1	2	2	1	1	1
28-Jan-02	10:15	34.318	76.757	2	1	2	2	1	1	1
28-Jan-02	10:16	34.285	76.724	2	1	2	2	1	1	1
28-Jan-02	10:17	34.279	76.718	2	1	2	2	1	1	1
28-Jan-02	10:17	34.273	76.713	2	1	2	2	1	1	1
28-Jan-02	10:20	34.211	76.649	2	1	2	2	1	1	1
28-Jan-02	10:22	34.205	76.630	2	1	2	2	1	1	1
28-Jan-02	10:34	34.343	76.672	1	3	2	2	2	1	1
28-Jan-02	10:36	34.349	76.667	1	3	2	2	2	1	1
28-Jan-02	10:37	34.347	76.676	1	3	2	2	2	1	1
28-Jan-02	10:45	34.531	76.855	1	3	2	2	2	1	1
28-Jan-02	10:49	34.604	76.933	1	3	2	2	2	1	1
28-Jan-02	11:11	34.329	76.560	1	2	2	2	3	1	1
28-Jan-02	11:25	34.289	76.410	1	2	2	2	1	1	1
28-Jan-02	15:27	34.466	76.173	1	2	3	3	1	1	1
15-Feb-02	09:41	35.161	75.363	1	3	2	3	2	1	1
22-Feb-02	15:49	33.035	78.723	1	1	3	1	2	1	1