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**MARINE MAMMAL DATA COLLECTED DURING A  
SURVEY IN THE EASTERN TROPICAL PACIFIC OCEAN  
ABOARD THE NOAA SHIPS *McARTHUR* AND *DAVID STARR JORDAN*  
AND THE UNOLS SHIP *ENDEAVOR* JULY 31 - DECEMBER 9, 1998**

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## INTRODUCTION

In 1997 the U.S. Congress directed the Secretary of Commerce to determine whether the chasing and deployment of purse seine nets around dolphins in the eastern tropical Pacific Ocean (ETP) during tuna fishing operations is having a significant adverse impact on any depleted dolphin stock (International Dolphin Program Conservation Act, Public Law 105-42). A portion of this mandate directed the National Marine Fisheries Service (NMFS) to undertake a three-year (1998-2000) series of surveys to estimate the current abundances of the populations of dolphins in the area affected by the fishery. In 1998 the Southwest Fisheries Science Center (SWFSC) initiated the first of these, the *Stenella* Population Abundance Monitoring (SPAM98) survey. This report summarizes the survey procedures and the data obtained for marine mammals in the ETP during the 1998 cruise. Separate reports will summarize the associated fauna (Olson et al., in prep) and the environmental and oceanographic findings (Philbrick et al., in prep).

The SWFSC has conducted research on the cetacean populations of the ETP since the mid-1970's. Between 1986 and 1990 the SWFSC completed the five-year "Monitoring of Porpoise Stocks" (MOPS) program of line-transect surveys, which produced estimates of abundance for 24 stocks of cetaceans representing 19 species or genera (Wade and Gerrodette, 1993). The MOPS program also produced annual estimates of abundance over the five-year period for the three species of dolphins (*Stenella attenuata*, *S. longirostris* and *Delphinus delphis*) most affected by the fishery (Wade and Gerrodette, 1992). Additional information regarding the abundance of stocks of dolphins taken by the fishery is available through analysis of sighting data from the tuna vessels (Anganuzzi and Buckland, 1994). Based on the sightings given in detail in this report, estimates of 1998 abundance for four dolphins stocks most affected by the purse-seine fishery are given in Gerrodette (1999).

At a planning meeting in December 1997, survey procedures and study area boundaries for the 1998-2000 cruises were discussed; results are summarized in Gerrodette et al. (1998). The 1998 survey was conducted using three ships, the NOAA Ships *McArthur* and *David Starr Jordan* (hereafter referred to as the *Jordan*), and the UNOLS Ship *Endeavor*, with cruise numbers assigned as follows:

<i>McArthur</i>	AR-98-11	SWFSC Cruise Number 1610
<i>Endeavor</i>		SWFSC Cruise Number 1611
<i>David Starr Jordan</i>	DS-98-10	SWFSC Cruise Number 1612

## SURVEY OBJECTIVES

The project was a multidisciplinary survey with the primary objective being to estimate the abundance of dolphins affected by the ETP purse-seine fishery for yellowfin tuna, *Thunnus albacares*. The survey's design targeted the depleted stocks of spinner (*Stenella longirostris orientalis*, the eastern stock) and spotted (*Stenella attenuata*, the northeastern offshore stock) dolphins, and the coastal stocks of spotted, spinner, and common (*Delphinus* sp.) dolphins. In

addition to data suitable for line-transect analysis, acoustic, photogrammetric, genetic, and individual whale identification data were collected on ETP cetaceans.

## STUDY AREA

The study area extended from the US/Mexico border, south to the territorial waters of Peru, bounded on the east by the continental shores of the Americas, and to the west to Hawaii (Fig. 1, Appendix A). Examination of dolphin sightings from research and fishing vessels indicated that this region encompasses the entire distribution of the dolphin stocks most affected by the fishery (Gerrodette et al., 1998). The study area was divided into four sampling strata which received varying levels of survey effort: the core area, the outer area, and north and south coastal areas.

## ITINERARY

The survey was scheduled to begin on July 28, but departure of all 3 ships was delayed because clearance to conduct research in the jurisdictional waters of Mexico and Ecuador had not been received. Clearance from Mexico was received on July 30 and the cruise began on July 31. After the cruise had begun, clearance from Nicaragua was received on August 28, from Ecuador on October 8 and from Peru (for the *Endeavor* only) on October 22. The survey ended on December 9, 1998. It was composed of five legs each on the *Endeavor* and *McArthur*, and six legs on the *Jordan*. Survey legs varied between 14 and 29 days in length, separated by 3 to 4 days in port. The itineraries for the ships are listed below.

### NOAA Ship *David Starr Jordan*:

31 JUL	Depart San Diego, CA
31 JUL - 14 AUG	Leg I
14 AUG - 18 AUG	Mazatlan, Mexico
18 AUG - 08 SEP	Leg II
08 SEP - 12 SEP	Panama City, Panama
12 SEP - 01 OCT	Leg III
01 OCT - 05 OCT	Manzanillo, Mexico
05 OCT - 24 OCT	Leg IV
24 OCT - 29 OCT	Puntarenas, Costa Rica
29 OCT - 16 NOV	Leg V
16 NOV - 22 NOV	Panama City, Panama
22 NOV - 09 DEC	Leg VI
09 DEC	Arrive San Diego, CA

### NOAA Ship *McArthur*:

31 JUL	Depart San Diego, CA
31 JUL - 16 AUG	Leg I
16 AUG - 21 AUG	Puerto Quetzal, Guatemala
21 AUG - 08 SEP	Leg II

08 SEP - 13 SEP	Panama City, Panama
13 SEP - 07 OCT	Leg III
07 OCT - 12 OCT	Manzanillo, Mexico
12 OCT - 09 NOV	Leg IV
09 NOV - 14 NOV	Manzanillo, Mexico
14 NOV - 09 DEC	Leg V
09 DEC	Arrive San Diego, CA

UNOLS Ship *Endeavor*:

30 JUL	Depart Panama City, Panama
30 JUL - 27 AUG	Leg I
27 AUG - 01 SEP	Hilo, HI
01 SEP - 25 SEP	Leg II
25 SEP - 30 SEP	Manzanillo, Mexico
30 SEP - 24 OCT	Leg III
24 OCT - 28 OCT	Puntarenas, Costa Rica
28 OCT - 16 NOV	Leg IV
16 NOV - 21 NOV	Callao, Peru
21 NOV - 09 DEC	Leg V
09 DEC	Arrive Panama City, Panama

### SCIENTIFIC PERSONNEL

The scientific complement consisted of up to 15 scientists aboard each of the *Jordan* and the *Endeavor*, and 12 aboard the *McArthur*. Appendix B lists the participating scientists and the ship-legs on which they participated.

Three six-person teams of marine mammal observers rotated among ships so that each team spent two legs on the *Jordan* in order to be calibrated with helicopter photogrammetric counts of school sizes. Two additional marine mammal observers were stationed on the *Endeavor* for the entire cruise because of the extra duty station, the "tracker" position, on that ship. The *Endeavor* additionally supported two acousticians, and the *Jordan* two photogrammetrists, per leg. Data collected by birders and oceanographers will be summarized in separate reports, as noted above.

### EQUIPMENT AND PROCEDURES

#### Line-transect Survey

The *Endeavor*, *McArthur* and *Jordan* are 56.4 m, 53.3 m and 52.1 m in length, respectively. The vessels maintained a cruising speed of approximately 18.5 km/hr (10 knots) along pre-determined tracklines (Figure 1) while actively searching for marine mammals ("on-effort" mode). When a sighting was made, effort typically switched to "closing" mode, during which variable speeds and courses were taken in order to approach the mammals. While in closing mode, ancillary projects such as photo-identification and skin biopsy sampling were often conducted.

Standard SWFSC line-transect procedures were followed during the survey. Observers maintained a visual watch for marine mammals during daylight hours (approximately 0600 to 1800) using two 25 X 150 power "bigeye" binoculars mounted on the port and starboard sides of the ship's flying bridge. A third 25 X 150 binocular was mounted near the center of the flying bridge for periodic use during sightings (but not during searching mode). Six observers rotated through three watch positions: port binocular, data recorder, and starboard binocular. Observers shifted positions every 40 minutes on the *Jordan* and the *McArthur* and every 30 minutes on the *Endeavor*. At least one identification specialist with previous experience in the ETP was on watch at all times.

Total binocular height above the water for both the *McArthur* and the *Endeavor* was 10.44 meters, giving a maximum ship-to-horizon sighting distance of approximately 11.5 km (6.2 nm). For the *Jordan*, total binocular height above the water was 10.74 meters, giving a maximum ship-to-horizon sighting distance of approximately 11.7 km (6.3 nm). On the *Jordan*, a fourth, centrally located bigeye was also used occasionally during cetacean sightings. On the *Endeavor*, a fourth bigeye binocular was mounted on a mast "tracker" platform 17.9 meters above water for a maximum sighting distance of 15.2 km (8.2 nm).

On-effort sighting data were collected by the three observers in the three watch positions on each ship. No information from other observers or binocular positions was relayed to this primary team during searching effort. The observer at the port binocular surveyed the area between 10° right and 90° left of the trackline. The observer at the starboard binocular surveyed the area between 10° left and 90° right of the trackline. Thus, the area 10° to either side of the trackline was covered by both bigeye observers while more lateral regions were covered by one observer or the other. Using unaided eyes and a handheld 7X binocular, the data recorder searched the entire 180° forward of the ship, with effort focused on the trackline and the area from the ship out to 300 meters (the "blind" area for observers using the 25X binoculars).

The data recorder entered sighting, weather and effort information into a laptop computer on the flying bridge using the software program "WinCruz", developed at the SWFSC. The computer was linked to the ship's global positioning system (GPS) to record time and position.

For each marine mammal sighting, bearing (using an azimuth ring on the binocular mount to measure angle) and distance (using a reticle scale inscribed in the eyepiece) were recorded, along with the initial sighting cue. Schools were approached if they were within three nautical miles of the trackline. Observers identified cetaceans, to the level of species/stock when possible, and then made independent estimates of school size. If more than one taxon were present, percent composition of the school was estimated independently by each observer.

#### Photo-Identification and Biopsy Studies

When possible during closing mode, 35-mm photographs of cetacean schools and individuals were taken in order to assist with stock delineations and for studies utilizing identifiable individuals to determine stock movement or, for some whale species, as an alternative means of estimating population sizes. These studies were often conducted in conjunction with biopsy sampling using a hollow-tipped dart fired from a crossbow to obtain a small sample of skin for genetic studies. Both

35-mm photography and biopsy sampling were conducted either from the bow of the ship or from a small boat with an outboard engine.

#### Aerial Photogrammetry (*Jordan* only)

Helicopter operations were conducted from the *Jordan* to obtain photographs of dolphin schools for calibrating observer estimates of abundance, for analysis of cetacean lengths, and for studies of pinniped and seabird colonies. Flights were made in the morning and afternoon during optimal weather conditions: clear skies and sea state below Beaufort 4. All mammal observers on the vessel made estimates of school size and taxonomic composition for schools photographed for calibration.

#### Tracking (*Endeavor* only)

Marine mammal "tracker" observations were conducted from the upper mast platform on the *Endeavor*, equipped with a 25 X 150 binocular, and a laptop computer with WinCruz and input from the ship's GPS. Mammal observers rotated through a thirty-minute watch on this platform following their watch rotation on the flying bridge. The tracker searched the area from 45° left to 45° right of the ship's trackline as far as possible in front of the ship. If the tracker detected a group of cetaceans before it was seen by the primary team on the flying bridge, he/she stopped searching and followed the group until the animals were either detected by the primary team or passed undetected abeam of the vessel. Trackers were aware of flying bridge sightings via one-way intercom but observers on the flying bridge were not aware of sightings made by the tracker. Once a tracker sighting was seen by the flying bridge, the tracker resumed searching for other undetected schools. The purpose of tracker search effort was to examine dolphin school movement ahead of the vessel and the proportion of sightings missed by the primary team.

#### Acoustics (*Endeavor* only)

A program was begun this year to determine whether monitoring of sounds made by cetaceans can be used to improve cetacean survey methods. A hydrophone array was towed behind the *Endeavor* to detect sounds from cetaceans (sperm whale clicks and delphinid whistles) that may have been missed by the visual observer team. Two arrays were used during the survey: a five-element array made by Innovative Transducers Inc. (ITI) that was sensitive from 50 Hz to 20 kHz and a three-element array made by Don Norris that was sensitive from 500 Hz to 150 kHz. The ITI array was only used during the first week of Leg 1 and during the entirety of Leg 2 (when the Norris array was returned for repairs). A hydrophone array was typically deployed in the morning before visual search effort began and was retrieved in the evening after visual effort ended. The array was attached to the end of a 1000 m lead-in cable on a hydraulic winch mounted on the fantail of the *Endeavor*, just forward of the A-frame.

Experimentation during the first week showed that a deployment of only 200 m of cable was the optimal compromise between minimizing ship noise (for the acoustic team) and minimizing restrictions on vessel maneuverability (for the visual team). The array was towed at the typical survey speed (10 kts) and flow noise limited the bandwidth of both arrays to frequencies above

1kHz. Vessel turns were limited to approximately 5 degrees of rudder angle to prevent the ship from accidentally running over the tail of the array.

Signals received from the array were amplified and monitored by an acoustic technician. Two acoustic technicians rotated on three hour shifts during daylight hours. Clear cetacean sounds were recorded on Digital Audio Tape (DAT) and, occasionally, high frequency signals were recorded directly to hard disk. A record was kept of acoustic effort using the program WHALTRAK, and cetacean sounds were noted in that record as coded comments. Bearing angles to the source of sperm whale clicks were estimated using the program REALTIME. Methods of estimating bearing angles to the source of delphinid whistles were in development during the cruise but were not fully functional by the end of the cruise.

Information regarding sperm whale detections was not shared between visual and acoustic teams until the animals had clearly passed abeam of the vessel; therefore, the visual and acoustic detections of this species can be considered to be independent. Visual observers frequently relayed information about delphinid sightings to the acoustic team to aid them in their documentation of delphinid whistle recordings.

Sonobuoys were deployed from the *Endeavor* to record cetacean sounds, primarily from baleen whales. The primary purpose of these studies was to quantify the fraction of time that baleen whales are vocalizing and would, therefore, be acoustically detectable. Sonobuoys (type 53A or 57B) were typically deployed within 1/2 nmi of a baleen whale that had been sighted by the visual team. The higher frequency type 57B sonobuoys were occasionally deployed in the proximity of odontocetes to record their whistles. Sonobuoy signals were recorded on a DAT recorder and were monitored using a scrolling spectrographic display.

Two hull-mounted hydrophones were installed to record signals (5 kHz - 150 kHz) from bow-riding dolphins. One of these hydrophones broke prior to the first leg (en route to Panama) and the second broke early during the cruise.

## RESULTS

### Line-transect Effort and Sightings

The daily record of kilometers surveyed by each ship during the cruise is reported in Table 1. Figure 1 depicts all completed on-effort trackline surveyed, and Figures 2, 3, and 4 depict the tracklines covered by each ship both inside and outside of the survey area.

A total of 2,260 sightings of marine mammals was made during the survey: 1,129 on the *Jordan*, 627 on the *Endeavor*, and 504 on the *McArthur*. The *Jordan's* tracklines were generally the closest to the coast while the *Endeavor* and the *McArthur* had more offshore tracklines (Figures 2 - 4).

Table 2 summarizes the times, locations, average estimated size, and other information for each sighting, organized by sighting-category (a single stock, species or more general category such as



"unidentified dolphin"). A total of 52 sighting-categories of marine mammals was recorded during SPAM98. Maps depicting the geographic positions for all the sightings of a particular sighting-category are displayed in Figures 5 through 27.

Each school was classified as "pure" or "mixed", depending on whether the individual animals in it belonged to a single sighting-category or multiple sighting-categories. The information from Table 2 for each school is summarized for each sighting-category in Table 3, with the number of pure schools, mixed schools, and average estimated school-size for each category. 89% of all schools (2,019 schools) were pure schools. The mixed school column in Table 3 totals 491 because mixed schools are recounted for each sighting-category that occurred in them, causing the total of pure and mixed schools in this column to exceed the number of sightings by 250. The actual number of mixed schools was 241 (see Table 4.)

The most commonly sighted sighting-category was unidentified dolphin, comprising 15% of the "total schools" column of Table 3. These were typically small schools (average estimate of 14 individuals per school) seen at a distance. These schools were often those seen beyond the 3-nm perpendicular distance that is used as a cut-off point to approach for species identification. The second most common sighting-category during the survey was *Tursiops truncatus* (13%), followed by one of the target stocks, the northeastern offshore stock of *Stenella attenuata* (10%). The second target stock, *Stenella longirostris orientalis* comprised about 5% of the total sightings. The most commonly sighted whale was *Balaenoptera edeni* (3% of all marine mammal sightings). Unidentified balaenopterids comprised 2% of the sightings, as did the sperm whale, *Physeter macrocephalus* and the most common of the beaked whales, *Ziphius cavirostris*.

There were 54 different combinations of mixed schools, of which 46 contained 2 sighting-categories and 7 contained 3, and 1 contained 4 (Table 4). The single most common mixture was offshore spotted and eastern spinner dolphins, comprising 72 (30%) of the mixed schools. *Tursiops truncatus* was also a common component of mixed schools, occurring in 3 of the 4 most regularly encountered types of mixed school. The northeastern offshore stock of *Stenella attenuata* occurred in mixed schools 48% of the time it was sighted, while *Stenella longirostris orientalis* occurred in mixed schools 70% of the time it was sighted.

While in the study area and in searching ("on-effort") mode, there was a total of 1,915 sightings during 43,305 km (23,383 nm) of searching effort, for an overall sighting rate of 44.2 sightings (schools) per 1000 km (Table 5). Sighting rates were strongly dependent on sea state and swell height (Table 5).

One hundred thirty-five sightings of marine mammals were recorded from the "tracker" platform on the *Endeavor* (Table 6). The number of tracker sightings in each sighting category that was determined in the field to be matches with flying bridge sightings is indicated in the "matched" column of Table 6. Fifty-four percent of all sightings seen first by the tracker were eventually picked up by the primary team. However, the proportion of tracker sightings matched varied widely for different sighting-categories of cetacean. These data are preliminary, and have not been rigorously edited.

### 35-mm Photography

One thousand six hundred ninety-one photos were taken of 124 cetacean schools belonging to 22 species or stock categories (Table 7). The most commonly photographed cetacean species was killer whale, *Orcinus orca* (360 photos). Other commonly photographed whales were pilot whales, *Globicephala macrorhynchus* (244 photos) and blue whales, *Balaenoptera musculus* (231 photos).

Table 8 summarizes the photos taken of whales that are potentially identifiable as unique individuals. Twelve blue whale, 5 humpback whale (*Megaptera novaeangliae*), 6 pilot whale, 19 killer whale and 3 sperm whale (*Physeter macrocephalus*) photos will be compared with existing catalogs of identified individuals of these species.

### Aerial Photogrammetry

Tables 9 and 10 summarize the photogrammetry results obtained by the helicopter on the *Jordan*. A mechanical breakdown early in Leg 1 eliminated use of the helicopter for most of that leg. A total of 36 calibration schools were photographed during the survey, mostly on Legs 3 and 4. Twenty-six schools of *Delphinus delphis*, 17 schools of *Stenella attenuata*, 10 schools of *Stenella longirostris*, and 8 schools containing both spotted and spinner dolphins, were photographed from the helicopter.

### Biopsy Sampling

Five hundred ninety-one skin biopsy samples of 22 stocks of cetaceans were obtained (Table 11). For spotted dolphins, 63 samples were of the northeastern offshore stock, 12 were of the west/south stock, 70 were of the coastal stock (*S. a. graffmani*) and two were unidentified to stock. For spinner dolphins, 57 samples were obtained of the "eastern" variety (*S. l. orientalis*), 16 samples were of the "Central American" variety (*S. l. centroamericana*), and 25 samples were of the hybrid "whitebelly" variety.

### Acoustics

The hydrophone array was towed and monitored for approximately 17,980 km (9,702 nmi)<sup>1</sup>. The ITI array (previously used on SWAPS-97) was used during the first week of Leg 1, but the Norris array proved to be better at receiving delphinid whistles and therefore was used for all the remaining cruise except Leg 2. The Norris array developed a stress fracture on one of the elements at the end of Leg 1 and was shipped back to San Diego for repair. The connector on the ITI array developed a stress fracture at the end of Leg 2 and was also sent back to San Diego for repair (the Norris array was returned to the ship in time for Leg 3). All problems with the arrays appeared to be caused by the winch drum being too small.

Delphinid whistles were frequently heard from the towed hydrophone array (Fig. 28). Many more whistles were heard when using the Norris array (most of Leg 1 and all of Legs 3, 4, and 5) than

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<sup>1</sup> Distance is corrected from previous value in Cruise Report.

when using the ITI array (Leg 2). The cause of this difference between arrays is not known, but may be caused by a narrower beam angle of the ITI array at higher frequencies. In general, delphinids were heard much more frequently than they were seen. This difference between visual and acoustic detection rates is probably explained by a difference in detection range, but because we were not able to localize the source of whistles, more research is needed to investigate this hypothesis. Whistles were recorded from pure schools of short-beaked common dolphins, long-beaked common dolphins, eastern spinner dolphins, bottlenose dolphins, striped dolphins, spotted dolphins, Frasier's dolphins, dusky dolphins, rough-toothed dolphins, false killer whales, pygmy killer whales, killer whales, and pilot whales. Sonobuoy recordings were made of blue whales.

Sperm whale clicks were detected at 23 distinct locations (Fig. 29). Visual observers on the *Endeavor* made 19 sperm whale sightings (Table 2). A total of 18 sperm whale groups were detected when both the visual and acoustic teams were on-effort. Of these 18, 7 were not seen before they had passed abeam, 4 were not heard before the vessel turned, and 7 were both seen and heard.

#### ACKNOWLEDGEMENTS

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Table 1. Kilometers of search effort within the study area by ship and day.

Date	McArthur	Endeavor	Jordan
30 Jul 98	.0	68.1	.0
31 Jul 98	121.5	96.3	65.0
1 Aug 98	221.9	157.9	174.1
2 Aug 98	224.7	188.8	75.7
3 Aug 98	213.5	111.1	126.3
4 Aug 98	201.2	.0	139.8
5 Aug 98	175.4	195.4	166.0
6 Aug 98	170.0	219.2	164.9
7 Aug 98	174.4	208.8	77.5
8 Aug 98	128.1	195.3	.0
9 Aug 98	153.8	151.1	131.9
10 Aug 98	123.0	174.0	176.0
11 Aug 98	116.4	207.9	121.6
12 Aug 98	96.6	200.9	115.4
13 Aug 98	98.0	184.0	89.0
14 Aug 98	127.7	208.4	.0
15 Aug 98	104.6	122.1	.0
16 Aug 98	.0	190.7	.0
17 Aug 98	.0	206.8	.0
18 Aug 98	.0	107.5	65.3
19 Aug 98	.0	42.8	179.2
20 Aug 98	.0	106.0	169.5
21 Aug 98	63.7	194.5	138.2
22 Aug 98	73.6	28.3	78.8
23 Aug 98	123.0	.0	133.7
24 Aug 98	199.8	.0	144.3
25 Aug 98	163.3	.0	119.9
26 Aug 98	.0	.0	112.9
27 Aug 98	104.0	.0	139.5
28 Aug 98	165.7	.0	115.3
29 Aug 98	215.3	.0	76.2
30 Aug 98	122.0	.0	63.1
31 Aug 98	155.5	.0	146.9
1 Sep 98	137.8	.0	87.6
2 Sep 98	.0	.0	122.4
3 Sep 98	163.3	.0	82.2
4 Sep 98	165.6	175.5	138.9
5 Sep 98	84.9	109.7	94.8
6 Sep 98	154.9	182.3	150.5
7 Sep 98	46.4	192.5	47.3
8 Sep 98	.0	132.2	.0
9 Sep 98	.0	193.7	.0
10 Sep 98	.0	135.7	.0
11 Sep 98	.0	207.9	.0
12 Sep 98	.0	214.3	57.1
13 Sep 98	176.3	202.0	81.9
14 Sep 98	174.7	208.6	137.4
15 Sep 98	180.6	209.4	144.7
16 Sep 98	195.8	180.6	110.3
17 Sep 98	189.5	139.8	185.6
18 Sep 98	200.2	103.6	128.4
19 Sep 98	188.8	164.6	82.4

Table 1. (continued)

Date	McArthur	Endeavor	Jordan
20 Sep 98	201.9	204.2	.0
21 Sep 98	184.6	159.5	126.5
22 Sep 98	190.2	176.4	146.9
23 Sep 98	130.0	150.6	33.3
24 Sep 98	145.4	154.6	85.3
25 Sep 98	175.7	.0	158.6
26 Sep 98	138.3	.0	144.7
27 Sep 98	150.5	.0	144.4
28 Sep 98	45.0	.0	100.1
29 Sep 98	192.7	.0	140.1
30 Sep 98	89.4	71.1	129.1
1 Oct 98	.0	171.6	.0
2 Oct 98	167.0	147.6	.0
3 Oct 98	200.8	206.5	.0
4 Oct 98	146.0	177.6	.0
5 Oct 98	147.3	205.3	87.0
6 Oct 98	173.0	188.7	147.4
7 Oct 98	.0	86.6	85.3
8 Oct 98	.0	137.0	146.1
9 Oct 98	.0	175.7	175.4
10 Oct 98	.0	154.1	19.4
11 Oct 98	.0	113.9	98.9
12 Oct 98	93.1	169.5	123.0
13 Oct 98	144.3	161.5	175.1
14 Oct 98	23.1	219.9	147.8
15 Oct 98	.0	.0	180.0
16 Oct 98	.0	154.9	136.8
17 Oct 98	192.8	105.4	121.0
18 Oct 98	128.1	62.3	149.5
19 Oct 98	123.9	170.0	141.9
20 Oct 98	180.4	92.1	182.7
21 Oct 98	192.8	68.7	190.9
22 Oct 98	196.0	70.9	46.7
23 Oct 98	178.9	27.2	95.3
24 Oct 98	145.1	.0	.0
25 Oct 98	176.0	.0	.0
26 Oct 98	125.3	.0	.0
27 Oct 98	189.5	.0	.0
28 Oct 98	205.0	.0	.0
29 Oct 98	200.2	96.6	29.9
30 Oct 98	176.4	163.6	16.4
31 Oct 98	172.8	193.2	.0
1 Nov 98	197.8	159.4	105.3
2 Nov 98	189.3	106.8	187.6
3 Nov 98	163.7	.0	197.6
4 Nov 98	140.5	160.0	66.9
5 Nov 98	105.9	174.8	125.3
6 Nov 98	182.2	182.8	89.8
7 Nov 98	161.0	217.6	90.2
8 Nov 98	127.9	184.8	94.8
9 Nov 98	.0	200.7	142.8
10 Nov 98	.0	214.2	169.6
11 Nov 98	.0	198.8	98.7
12 Nov 98	.0	201.8	167.5
13 Nov 98	.0	200.4	116.3
14 Nov 98	69.5	194.6	97.9

Table 1. (continued)

Date	McArthur	Endeavor	Jordan
15 Nov 98	173.8	.0	142.2
16 Nov 98	176.9	.0	.0
17 Nov 98	136.9	.0	.0
18 Nov 98	162.3	.0	.0
19 Nov 98	161.2	.0	.0
20 Nov 98	148.2	.0	.0
21 Nov 98	122.8	34.4	.0
22 Nov 98	157.3	131.3	45.8
23 Nov 98	165.2	132.3	152.5
24 Nov 98	174.2	180.9	150.0
25 Nov 98	157.4	107.5	132.0
26 Nov 98	128.5	98.9	132.8
27 Nov 98	201.1	53.6	165.0
28 Nov 98	.0	95.0	183.4
29 Nov 98	.0	163.9	78.5
30 Nov 98	175.9	162.8	126.1
1 Dec 98	.0	189.2	175.5
2 Dec 98	.0	122.2	184.5
3 Dec 98	172.8	189.0	58.8
4 Dec 98	159.6	166.6	96.2
5 Dec 98	28.6	110.0	15.6
6 Dec 98	113.2	156.0	.0
7 Dec 98	74.5	192.8	.0
8 Dec 98	53.6	124.7	90.5
Total	15398.7	15563.0	12343.5

Table 2. Marine mammal sightings for each sighting-category. "Other Codes" indicate the codes of other sighting-categories (see Appendix C) in a mixed-species school. Times are local. Sighting numbers begin with first letter of ship's name on which they occurred. School size is the mean of the observers' best estimates of school size.

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft.	Obs. no.	School size	Effort
<i>Mesoplodon peruvianus</i>										
001		E 541	28 Nov 98	1202	S05:35.44	W081:25.42	1	168	4	On
001		J 3133	6 Aug 98	0606	N23:41.97	W108:29.38	3	143	2	On
001		J 3257	11 Aug 98	1156	N25:12.16	W109:36.20	1	143	5	Off
001		J 3652	5 Sep 98	1630	N07:21.34	W082:08.39	3	125	1	Off
001		J 4143	1 Dec 98	1252	N18:07.10	W106:47.28	3	4	3	Off
<i>Stenella attenuata</i> (offshore)										
002		E 29	1 Aug 98	0730	N05:06.07	W082:16.86	2	153	82	On
002		E 121	26 Aug 98	0945	N19:21.86	W156:02.21	1	73	5	Off
002		E 129	3 Sep 98	0833	N13:28.38	W153:36.77	3	182	116	Off
002	011	E 150	8 Sep 98	0837	N09:56.18	W142:35.11	2	1	176	On
002	011	E 155	9 Sep 98	1415	N12:24.38	W140:11.51	4	73	237	On
002	011	E 168	13 Sep 98	0837	N07:37.94	W133:18.05	5	153	243	On
002	011	E 173	16 Sep 98	0802	N12:01.49	W127:55.98	2	73	114	On
002	011	E 179	16 Sep 98	1237	N12:35.12	W127:34.93	3	184	115	On
002		E 182	17 Sep 98	0750	N12:36.69	W125:16.83	3	185	43	On
002	011	E 184	17 Sep 98	0918	N12:35.71	W125:03.76	3	126	150	On
002	011	E 188	18 Sep 98	0708	N12:30.21	W122:34.97	2	186	165	On
002		E 196	18 Sep 98	0946	N12:42.35	W122:21.06	2	153	40	On
002	010	E 207	18 Sep 98	1625	N12:33.00	W121:42.19	1	184	119	On
002	010	E 210	18 Sep 98	1726	N12:31.68	W121:30.14	1	184	216	On
002	077	E 211	18 Sep 98	1738	N12:35.55	W121:33.34	1	153	40	On
002	010	E 220	20 Sep 98	0846	N14:06.86	W116:36.31	3	186	188	On
002		E 228	22 Sep 98	1116	N16:53.43	W110:33.59	2	184	64	On
002		E 231	22 Sep 98	1812	N17:10.89	W109:36.54	4	185	46	On
002		E 232	23 Sep 98	0745	N17:46.62	W108:10.44	4	182	21	On
002	018	E 234	23 Sep 98	1550	N18:20.61	W107:00.96	4	186	60	On
002	010	E 235	23 Sep 98	1727	N18:22.29	W107:02.95	4	1	208	Off
002		E 238	24 Sep 98	1213	N18:52.94	W105:40.27	3	186	41	On
002		E 239	24 Sep 98	1302	N18:48.81	W105:33.66	3	186	26	On
002		E 241	24 Sep 98	1509	N18:54.13	W105:20.48	2	1	20	On
002		E 246	1 Oct 98	0952	N18:53.81	W107:21.30	4	73	12	On
002	003	E 249	1 Oct 98	1420	N19:17.27	W107:50.84	4	186	120	On
002	003	E 254	2 Oct 98	1707	N19:07.29	W109:27.84	4	153	159	On
002		E 258	4 Oct 98	1219	N18:19.74	W114:30.51	5	186	3	On
002	010	E 266	6 Oct 98	1648	N14:29.82	W119:41.65	4	185	84	On
002	011	E 282	11 Oct 98	1101	N03:44.69	W117:51.28	5	126	142	On
002	003	E 283	11 Oct 98	1224	N03:43.26	W117:46.97	5	56	271	On
002	003	E 284	11 Oct 98	1351	N03:41.36	W117:38.59	5	185	185	On
002		E 285	11 Oct 98	1540	N03:33.77	W117:35.90	4	184	173	On
002	011	E 293	13 Oct 98	1613	N04:54.97	W113:21.86	4	153	297	On
002		E 296	14 Oct 98	1504	N06:39.41	W110:29.30	5	186	52	On
002	018	E 302	19 Oct 98	0624	N10:43.36	W096:16.63	3	184	43	On
002		E 303	19 Oct 98	0705	N10:44.27	W096:09.54	3	126	25	On
002		E 304	19 Oct 98	0926	N10:49.59	W095:49.44	3	186	11	On
002	010	E 305	19 Oct 98	1103	N10:39.08	W095:31.17	3	126	147	On
002	010	E 306	19 Oct 98	1400	N10:33.07	W095:03.51	4	186	137	On



Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Ef- fort
002		E 315	20 Oct 98	1026	N10:36.65	W092:44.34	1	126	106	On
002	018	E 320	20 Oct 98	1316	N10:26.79	W092:22.94	1	126	101	On
002		E 330	20 Oct 98	1704	N10:19.19	W092:16.77	0	186	48	On
002		E 331	21 Oct 98	0608	N10:09.88	W090:45.05	0	184	83	On
002		E 335	21 Oct 98	0722	N10:10.91	W090:38.22	0	182	68	On
002		E 337	21 Oct 98	0808	N10:14.04	W090:35.04	0	185	12	On
002		E 338	21 Oct 98	0811	N10:19.10	W090:33.64	0	185	13	On
002		E 342	21 Oct 98	0900	N10:10.78	W090:24.51	1	185	39	On
002		E 355	21 Oct 98	1354	N10:08.12	W089:51.61	2	186	18	Off
002		E 360	21 Oct 98	1534	N10:04.87	W089:38.51	3	186	12	Off
002		E 371	22 Oct 98	0951	N10:13.45	W089:11.37	2	184	72	On
002	003	E 374	22 Oct 98	1125	N10:00.99	W089:02.42	2	153	83	On
002		E 377	22 Oct 98	1220	N09:56.73	W088:56.17	1	73	34	On
002	018	E 385	23 Oct 98	1521	N09:10.52	W085:05.09	4	73	75	On
002	018	E 397	30 Oct 98	1446	N06:19.01	W087:00.18	4	91	20	On
002		E 398	30 Oct 98	1654	N06:07.87	W087:10.48	4	92	64	On
002	010	E 402	31 Oct 98	1602	N03:20.11	W089:16.31	4	92	99	On
002	003	E 585	2 Dec 98	1731	S06:57.32	W089:08.57	4	149	1020	On
002	011	E 613	6 Dec 98	1514	N03:01.59	W082:26.97	5	92	79	On
002	077	M 2020	7 Aug 98	1028	N14:08.31	W110:26.48	3	91	26	On
002	013	M 2024	8 Aug 98	1242	N13:46.04	W108:38.85	2	149	147	On
002	010	M 2028	9 Aug 98	1308	N13:12.67	W105:40.02	5	91	178	On
002		M 2030	9 Aug 98	1552	N13:07.66	W105:19.31	5	181	32	On
002	018	M 2033	10 Aug 98	1300	N12:36.14	W102:45.26	3	92	32	On
002	018	M 2034	10 Aug 98	1635	N12:25.05	W102:13.90	2	168	75	On
002		M 2036	12 Aug 98	0919	N14:06.29	W098:35.04	3	149	2	On
002		M 2042	12 Aug 98	1634	N14:37.97	W098:13.88	1	92	12	Off
002		M 2046	12 Aug 98	1728	N14:45.51	W098:10.96	2	99	2	Off
002		M 2047	12 Aug 98	1747	N14:46.48	W098:09.38	2	181	50	On
002		M 2048	12 Aug 98	1834	N14:51.33	W098:08.00	2	168	18	On
002	010	M 2049	13 Aug 98	0929	N14:21.91	W096:30.35	4	181	55	On
002	010	M 2051	13 Aug 98	1345	N14:10.47	W095:57.41	5	149	48	On
002		M 2058	14 Aug 98	1012	N13:28.04	W094:21.63	3	168	16	On
002		M 2062	14 Aug 98	1409	N13:25.75	W094:00.44	3	168	30	On
002		M 2063	14 Aug 98	1434	N13:26.56	W093:58.94	3	92	5	On
002		M 2065	15 Aug 98	0621	N12:47.01	W092:10.88	3	99	17	Off
002		M 2082	15 Aug 98	1635	N13:31.00	W091:18.76	2	168	5	On
002	018	M 2116	22 Aug 98	1550	N11:39.04	W090:58.75	2	91	52	On
002	010 077	M 2117	22 Aug 98	1647	N11:37.87	W091:07.34	2	149	56	On
002	010	M 2118	22 Aug 98	1725	N11:40.26	W091:09.74	3	92	230	On
002	010	M 2121	23 Aug 98	0940	N12:14.04	W093:17.08	3	91	422	On
002	010	M 2122	23 Aug 98	1021	N12:16.87	W093:20.50	3	149	108	On
002	010	M 2126	23 Aug 98	1207	N12:23.83	W093:29.75	3	152	132	On
002	010	M 2127	23 Aug 98	1247	N12:24.63	W093:31.76	3	92	197	On
002	010	M 2130	23 Aug 98	1536	N12:33.69	W093:55.77	3	92	163	On
002	010	M 2135	24 Aug 98	1426	N12:08.39	W096:45.95	4	91	53	On
002		M 2154	5 Sep 98	1002	N05:20.95	W079:37.59	2	168	27	On
002	013 077	M 2204	16 Sep 98	1637	N07:07.43	W089:48.10	4	143	55	On
002	003	M 2217	19 Sep 98	1641	N07:43.78	W099:39.46	5	143	26	On
002		M 2222	22 Sep 98	1302	N07:13.91	W108:36.94	4	74	73	On
002	011	M 2224	22 Sep 98	1627	N06:56.48	W108:59.63	3	143	54	On
002		M 2229	24 Sep 98	1507	N05:27.86	W112:23.54	5	7	73	On
002		M 2231	25 Sep 98	0951	N05:36.43	W114:55.12	5	74	38	On
002		M 2236	26 Sep 98	1241	N06:23.68	W117:21.03	5	147	57	On
002		M 2239	30 Sep 98	0911	N09:44.53	W109:49.06	4	143	17	On
002	010	M 2241	30 Sep 98	1215	N10:01.46	W109:27.41	4	7	121	On
002	003	M 2243	2 Oct 98	1126	N11:26.60	W106:57.45	2	125	130	On
002	003 018	M 2247	2 Oct 98	1521	N11:43.23	W106:19.69	3	74	92	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
002		M 2249	2 Oct 98	1659	N11:47.06	W106:13.41	2	183	38	On
002		M 2250	2 Oct 98	1728	N11:50.73	W106:06.59	1	74	33	On
002		M 2254	3 Oct 98	0621	N12:31.94	W104:40.42	0	143	69	On
002	010	M 2255	3 Oct 98	0747	N12:35.98	W104:28.46	4	147	110	On
002	010	M 2259	4 Oct 98	0721	N14:04.76	W101:39.71	2	143	325	On
002		M 2260	4 Oct 98	0900	N14:03.18	W101:28.52	2	74	30	On
002	010	M 2261	4 Oct 98	0925	N14:11.36	W101:23.43	2	147	260	On
002	018	M 2264	4 Oct 98	1135	N14:21.01	W101:14.90	4	74	114	On
002		M 2266	4 Oct 98	1534	N14:36.64	W100:41.54	4	74	37	On
002	010	M 2269	5 Oct 98	0902	N15:46.81	W100:39.16	1	125	61	On
002		M 2274	5 Oct 98	1439	N16:03.86	W101:19.29	3	7	257	On
002		M 2277	6 Oct 98	0819	N17:29.09	W103:17.60	2	125	52	On
002		M 2278	6 Oct 98	0820	N17:27.67	W103:18.63	2	99	18	Off
002		M 2283	6 Oct 98	1357	N18:06.50	W103:53.85	3	74	252	On
002	010	M 2284	6 Oct 98	1418	N18:08.91	W103:53.87	3	143	231	On
002	018	M 2291	13 Oct 98	1735	N15:55.36	W106:41.09	3	7	147	On
002	101	M 2297	18 Oct 98	1545	N03:27.92	W112:53.73	5	74	500	On
002		M 2306	19 Oct 98	1700	N01:21.27	W113:29.06	3	143	156	On
002		M 2309	20 Oct 98	1231	N01:22.05	W115:54.96	3	125	50	On
002	101	M 2322	23 Oct 98	0715	N02:05.70	W123:20.37	4	7	347	On
002		M 2323	24 Oct 98	0751	N04:53.16	W123:25.06	4	7	115	On
002		M 2332	24 Oct 98	1815	N06:26.84	W123:19.67	2	143	800	On
002	010	M 2344	26 Oct 98	0726	N10:53.14	W123:22.53	1	74	231	On
002	010	M 2346	26 Oct 98	0927	N11:06.50	W123:23.90	1	7	92	On
002	010	M 2347	26 Oct 98	1039	N11:20.38	W123:23.21	2	7	247	On
002		M 2355	27 Oct 98	1206	N14:27.30	W123:16.07	4	125	136	On
002		M 2360	30 Oct 98	1609	N21:30.73	W119:27.57	4	125	135	On
002		M 2362	31 Oct 98	1451	N18:29.80	W118:14.34	5	74	43	On
002		M 2364	2 Nov 98	0831	N20:37.22	W116:10.38	4	125	109	On
002	010	M 2384	5 Nov 98	1125	N21:25.82	W111:03.51	4	7	320	On
002		M 2404	6 Nov 98	1055	N21:06.71	W109:40.46	4	125	202	On
002	010	M 2410	6 Nov 98	1324	N21:27.78	W109:39.23	4	143	193	On
002		M 2414	7 Nov 98	1343	N20:58.75	W108:50.12	4	7	122	On
002	010	M 2421	8 Nov 98	0908	N20:09.33	W107:22.81	3	183	116	On
002		M 2422	8 Nov 98	0918	N20:11.91	W107:23.61	3	99	9	Off
002	018	M 2423	8 Nov 98	1122	N20:13.21	W106:57.89	3	143	173	On
002		M 2424	8 Nov 98	1336	N20:00.17	W106:43.40	3	74	220	On
002		M 2425	8 Nov 98	1430	N19:58.77	W106:37.89	2	7	30	On
002	010	M 2426	8 Nov 98	1451	N19:58.64	W106:33.14	2	143	183	On
002	010	M 2439	14 Nov 98	1524	N18:48.16	W105:02.26	2	143	290	On
002	077	M 2440	15 Nov 98	0814	N17:51.27	W106:21.99	4	143	92	On
002		M 2441	15 Nov 98	0909	N17:42.77	W106:24.23	4	7	87	On
002	010	M 2456	17 Nov 98	1152	N14:10.71	W111:57.39	4	143	363	On
002		M 2459	17 Nov 98	1417	N14:00.92	W112:18.61	4	143	73	On
002	010	M 2461	18 Nov 98	0803	N13:15.99	W114:22.49	4	7	113	On
002		M 2462	18 Nov 98	1017	N13:10.01	W114:40.65	4	69	98	On
002	011	M 2476	21 Nov 98	0839	N08:51.15	W120:43.74	3	69	255	On
002	011	M 2477	21 Nov 98	1107	N08:51.43	W120:56.77	3	125	350	On
002	010	M 2478	21 Nov 98	1158	N08:47.25	W121:06.71	3	143	250	On
002		M 2479	21 Nov 98	1205	N08:44.32	W121:05.61	3	143	128	On
002		M 2480	21 Nov 98	1425	N08:32.68	W121:20.11	3	7	197	On
002		M 2482	21 Nov 98	1710	N08:13.43	W121:26.36	3	147	171	On
002		M 2485	22 Nov 98	1350	N06:59.27	W123:55.42	4	7	72	On
002	010	M 2508	25 Nov 98	1717	N09:02.90	W130:05.21	4	125	123	On
002	101	M 2509	26 Nov 98	1401	N11:00.75	W130:42.50	5	69	453	On
002		J 3120	5 Aug 98	0809	N23:11.91	W110:30.11	2	143	79	On
002		J 3132	6 Aug 98	0601	N23:41.39	W108:30.93	3	4	70	Off
002		J 3138	6 Aug 98	0636	N23:46.33	W108:26.76	3	143	11	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
002		J 3146	6 Aug 98	1109	N24:13.94	W108:02.23	3	125	31	On
002		J 3273	11 Aug 98	1544	N24:38.91	W109:35.57	1	125	90	On
002		J 3290	12 Aug 98	1442	N23:21.40	W109:13.20	4	183	467	On
002	010	J 3292	12 Aug 98	1824	N22:55.23	W108:49.55	4	7	217	On
002		J 3302	13 Aug 98	0947	N23:28.72	W107:44.75	1	125	15	On
002	010 013	J 3307	13 Aug 98	1053	N23:25.16	W107:40.45	1	143	348	On
002	010	J 3310	13 Aug 98	1221	N23:12.86	W107:38.97	1	74	307	On
002	010	J 3314	13 Aug 98	1559	N22:51.91	W107:33.79	2	74	280	On
002		J 3315	13 Aug 98	1637	N22:51.33	W107:31.79	2	125	34	On
002		J 3316	13 Aug 98	1704	N22:46.61	W107:29.18	1	147	77	On
002		J 3317	13 Aug 98	1724	N22:43.72	W107:31.51	1	7	125	On
002		J 3320	18 Aug 98	1227	N23:04.69	W106:29.15	1	143	3	On
002		J 3337	20 Aug 98	0923	N21:25.65	W107:02.03	3	7	95	On
002		J 3339	20 Aug 98	1054	N21:22.64	W107:10.37	3	125	23	On
002	010	J 3340	20 Aug 98	1112	N21:18.93	W107:16.37	3	147	230	On
002	010	J 3342	20 Aug 98	1505	N21:21.03	W107:44.20	3	147	207	On
002	010	J 3345	21 Aug 98	0743	N20:56.16	W107:08.73	3	74	220	On
002		J 3351	21 Aug 98	1158	N20:52.18	W106:37.88	1	147	37	On
002	010	J 3353	21 Aug 98	1259	N20:46.89	W106:31.35	1	7	117	On
002		J 3363	22 Aug 98	0813	N18:51.76	W104:41.98	3	74	12	On
002		J 3364	22 Aug 98	0849	N18:47.79	W104:36.82	3	147	42	On
002		J 3369	23 Aug 98	0755	N17:55.65	W103:12.81	4	99	8	Off
002		J 3372	23 Aug 98	0954	N17:50.42	W102:56.58	3	7	47	On
002		J 3384	23 Aug 98	1550	N17:31.21	W102:18.63	3	143	19	On
002	010	J 3385	23 Aug 98	1559	N17:27.54	W102:13.34	3	143	145	On
002		J 3466	28 Aug 98	0731	N12:18.08	W091:24.97	0	147	25	On
002	010	J 3468	28 Aug 98	0754	N12:16.33	W091:23.85	0	74	100	On
002		J 3478	28 Aug 98	0957	N12:04.74	W091:17.06	1	143	30	On
002		J 3479	28 Aug 98	1001	N12:05.84	W091:16.54	1	147	10	Off
002		J 3480	28 Aug 98	1005	N12:03.16	W091:16.99	1	143	40	On
002	010 077	J 3483	28 Aug 98	1033	N11:57.32	W091:08.86	1	74	211	On
002	010	J 3485	28 Aug 98	1134	N11:52.71	W091:06.05	1	74	113	On
002		J 3500	28 Aug 98	1331	N11:42.00	W091:00.71	2	183	31	On
002	010	J 3503	28 Aug 98	1423	N11:34.74	W091:00.03	2	143	55	On
002		J 3505	28 Aug 98	1502	N11:29.30	W090:57.85	2	144	5	On
002		J 3512	29 Aug 98	1350	N11:51.47	W090:24.25	1	143	104	On
002		J 3541	31 Aug 98	1054	N12:30.90	W088:56.19	5	74	3	On
002		J 3708	16 Sep 98	1551	N07:52.34	W089:39.61	5	181	14	On
002		J 3717	18 Sep 98	0918	N08:53.47	W094:45.65	4	168	4	On
002		J 3718	18 Sep 98	1138	N08:55.99	W095:07.96	4	92	8	On
002	010	J 3726	19 Sep 98	1405	N09:42.46	W098:04.64	4	149	200	On
002		J 3731	21 Sep 98	1049	N10:00.90	W103:25.98	4	168	27	On
002	010	J 3732	21 Sep 98	1516	N10:07.67	W104:10.30	3	91	103	On
002	010	J 3733	22 Sep 98	0759	N10:09.13	W105:53.33	2	152	140	On
002	010	J 3737	22 Sep 98	1554	N10:13.29	W107:05.59	4	99	140	Off
002	010	J 3741	23 Sep 98	0758	N10:19.94	W108:43.63	2	92	88	On
002	010	J 3760	25 Sep 98	0847	N10:48.48	W112:56.35	2	91	152	On
002		J 3761	25 Sep 98	1117	N10:47.69	W113:20.19	4	92	65	On
002		J 3762	25 Sep 98	1117	N10:48.77	W113:20.22	4	92	30	On
002		J 3763	25 Sep 98	1253	N10:44.95	W113:26.54	4	152	35	On
002	010	J 3765	25 Sep 98	1855	N11:02.75	W114:21.21	4	149	398	On
002	010	J 3770	26 Sep 98	1218	N11:29.84	W114:21.23	3	91	148	On
002	010	J 3771	26 Sep 98	1407	N11:35.76	W114:05.45	3	149	427	On
002	003	J 3775	26 Sep 98	1645	N11:37.47	W113:44.22	3	168	300	On
002	010	J 3777	27 Sep 98	0829	N12:05.90	W111:43.32	4	92	73	On
002	010	J 3778	27 Sep 98	1211	N12:13.30	W111:07.56	3	92	133	On
002	010	J 3784	27 Sep 98	1852	N12:20.64	W110:16.91	5	168	113	Off
002	010	J 3785	27 Sep 98	1857	N12:19.52	W110:16.75	5	168	103	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Ef-fort
002		J 3793	28 Sep 98	1611	N12:52.06	W107:50.90	1	152	20	On
002		J 3801	29 Sep 98	1128	N14:27.84	W106:14.89	2	152	74	On
002		J 3802	29 Sep 98	1612	N15:05.77	W106:00.01	3	92	5	On
002	010	J 3804	29 Sep 98	1810	N15:29.52	W105:54.73	3	91	192	On
002	018	J 3806	30 Sep 98	1649	N18:21.99	W104:56.91	3	149	198	On
002		J 3809	5 Oct 98	1445	N18:54.74	W104:34.45	4	91	60	On
002	010	J 3812	6 Oct 98	0750	N16:23.62	W104:10.69	2	91	160	On
002		J 3817	6 Oct 98	1252	N15:47.57	W104:15.79	2	149	120	On
002		J 3818	6 Oct 98	1352	N15:44.57	W104:17.68	2	92	16	On
002		J 3819	6 Oct 98	1416	N15:35.67	W104:16.56	2	91	70	On
002	010	J 3823	7 Oct 98	0930	N12:58.78	W104:38.22	3	91	98	On
002	010	J 3824	7 Oct 98	1241	N12:28.32	W104:44.25	3	92	78	On
002	010	J 3826	7 Oct 98	1415	N12:15.63	W104:49.13	2	168	78	On
002	010	J 3827	7 Oct 98	1504	N12:09.11	W104:47.19	3	181	109	On
002	010	J 3829	7 Oct 98	1628	N11:59.89	W104:52.76	3	181	105	On
002	010 077	J 3830	7 Oct 98	1755	N11:54.07	W104:44.64	3	91	63	On
002		J 3832	8 Oct 98	0918	N09:51.65	W105:02.74	4	149	22	On
002		J 3833	8 Oct 98	1119	N09:37.99	W104:59.09	3	92	46	On
002	010	J 3834	8 Oct 98	1604	N08:59.26	W105:08.05	4	168	150	On
002		J 3857	12 Oct 98	1759	S02:54.29	W106:46.51	3	168	25	On
002	101	J 3876	16 Oct 98	1354	S04:32.31	W103:23.72	4	92	77	On
002	101	J 3878	16 Oct 98	1704	S04:13.47	W103:06.87	4	181	613	On
002	101	J 3881	17 Oct 98	1111	S02:35.50	W101:35.94	3	149	153	On
002		J 3904	19 Oct 98	1312	N01:57.96	W096:54.79	5	91	13	On
002		J 3909	20 Oct 98	1253	N04:16.93	W094:33.17	4	152	98	On
002		J 3925	2 Nov 98	1545	N04:45.90	W091:24.61	4	111	52	On
002	003	J 3926	3 Nov 98	0631	N03:01.95	W092:12.59	4	126	163	On
002		J 4020	12 Nov 98	1232	N00:52.51	W080:19.74	4	73	250	On
002		J 4025	13 Nov 98	1109	N02:52.07	W078:29.50	5	185	168	On
002		J 4028	14 Nov 98	0749	N03:35.51	W077:43.35	4	126	14	Off
002		J 4046	22 Nov 98	1534	N08:32.19	W079:38.61	2	73	5	On
002		J 4077	25 Nov 98	0854	N08:51.26	W088:17.68	4	153	15	On
002	018	J 4081	25 Nov 98	1035	N08:51.35	W088:31.86	4	126	65	On
002	018	J 4083	25 Nov 98	1208	N08:56.75	W088:43.13	5	73	119	On
002		J 4086	25 Nov 98	1528	N09:01.45	W089:11.04	4	153	78	On
002	018	J 4087	25 Nov 98	1600	N09:01.24	W089:09.09	4	73	3	Off
002		J 4099	27 Nov 98	0648	N11:07.00	W094:37.59	3	182	57	On
002	010	J 4110	29 Nov 98	1200	N16:46.77	W100:28.23	1	188	87	Off
002	010	J 4112	29 Nov 98	1244	N16:45.41	W100:34.92	1	99	197	Off
002	010	J 4116	29 Nov 98	1430	N16:40.40	W100:42.59	0	153	59	On
002	010	J 4117	29 Nov 98	1433	N16:35.59	W100:37.61	0	99	228	Off
002		J 4127	30 Nov 98	1002	N17:03.64	W103:09.65	2	99	37	Off
002		J 4128	30 Nov 98	1044	N17:06.77	W103:15.34	2	188	92	On
002	013	J 4129	30 Nov 98	1131	N17:08.39	W103:24.53	2	185	25	On
002		J 4132	30 Nov 98	1219	N17:08.90	W103:23.98	0	153	7	On
002		J 4133	30 Nov 98	1306	N17:12.47	W103:30.54	0	111	37	On
002		J 4138	30 Nov 98	1805	N17:29.20	W104:03.24	1	153	20	On
002		J 4141	1 Dec 98	1131	N18:06.49	W106:43.10	3	185	16	On
<i>Stenella longirostris</i> (unid. subsp.)										
003	077	E 151	8 Sep 98	0856	N10:00.05	W142:35.76	2	126	90	Off
003	002	E 249	1 Oct 98	1420	N19:17.27	W107:50.84	4	186	120	On
003	002	E 254	2 Oct 98	1707	N19:07.29	W109:27.84	4	153	159	On
003		E 273	10 Oct 98	1043	N05:23.41	W119:03.08	4	126	3	On
003	002	E 283	11 Oct 98	1224	N03:43.26	W117:46.97	5	56	271	On
003	002	E 284	11 Oct 98	1351	N03:41.36	W117:38.59	5	185	185	On
003	002	E 374	22 Oct 98	1125	N10:00.99	W089:02.42	2	153	83	On
003	077	E 580	2 Dec 98	1106	S07:43.08	W088:31.12	4	184	312	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
003	002	E 585	2 Dec 98	1731	S06:57.32	W089:08.57	4	149	1020	On
003		E 586	3 Dec 98	0910	S05:01.63	W088:28.74	4	186	259	On
003	002	M 2217	19 Sep 98	1641	N07:43.78	W099:39.46	5	143	26	On
003	002	M 2243	2 Oct 98	1126	N11:26.60	W106:57.45	2	125	130	On
003	002 018	M 2247	2 Oct 98	1521	N11:43.23	W106:19.69	3	74	92	On
003		J 3543	31 Aug 98	1131	N12:26.55	W088:55.83	5	125	5	On
003	018	J 3544	31 Aug 98	1149	N12:26.31	W088:55.62	5	7	467	Off
003		J 3549	1 Sep 98	1103	N11:57.04	W087:44.06	3	147	330	On
003		J 3582	1 Sep 98	1847	N11:32.00	W087:10.81	2	147	743	On
003		J 3624	3 Sep 98	0647	N09:38.17	W085:33.96	3	143	267	On
003		J 3636	4 Sep 98	0929	N08:41.71	W084:05.93	3	125	33	On
003		J 3646	5 Sep 98	0722	N07:49.86	W082:40.50	3	7	202	On
003		J 3678	13 Sep 98	0707	N07:04.69	W080:27.37	4	168	232	On
003		J 3755	24 Sep 98	1133	N10:31.57	W110:45.01	1	92	24	Off
003	002	J 3775	26 Sep 98	1645	N11:37.47	W113:44.22	3	168	300	On
003	002	J 3926	3 Nov 98	0631	N03:01.95	W092:12.59	4	126	163	On
003		J 4035	15 Nov 98	0828	N06:27.03	W077:36.13	1	182	1	On
003		J 4045	15 Nov 98	1708	N07:19.89	W078:27.70	1	73	163	On
<i>Delphinus sp.</i>										
005		E 376	22 Oct 98	1217	N09:54.50	W088:55.68	1	73	10	On
005		E 498	22 Nov 98	1804	S10:39.49	W079:42.65	4	149	33	Off
005		E 513	25 Nov 98	1113	S08:44.46	W079:25.19	2	92	245	On
005		E 548	29 Nov 98	0821	S03:31.77	W081:23.05	4	184	287	On
005		M 2186	13 Sep 98	1124	N06:47.49	W079:33.81	4	125	1	On
005		M 2417	7 Nov 98	1544	N20:49.22	W108:41.32	5	74	30	On
005		J 3073	2 Aug 98	1915	N27:42.71	W115:09.90	5	143	12	On
005		J 3164	9 Aug 98	0628	N26:10.88	W111:06.16	2	125	100	On
005		J 3287	12 Aug 98	0858	N23:49.27	W109:01.41	2	74	20	On
005		J 3461	28 Aug 98	0636	N12:25.42	W091:32.22	1	143	5	On
005		J 3638	4 Sep 98	0958	N08:34.94	W084:06.18	3	125	15	On
005		J 3919	23 Oct 98	1052	N09:24.15	W085:19.68	5	4	75	Off
005		J 3960	6 Nov 98	0810	S01:20.42	W092:22.70	3	153	46	On
005		J 3961	6 Nov 98	0816	S01:15.31	W092:19.90	3	126	35	Off
005		J 4004	10 Nov 98	1020	S02:26.84	W083:16.33	4	111	70	On
<i>Stenella attenuata graffmani</i>										
006		M 2087	21 Aug 98	1056	N13:47.65	W090:45.48	2	181	13	On
006	018	M 2088	21 Aug 98	1131	N13:44.37	W090:43.91	3	149	53	On
006		M 2183	7 Sep 98	1522	N08:39.19	W079:16.78	3	91	29	On
006		M 2433	14 Nov 98	1305	N19:02.07	W104:46.12	2	7	283	On
006		J 3319	18 Aug 98	1149	N23:05.53	W106:25.10	1	4	50	Off
006		J 3327	18 Aug 98	1403	N22:51.24	W106:26.79	1	74	41	On
006		J 3333	19 Aug 98	0924	N21:30.28	W105:43.08	3	74	228	On
006		J 3391	24 Aug 98	1325	N16:43.18	W099:54.33	4	147	193	On
006		J 3392	24 Aug 98	1444	N16:39.72	W099:47.12	4	147	21	On
006		J 3393	24 Aug 98	1539	N16:36.94	W099:40.33	4	143	7	On
006		J 3394	24 Aug 98	1618	N16:33.30	W099:31.00	4	143	75	On
006		J 3395	24 Aug 98	1717	N16:31.88	W099:27.06	4	74	33	On
006		J 3403	25 Aug 98	0919	N15:51.87	W097:54.08	3	143	49	On
006		J 3425	26 Aug 98	1313	N15:53.19	W094:42.95	1	74	23	On
006		J 3430	26 Aug 98	1455	N15:57.00	W094:27.60	1	125	31	On
006		J 3435	26 Aug 98	1739	N15:43.70	W094:15.08	3	74	65	On
006		J 3439	27 Aug 98	0722	N14:49.87	W093:14.82	2	7	8	On
006		J 3440	27 Aug 98	0744	N14:51.02	W093:10.87	2	7	11	On
006		J 3441	27 Aug 98	0759	N14:50.01	W093:11.52	2	125	7	On
006		J 3444	27 Aug 98	0843	N14:48.80	W093:00.21	2	7	227	On
006		J 3451	27 Aug 98	1508	N14:14.52	W092:26.60	3	74	16	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
006		J 3452	27 Aug 98	1525	N14:14.27	W092:23.13	3	7	35	On
006		J 3533	31 Aug 98	0706	N13:09.96	W089:04.47	4	7	10	On
006		J 3537	31 Aug 98	0753	N13:04.75	W089:04.18	4	143	4	On
006		J 3538	31 Aug 98	0805	N13:03.44	W089:04.10	4	7	2	On
006		J 3539	31 Aug 98	0809	N13:01.00	W089:01.86	4	143	4	On
006		J 3540	31 Aug 98	0821	N13:01.40	W089:02.68	4	143	6	On
006		J 3545	1 Sep 98	0820	N12:21.96	W087:56.56	3	143	4	On
006		J 3548	1 Sep 98	1103	N12:02.84	W087:46.54	3	74	8	On
006		J 3551	1 Sep 98	1124	N12:02.22	W087:46.01	3	4	3	Off
006		J 3577	1 Sep 98	1744	N11:34.80	W087:22.13	2	143	4	On
006		J 3583	2 Sep 98	0648	N11:27.97	W086:34.29	2	183	9	On
006		J 3584	2 Sep 98	0656	N11:27.91	W086:34.00	2	74	60	On
006		J 3585	2 Sep 98	0714	N11:24.47	W086:32.36	2	125	13	On
006		J 3586	2 Sep 98	0728	N11:22.45	W086:32.25	2	147	9	On
006		J 3588	2 Sep 98	0803	N11:19.11	W086:33.86	3	147	8	On
006		J 3589	2 Sep 98	0816	N11:17.00	W086:34.17	2	147	6	On
006		J 3590	2 Sep 98	0818	N11:14.61	W086:32.75	2	7	8	On
006		J 3625	3 Sep 98	0830	N09:22.47	W085:27.97	2	74	85	On
006		J 3627	3 Sep 98	0947	N09:29.25	W085:26.45	4	143	97	On
006		J 3647	5 Sep 98	1025	N07:42.11	W082:15.15	2	147	240	On
006		J 3648	5 Sep 98	1116	N07:33.26	W082:20.51	4	7	435	On
006		J 3650	5 Sep 98	1557	N07:23.88	W082:09.85	4	143	171	On
006		J 3655	6 Sep 98	0912	N07:19.07	W081:09.79	3	99	120	Off
006		J 3657	6 Sep 98	0947	N07:16.42	W081:09.53	3	147	3	On
006		J 3662	6 Sep 98	1529	N07:12.49	W080:26.38	4	143	177	On
006		J 3663	6 Sep 98	1555	N07:11.42	W080:24.42	4	7	142	On
006		J 3673	12 Sep 98	1336	N08:29.84	W079:36.27	4	92	4	On
006		J 3674	12 Sep 98	1442	N08:17.64	W079:46.15	4	91	25	On
006		J 3676	12 Sep 98	1739	N08:11.63	W079:58.33	3	91	2	Off
006		J 3677	12 Sep 98	1751	N08:09.55	W079:58.62	4	92	6	On
006		J 3921	30 Oct 98	0958	N11:21.71	W086:23.02	5	111	6	Off
006		J 4017	12 Nov 98	0654	N00:14.70	W080:32.96	4	73	185	On
006		J 4022	12 Nov 98	1446	N01:01.01	W080:06.00	4	153	89	On
006		J 4026	13 Nov 98	1347	N03:00.80	W078:10.02	5	153	6	Off
006		J 4053	23 Nov 98	0624	N07:02.51	W080:57.19	3	73	8	On
006		J 4054	23 Nov 98	0709	N07:02.54	W081:02.80	3	185	17	On
006		J 4105	29 Nov 98	0837	N16:48.41	W099:54.77	2	111	3	Off
<i>Stenella longirostris orientalis</i>										
010	002	E 207	18 Sep 98	1625	N12:33.00	W121:42.19	1	184	119	On
010	002	E 210	18 Sep 98	1726	N12:31.68	W121:30.14	1	184	216	On
010		E 218	19 Sep 98	1607	N13:05.62	W118:34.63	3	126	181	On
010	002	E 220	20 Sep 98	0846	N14:06.86	W116:36.31	3	186	188	On
010	002	E 235	23 Sep 98	1727	N18:22.29	W107:02.95	4	1	208	Off
010		E 236	23 Sep 98	1809	N18:20.26	W106:58.60	4	126	103	Off
010		E 255	3 Oct 98	1159	N19:51.98	W111:26.13	4	184	58	On
010	002	E 266	6 Oct 98	1648	N14:29.82	W119:41.65	4	185	84	On
010		E 269	7 Oct 98	1232	N12:50.16	W118:13.80	6	73	168	Off
010	002	E 305	19 Oct 98	1103	N10:39.08	W095:31.17	3	126	147	On
010	002	E 306	19 Oct 98	1400	N10:33.07	W095:03.51	4	186	137	On
010		E 311	20 Oct 98	0622	N10:24.47	W093:20.57	2	56	73	On
010		E 313	20 Oct 98	0828	N10:29.80	W093:00.76	2	73	39	On
010	002	E 402	31 Oct 98	1602	N03:20.11	W089:16.31	4	92	99	On
010	013	M 2013	5 Aug 98	0643	N17:43.03	W114:04.88	2	149	45	On
010		M 2027	8 Aug 98	1658	N13:37.10	W108:02.99	3	152	24	On
010	002	M 2028	9 Aug 98	1308	N13:12.67	W105:40.02	5	91	178	On
010		M 2031	9 Aug 98	1623	N13:11.55	W105:16.54	5	168	30	On
010	077	M 2040	12 Aug 98	1447	N14:35.24	W098:17.92	1	152	42	Off

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
010	002	M 2049	13 Aug 98	0929	N14:21.91	W096:30.35	4	181	55	On
010	002	M 2051	13 Aug 98	1345	N14:10.47	W095:57.41	5	149	48	On
010		M 2060	14 Aug 98	1108	N13:29.02	W094:20.27	3	181	10	On
010		M 2095	21 Aug 98	1633	N13:11.95	W090:38.22	4	98	2400	Off
010	013	M 2104	22 Aug 98	1049	N11:30.78	W090:26.08	2	149	1375	On
010		M 2109	22 Aug 98	1332	N11:35.39	W090:44.40	1	92	43	On
010		M 2110	22 Aug 98	1411	N11:33.63	W090:49.24	1	91	220	On
010	002 077	M 2117	22 Aug 98	1647	N11:37.87	W091:07.34	2	149	56	On
010	002	M 2118	22 Aug 98	1725	N11:40.26	W091:09.74	3	92	230	On
010		M 2120	23 Aug 98	0916	N12:13.64	W093:13.68	3	181	20	On
010	002	M 2121	23 Aug 98	0940	N12:14.04	W093:17.08	3	91	422	On
010	002	M 2122	23 Aug 98	1021	N12:16.87	W093:20.50	3	149	108	On
010	002	M 2126	23 Aug 98	1207	N12:23.83	W093:29.75	3	152	132	On
010	002	M 2127	23 Aug 98	1247	N12:24.63	W093:31.76	3	92	197	On
010	002	M 2130	23 Aug 98	1536	N12:33.69	W093:55.77	3	92	163	On
010		M 2133	24 Aug 98	1206	N12:17.79	W096:28.93	3	181	110	On
010	002	M 2135	24 Aug 98	1426	N12:08.39	W096:45.95	4	91	53	On
010		M 2146	3 Sep 98	1703	N05:20.05	W083:46.08	5	92	103	On
010		M 2149	4 Sep 98	1218	N05:17.23	W082:09.36	4	168	85	On
010	002	M 2241	30 Sep 98	1215	N10:01.46	W109:27.41	4	7	121	On
010	002	M 2255	3 Oct 98	0747	N12:35.98	W104:28.46	4	147	110	On
010	002	M 2259	4 Oct 98	0721	N14:04.76	W101:39.71	2	143	325	On
010	002	M 2261	4 Oct 98	0925	N14:11.36	W101:23.43	2	147	260	On
010	002	M 2269	5 Oct 98	0902	N15:46.81	W100:39.16	1	125	61	On
010		M 2272	5 Oct 98	1316	N16:04.79	W101:06.67	3	183	267	On
010		M 2279	6 Oct 98	0928	N17:34.75	W103:25.64	3	7	80	On
010	002	M 2284	6 Oct 98	1418	N18:08.91	W103:53.87	3	143	231	On
010	090	M 2288	12 Oct 98	1737	N18:26.53	W105:04.51	4	183	95	On
010	002	M 2344	26 Oct 98	0726	N10:53.14	W123:22.53	1	74	231	On
010	002	M 2346	26 Oct 98	0927	N11:06.50	W123:23.90	1	7	92	On
010	002	M 2347	26 Oct 98	1039	N11:20.38	W123:23.21	2	7	247	On
010	002	M 2384	5 Nov 98	1125	N21:25.82	W111:03.51	4	7	320	On
010		M 2394	5 Nov 98	1644	N20:45.16	W110:55.40	4	183	518	On
010	002	M 2410	6 Nov 98	1324	N21:27.78	W109:39.23	4	143	193	On
010	002	M 2421	8 Nov 98	0908	N20:09.33	W107:22.81	3	183	116	On
010	002	M 2426	8 Nov 98	1451	N19:58.64	W106:33.14	2	143	183	On
010	002	M 2439	14 Nov 98	1524	N18:48.16	W105:02.26	2	143	290	On
010	002	M 2456	17 Nov 98	1152	N14:10.71	W111:57.39	4	143	363	On
010	002	M 2461	18 Nov 98	0803	N13:15.99	W114:22.49	4	7	113	On
010	002	M 2478	21 Nov 98	1158	N08:47.25	W121:06.71	3	143	250	On
010	002	M 2508	25 Nov 98	1717	N09:02.90	W130:05.21	4	125	123	On
010		J 3145	6 Aug 98	0943	N24:09.77	W108:08.12	3	7	323	On
010	002	J 3292	12 Aug 98	1824	N22:55.23	W108:49.55	4	7	217	On
010	002 013	J 3307	13 Aug 98	1053	N23:25.16	W107:40.45	1	143	348	On
010	002	J 3310	13 Aug 98	1221	N23:12.86	W107:38.97	1	74	307	On
010	002	J 3314	13 Aug 98	1559	N22:51.91	W107:33.79	2	74	280	On
010	002	J 3340	20 Aug 98	1112	N21:18.93	W107:16.37	3	147	230	On
010	002	J 3342	20 Aug 98	1505	N21:21.03	W107:44.20	3	147	207	On
010	002	J 3345	21 Aug 98	0743	N20:56.16	W107:08.73	3	74	220	On
010	002	J 3353	21 Aug 98	1259	N20:46.89	W106:31.35	1	7	117	On
010		J 3383	23 Aug 98	1348	N17:36.79	W102:31.72	1	125	387	On
010	002	J 3385	23 Aug 98	1559	N17:27.54	W102:13.34	3	143	145	On
010		J 3400	25 Aug 98	0728	N15:56.32	W098:00.92	2	147	300	On
010		J 3401	25 Aug 98	0752	N15:56.81	W098:04.02	2	147	597	On
010	090	J 3436	27 Aug 98	0630	N14:52.72	W093:19.80	2	125	115	On
010	002	J 3468	28 Aug 98	0754	N12:16.33	W091:23.85	0	74	100	On
010		J 3469	28 Aug 98	0756	N12:14.74	W091:22.49	0	74	143	On
010		J 3477	28 Aug 98	0940	N12:03.57	W091:14.01	2	7	42	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Efort
010	002 077	J 3483	28 Aug 98	1033	N11:57.32	W091:08.86	1	74	211	On
010	002	J 3485	28 Aug 98	1134	N11:52.71	W091:06.05	1	74	113	On
010	002	J 3503	28 Aug 98	1423	N11:34.74	W091:00.03	2	143	55	On
010		J 3552	1 Sep 98	1137	N11:56.38	W087:48.01	3	125	925	On
010		J 3560	1 Sep 98	1458	N11:34.84	W087:38.72	2	147	257	Off
010		J 3687	14 Sep 98	0735	N07:03.03	W083:14.77	2	4	37	Off
010	002	J 3726	19 Sep 98	1405	N09:42.46	W098:04.64	4	149	200	On
010		J 3727	19 Sep 98	1559	N09:46.13	W098:10.06	3	4	51	Off
010	002	J 3732	21 Sep 98	1516	N10:07.67	W104:10.30	3	91	103	On
010	002	J 3733	22 Sep 98	0759	N10:09.13	W105:53.33	2	152	140	On
010	002	J 3737	22 Sep 98	1554	N10:13.29	W107:05.59	4	99	140	Off
010		J 3739	22 Sep 98	1804	N10:18.15	W107:11.81	4	91	32	On
010	002	J 3741	23 Sep 98	0758	N10:19.94	W108:43.63	2	92	88	On
010		J 3756	24 Sep 98	1136	N10:28.47	W110:51.68	1	99	212	Off
010	002	J 3760	25 Sep 98	0847	N10:48.48	W112:56.35	2	91	152	On
010	002	J 3765	25 Sep 98	1855	N11:02.75	W114:21.21	4	149	398	On
010	002	J 3770	26 Sep 98	1218	N11:29.84	W114:21.23	3	91	148	On
010	002	J 3771	26 Sep 98	1407	N11:35.76	W114:05.45	3	149	427	On
010	002	J 3777	27 Sep 98	0829	N12:05.90	W111:43.32	4	92	73	On
010	002	J 3778	27 Sep 98	1211	N12:13.30	W111:07.56	3	92	133	On
010	002	J 3784	27 Sep 98	1852	N12:20.64	W110:16.91	5	168	113	Off
010	002	J 3785	27 Sep 98	1857	N12:19.52	W110:16.75	5	168	103	On
010		J 3787	28 Sep 98	1029	N12:43.33	W108:32.78	3	149	102	On
010		J 3799	28 Sep 98	1828	N12:53.07	W107:32.60	1	149	36	On
010	002	J 3804	29 Sep 98	1810	N15:29.52	W105:54.73	3	91	192	On
010	002	J 3812	6 Oct 98	0750	N16:23.62	W104:10.69	2	91	160	On
010	002	J 3823	7 Oct 98	0930	N12:58.78	W104:38.22	3	91	98	On
010	002	J 3824	7 Oct 98	1241	N12:28.32	W104:44.25	3	92	78	On
010	002	J 3826	7 Oct 98	1415	N12:15.63	W104:49.13	2	168	78	On
010	002	J 3827	7 Oct 98	1504	N12:09.11	W104:47.19	3	181	109	On
010	002	J 3829	7 Oct 98	1628	N11:59.89	W104:52.76	3	181	105	On
010	002 077	J 3830	7 Oct 98	1755	N11:54.07	W104:44.64	3	91	63	On
010	002	J 3834	8 Oct 98	1604	N08:59.26	W105:08.05	4	168	150	On
010		J 4030	14 Nov 98	1257	N04:06.17	W077:49.04	4	73	75	Off
010	002	J 4110	29 Nov 98	1200	N16:46.77	W100:28.23	1	188	87	Off
010	002	J 4112	29 Nov 98	1244	N16:45.41	W100:34.92	1	99	197	Off
010	002	J 4116	29 Nov 98	1430	N16:40.40	W100:42.59	0	153	59	On
010	002	J 4117	29 Nov 98	1433	N16:35.59	W100:37.61	0	99	228	Off
<i>Stenella longirostris</i> (whitebelly)										
011	077	E 117	21 Aug 98	1639	N11:09.09	W142:55.52	2	153	153	On
011	002	E 150	8 Sep 98	0837	N09:56.18	W142:35.11	2	1	176	On
011	002	E 155	9 Sep 98	1415	N12:24.38	W140:11.51	4	73	237	On
011		E 156	9 Sep 98	1806	N12:44.20	W139:46.67	5	153	47	On
011	002	E 168	13 Sep 98	0837	N07:37.94	W133:18.05	5	153	243	On
011	002	E 173	16 Sep 98	0802	N12:01.49	W127:55.98	2	73	114	On
011	002	E 179	16 Sep 98	1237	N12:35.12	W127:34.93	3	184	115	On
011	002	E 184	17 Sep 98	0918	N12:35.71	W125:03.76	3	126	150	On
011	002	E 188	18 Sep 98	0708	N12:30.21	W122:34.97	2	186	165	On
011	002	E 282	11 Oct 98	1101	N03:44.69	W117:51.28	5	126	142	On
011	002	E 293	13 Oct 98	1613	N04:54.97	W113:21.86	4	153	297	On
011	015	E 604	5 Dec 98	1214	N00:45.51	W085:02.50	3	149	153	On
011	002	E 613	6 Dec 98	1514	N03:01.59	W082:26.97	5	92	79	On
011		M 2197	15 Sep 98	1017	N06:41.42	W085:30.80	4	7	36	On
011	002	M 2224	22 Sep 98	1627	N06:56.48	W108:59.63	3	143	54	On
011	002	M 2476	21 Nov 98	0839	N08:51.15	W120:43.74	3	69	255	On
011	002	M 2477	21 Nov 98	1107	N08:51.43	W120:56.77	3	125	350	On



Table 2 (continued)

Other Code	Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Efort
<i>Stenella coeruleoalba</i>										
013		E 16	31 Jul 98	0948	N06:41.06	W080:40.08	1	153	47	On
013	017	E 19	31 Jul 98	1150	N06:39.17	W080:50.46	0	73	94	On
013		E 23	31 Jul 98	1529	N06:17.03	W081:02.70	4	186	37	On
013		E 36	1 Aug 98	1002	N04:55.61	W082:30.09	2	126	63	On
013		E 43	1 Aug 98	1815	N04:11.25	W083:31.21	2	186	22	On
013		E 45	2 Aug 98	0833	N04:00.75	W084:38.76	3	184	65	On
013		E 49	5 Aug 98	1106	N01:41.01	W096:24.83	4	73	19	On
013		E 50	5 Aug 98	1205	N01:37.52	W096:31.43	4	1	106	On
013		E 53	5 Aug 98	1754	N01:30.87	W097:30.96	4	73	39	On
013		E 54	6 Aug 98	0724	N01:16.35	W099:07.59	4	99	29	Off
013		E 55	6 Aug 98	0851	N01:14.91	W099:24.34	4	153	25	On
013		E 61	7 Aug 98	1158	N00:20.15	W103:41.84	4	184	86	On
013		E 62	7 Aug 98	1253	N00:19.30	W103:47.74	4	186	53	On
013		E 66	7 Aug 98	1708	N00:16.33	W104:28.41	3	153	3	On
013		E 67	7 Aug 98	1734	N00:14.02	W104:31.78	3	186	5	On
013		E 68	8 Aug 98	0856	S00:12.40	W106:34.69	2	153	47	On
013	017	E 71	8 Aug 98	1130	S00:13.95	W106:56.11	2	182	22	On
013		E 75	8 Aug 98	1326	S00:14.80	W107:16.87	3	186	85	On
013		E 85	10 Aug 98	1151	S01:33.73	W113:24.42	3	1	23	On
013		E 90	11 Aug 98	0722	S02:21.34	W115:38.29	4	186	50	On
013		E 91	11 Aug 98	0844	S02:24.28	W115:49.04	4	1	21	On
013		E 96	12 Aug 98	0937	S04:06.81	W119:11.99	5	1	55	On
013		E 111	18 Aug 98	0932	N05:39.40	W135:08.60	4	1	87	On
013		E 114	20 Aug 98	0849	N08:22.44	W138:56.45	4	126	33	On
013		E 115	20 Aug 98	1233	N08:45.61	W139:27.96	4	1	15	On
013		E 116	20 Aug 98	1318	N08:51.56	W139:28.43	4	184	34	On
013		E 131	3 Sep 98	1136	N13:10.08	W153:30.04	3	182	61	Off
013		E 141	6 Sep 98	0841	N05:48.45	W147:04.45	5	186	4	On
013		E 149	8 Sep 98	0651	N09:45.83	W142:43.13	2	73	36	On
013		E 152	8 Sep 98	1135	N09:56.41	W142:15.89	2	73	56	On
013		E 159	10 Sep 98	1524	N14:14.21	W138:20.98	4	185	96	On
013		E 160	10 Sep 98	1726	N14:24.82	W138:08.64	4	184	125	On
013		E 162	11 Sep 98	1704	N12:20.74	W136:10.27	4	1	13	On
013		E 166	12 Sep 98	1818	N09:11.92	W134:14.68	1	185	60	On
013		E 212	18 Sep 98	1826	N12:32.50	W121:23.01	2	186	78	On
013		E 219	19 Sep 98	1821	N13:21.60	W118:17.61	2	73	22	On
013		E 225	21 Sep 98	1746	N15:57.68	W112:28.91	3	186	12	On
013		E 226	21 Sep 98	1834	N16:03.39	W112:21.51	3	126	50	On
013		E 227	22 Sep 98	0929	N16:46.72	W110:49.64	2	186	19	On
013		E 229	22 Sep 98	1217	N16:57.99	W110:25.43	2	186	11	On
013		E 230	22 Sep 98	1659	N17:05.77	W109:48.38	4	186	3	On
013		E 233	23 Sep 98	1321	N18:10.65	W107:23.61	4	126	13	On
013		E 243	24 Sep 98	1553	N18:56.48	W105:13.86	2	153	27	On
013		E 247	1 Oct 98	1132	N18:51.87	W107:36.74	4	73	10	On
013		E 260	5 Oct 98	0828	N17:10.61	W116:33.22	0	73	4	On
013		E 265	6 Oct 98	1312	N14:56.06	W119:57.00	4	73	5	On
013		E 277	10 Oct 98	1822	N04:52.46	W119:19.41	5	73	43	On
013		E 279	11 Oct 98	0708	N04:06.04	W118:13.85	5	56	127	On
013		E 300	17 Oct 98	1817	N11:00.16	W100:29.27	5	73	7	On
013		E 308	19 Oct 98	1534	N10:35.70	W094:52.72	2	99	29	Off
013		E 312	20 Oct 98	0717	N10:24.82	W093:07.69	2	153	133	On
013		E 321	20 Oct 98	1426	N10:23.74	W092:15.09	1	56	51	On
013		E 333	21 Oct 98	0654	N10:07.50	W090:40.85	1	56	55	On
013		E 336	21 Oct 98	0724	N10:11.61	W090:38.60	0	186	105	On
013		E 340	21 Oct 98	0832	N10:12.09	W090:30.66	1	73	43	On
013		E 344	21 Oct 98	1026	N10:06.74	W090:16.75	1	184	12	On
013		E 357	21 Oct 98	1410	N10:07.80	W089:49.30	2	182	42	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Ef- fort
013		E 358	21 Oct 98	1445	N10:05.36	W089:45.78	2	56	27	On
013		E 361	21 Oct 98	1558	N10:04.44	W089:36.01	3	99	50	Off
013		E 362	21 Oct 98	1602	N10:05.10	W089:36.18	3	73	10	Off
013		E 364	22 Oct 98	0633	N10:04.51	W089:31.99	2	182	15	On
013		E 366	22 Oct 98	0749	N10:08.27	W089:20.42	3	186	33	On
013		E 368	22 Oct 98	0821	N10:12.39	W089:17.87	2	126	28	On
013		E 370	22 Oct 98	0930	N10:17.84	W089:11.43	2	56	61	On
013		E 372	22 Oct 98	1008	N10:08.32	W089:09.34	2	56	75	On
013		E 379	22 Oct 98	1410	N09:58.39	W088:40.64	2	153	96	On
013		E 394	29 Oct 98	1634	N08:04.67	W085:11.39	4	184	4	On
013		E 399	31 Oct 98	0611	N04:36.80	W088:17.65	4	91	6	On
013		E 401	31 Oct 98	0817	N04:19.70	W088:25.60	5	92	104	On
013		E 409	1 Nov 98	1435	N00:56.51	W091:13.53	3	91	278	On
013		E 410	1 Nov 98	1543	N00:46.17	W091:17.82	3	92	30	On
013		E 425	4 Nov 98	1506	S03:39.69	W092:53.31	4	92	15	On
013		E 426	4 Nov 98	1559	S03:47.95	W092:56.59	4	186	66	On
013		E 437	6 Nov 98	0940	S08:26.80	W097:05.49	4	181	112	On
013		E 438	6 Nov 98	1130	S08:29.07	W097:12.09	4	92	32	On
013		E 449	9 Nov 98	0759	S12:18.60	W094:44.78	5	91	100	On
013		E 589	3 Dec 98	1527	S04:09.05	W088:12.94	4	181	151	On
013		E 591	4 Dec 98	0743	S02:06.30	W087:27.39	3	168	47	On
013		E 598	4 Dec 98	1807	S00:54.36	W086:43.18	4	91	14	On
013		E 600	5 Dec 98	0832	N00:21.25	W085:28.08	3	91	43	On
013		E 602	5 Dec 98	0939	N00:26.14	W085:20.44	3	91	42	On
013		E 609	6 Dec 98	0850	N02:21.08	W083:11.96	5	181	11	On
013		E 611	6 Dec 98	1036	N02:32.07	W082:58.77	5	168	25	On
013		E 614	6 Dec 98	1614	N03:07.59	W082:29.34	5	91	19	On
013		E 615	6 Dec 98	1649	N03:06.97	W082:23.58	5	149	35	On
013		E 616	7 Dec 98	0732	N03:49.89	W080:50.28	6	152	19	On
013		E 623	7 Dec 98	1601	N03:47.08	W079:21.69	4	149	17	On
013		E 624	7 Dec 98	1649	N03:46.19	W079:16.78	4	91	10	On
013		M 2003	1 Aug 98	1712	N28:00.40	W119:44.81	3	181	56	On
013		M 2008	4 Aug 98	1316	N19:34.10	W115:10.97	3	168	85	On
013		M 2010	4 Aug 98	1503	N19:22.84	W115:02.52	3	149	24	On
013	010	M 2013	5 Aug 98	0643	N17:43.03	W114:04.88	2	149	45	On
013		M 2015	5 Aug 98	0834	N17:30.87	W113:55.95	2	168	62	On
013		M 2016	5 Aug 98	0958	N17:18.57	W113:46.80	3	181	67	On
013		M 2017	5 Aug 98	1039	N17:16.83	W113:43.51	3	91	15	On
013		M 2018	5 Aug 98	1759	N16:11.46	W113:08.59	4	149	18	On
013		M 2019	5 Aug 98	1841	N16:00.45	W113:06.80	3	149	15	On
013		M 2021	7 Aug 98	1247	N14:03.86	W110:08.39	4	92	63	On
013		M 2022	7 Aug 98	1531	N13:59.74	W109:42.54	4	92	16	On
013		M 2023	7 Aug 98	1619	N13:57.01	W109:31.41	3	152	5	On
013	002	M 2024	8 Aug 98	1242	N13:46.04	W108:38.85	2	149	147	On
013		M 2098	22 Aug 98	0618	N11:38.26	W090:16.45	3	91	33	On
013		M 2099	22 Aug 98	0652	N11:33.90	W090:15.87	4	91	8	On
013	010	M 2104	22 Aug 98	1049	N11:30.78	W090:26.08	2	149	1375	On
013		M 2106	22 Aug 98	1220	N11:33.45	W090:31.08	2	168	5	On
013		M 2107	22 Aug 98	1302	N11:34.86	W090:39.24	1	152	45	On
013		M 2119	23 Aug 98	0824	N12:16.45	W093:06.95	3	181	17	On
013		M 2129	23 Aug 98	1429	N12:30.84	W093:43.82	3	91	3	On
013		M 2132	23 Aug 98	1719	N12:43.32	W094:06.31	3	92	24	On
013		M 2141	30 Aug 98	1052	N05:01.20	W095:25.75	3	91	24	On
013		M 2142	30 Aug 98	1233	N04:59.82	W095:11.89	4	152	102	On
013		M 2145	3 Sep 98	1553	N05:18.64	W083:59.61	4	168	7	On
013		M 2150	4 Sep 98	1530	N05:23.34	W081:42.66	3	152	16	On
013		M 2151	5 Sep 98	0709	N05:19.52	W079:56.91	3	168	31	On
013		M 2158	5 Sep 98	1144	N05:12.94	W079:24.67	2	168	50	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Effort
013	018	M 2166	5 Sep 98	1748	N05:22.41	W078:54.68	2	168	64	On
013		M 2168	6 Sep 98	0907	N06:02.40	W078:28.61	3	149	23	On
013		M 2169	6 Sep 98	0915	N06:05.48	W078:29.10	3	149	28	Off
013		M 2189	13 Sep 98	1619	N06:18.00	W079:55.36	4	98	45	Off
013		M 2192	14 Sep 98	1650	N06:31.85	W083:23.73	4	143	23	On
013		M 2196	15 Sep 98	0925	N06:36.38	W085:24.60	3	143	23	On
013	002 077	M 2204	16 Sep 98	1637	N07:07.43	W089:48.10	4	143	55	On
013		M 2205	16 Sep 98	1838	N07:04.98	W089:55.57	5	7	58	On
013		M 2212	18 Sep 98	1314	N07:21.60	W095:52.97	5	143	14	On
013		M 2215	19 Sep 98	0912	N07:33.20	W098:30.25	5	7	28	On
013		M 2223	22 Sep 98	1532	N07:01.80	W108:51.38	3	147	36	On
013		M 2226	23 Sep 98	0905	N05:52.08	W109:02.53	4	143	137	On
013		M 2228	24 Sep 98	1124	N05:22.02	W112:01.22	5	125	38	On
013		M 2230	25 Sep 98	0858	N05:31.68	W114:48.17	5	143	32	On
013		M 2232	25 Sep 98	1328	N06:00.28	W115:20.16	5	7	36	On
013		M 2287	12 Oct 98	1643	N18:35.64	W105:00.87	5	125	15	On
013		M 2290	13 Oct 98	1553	N16:10.61	W106:46.75	3	74	20	On
013	021	M 2305	19 Oct 98	1600	N01:18.89	W113:18.88	4	74	69	On
013		M 2307	19 Oct 98	1737	N01:20.15	W113:30.39	2	143	22	On
013		M 2319	22 Oct 98	0855	N01:20.34	W121:16.61	4	125	45	On
013		M 2325	24 Oct 98	1353	N05:45.04	W123:22.49	3	74	115	On
013		M 2327	24 Oct 98	1613	N06:08.18	W123:19.10	3	125	77	On
013		M 2328	24 Oct 98	1634	N06:15.49	W123:20.86	3	143	73	On
013		M 2330	24 Oct 98	1730	N06:21.51	W123:21.26	2	143	143	On
013		M 2336	25 Oct 98	1157	N08:32.56	W123:18.29	1	74	18	On
013		M 2337	25 Oct 98	1230	N08:35.31	W123:23.34	1	7	20	On
013		M 2341	25 Oct 98	1318	N08:40.06	W123:21.25	1	143	42	On
013		M 2345	26 Oct 98	0733	N10:51.89	W123:20.81	1	143	19	Off
013		M 2349	26 Oct 98	1345	N11:40.03	W123:23.84	3	143	42	On
013		M 2350	26 Oct 98	1413	N11:42.97	W123:22.53	3	143	28	On
013		M 2358	30 Oct 98	1453	N21:44.60	W119:30.28	4	183	40	On
013		M 2359	30 Oct 98	1531	N21:36.26	W119:28.20	4	74	26	On
013		M 2380	4 Nov 98	1644	N20:58.44	W112:10.31	4	143	20	On
013		M 2381	5 Nov 98	0705	N21:52.50	W111:03.38	3	125	18	On
013		M 2389	5 Nov 98	1504	N21:01.13	W110:57.92	4	7	35	On
013		M 2415	7 Nov 98	1453	N20:56.24	W108:46.24	5	183	16	On
013		M 2419	7 Nov 98	1652	N20:42.66	W108:34.10	5	125	13	On
013		M 2448	15 Nov 98	1649	N17:17.76	W107:26.44	3	7	40	On
013		M 2453	16 Nov 98	1816	N15:03.61	W110:04.63	4	7	39	On
013		M 2465	18 Nov 98	1515	N12:56.73	W115:27.69	4	143	10	On
013		M 2475	20 Nov 98	1539	N09:12.39	W119:19.74	3	147	52	On
013		M 2492	23 Nov 98	1427	N05:22.93	W126:49.10	4	183	17	Off
013		M 2504	24 Nov 98	1836	N06:17.13	W129:13.21	4	69	14	On
013		M 2505	25 Nov 98	1155	N08:15.94	W129:52.61	2	183	44	On
013		J 3303	13 Aug 98	1010	N23:27.84	W107:44.48	1	7	45	On
013	002 010	J 3307	13 Aug 98	1053	N23:25.16	W107:40.45	1	143	348	On
013		J 3308	13 Aug 98	1152	N23:22.85	W107:38.21	1	74	35	On
013		J 3312	13 Aug 98	1440	N23:02.95	W107:37.91	1	7	29	On
013		J 3338	20 Aug 98	0946	N21:22.36	W107:06.45	3	74	28	On
013		J 3341	20 Aug 98	1232	N21:22.75	W107:19.51	4	7	30	On
013		J 3344	21 Aug 98	0720	N21:02.49	W107:10.76	1	125	18	On
013		J 3350	21 Aug 98	1126	N20:53.05	W106:46.39	1	125	19	On
013		J 3689	14 Sep 98	0825	N07:03.73	W083:20.86	3	92	11	On
013		J 3709	16 Sep 98	1742	N07:59.81	W089:49.88	4	149	12	On
013		J 3711	17 Sep 98	1237	N08:20.17	W092:01.32	5	181	17	On
013		J 3712	17 Sep 98	1459	N08:25.97	W092:21.13	5	4	4	Off
013		J 3721	18 Sep 98	1508	N09:03.88	W095:32.88	5	92	54	On
013		J 3722	19 Sep 98	0642	N09:37.13	W097:30.07	5	181	31	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Ef-fort
013		J 3735	22 Sep 98	1052	N10:12.06	W106:19.24	3	168	88	On
013		J 3748	23 Sep 98	1017	N10:15.68	W108:59.55	2	152	30	On
013		J 3767	26 Sep 98	0851	N11:22.83	W114:49.37	4	168	55	On
013		J 3782	27 Sep 98	1731	N12:18.66	W110:31.53	5	149	21	On
013		J 3820	6 Oct 98	1630	N15:23.95	W104:20.80	2	152	47	On
013		J 3839	11 Oct 98	0716	N00:57.01	W106:22.13	2	149	53	On
013		J 3840	11 Oct 98	1105	N00:46.72	W106:25.07	2	149	57	On
013		J 3845	11 Oct 98	1558	N00:16.52	W106:34.90	3	168	48	On
013		J 3859	13 Oct 98	0738	S04:42.63	W107:06.52	3	181	22	On
013		J 3873	16 Oct 98	1016	S04:54.13	W103:41.45	5	181	37	On
013		J 3877	16 Oct 98	1614	S04:21.04	W103:13.63	4	91	14	On
013		J 3883	17 Oct 98	1234	S02:27.29	W101:27.13	4	91	27	On
013		J 3890	18 Oct 98	1002	S00:37.01	W099:29.87	3	91	61	On
013	017	J 3891	18 Oct 98	1031	S00:32.04	W099:24.09	3	152	142	On
013		J 3893	18 Oct 98	1535	S00:04.00	W098:56.13	2	181	28	On
013		J 3894	18 Oct 98	1602	S00:02.01	W098:54.63	2	181	78	On
013		J 3895	18 Oct 98	1630	N00:00.20	W098:49.93	3	181	14	On
013		J 3902	18 Oct 98	1747	N00:11.25	W098:40.55	3	149	12	On
013		J 3911	20 Oct 98	1421	N04:24.38	W094:23.13	4	152	9	On
013		J 3914	21 Oct 98	0958	N05:55.30	W091:51.47	4	92	12	On
013		J 3927	3 Nov 98	1015	N02:34.86	W092:33.71	4	73	23	On
013		J 3936	4 Nov 98	1218	S00:23.94	W094:37.49	3	153	35	On
013	017	J 3937	4 Nov 98	1237	S00:30.56	W094:41.35	3	73	184	On
013		J 3948	5 Nov 98	0813	S01:53.03	W095:07.79	1	185	45	On
013	017	J 3949	5 Nov 98	0929	S01:44.43	W095:02.97	1	111	174	On
013		J 3955	5 Nov 98	1625	S01:47.69	W094:00.47	2	185	119	On
013		J 3957	6 Nov 98	0609	S01:19.19	W092:37.57	1	182	72	On
013		J 3987	7 Nov 98	1654	S01:02.09	W090:21.96	4	126	83	On
013		J 4001	9 Nov 98	1512	S01:57.72	W085:31.63	2	111	108	On
013		J 4002	9 Nov 98	1655	S01:56.43	W085:20.18	3	73	63	On
013		J 4032	14 Nov 98	1640	N04:22.31	W077:57.60	4	111	8	On
013		J 4068	24 Nov 98	0939	N07:56.14	W085:07.52	4	153	53	On
013		J 4078	25 Nov 98	0947	N08:49.52	W088:26.21	4	182	49	On
013		J 4094	26 Nov 98	0945	N10:06.82	W091:55.84	4	73	12	On
013		J 4098	26 Nov 98	1607	N10:19.39	W092:43.68	4	73	57	On
013		J 4100	27 Nov 98	0726	N11:10.70	W094:44.80	3	153	3	On
013		J 4120	30 Nov 98	0657	N16:57.70	W102:47.78	2	188	18	On
013	002	J 4129	30 Nov 98	1131	N17:08.39	W103:24.53	2	185	25	On
013		J 4140	1 Dec 98	0744	N17:57.44	W106:05.13	3	153	57	On
013		J 4144	2 Dec 98	0840	N17:53.02	W109:24.76	5	188	125	On
013		J 4145	2 Dec 98	0907	N17:52.94	W109:24.54	5	185	33	On
<i>Steno bredanensis</i>										
015		E 15	31 Jul 98	0903	N06:47.57	W080:31.99	2	126	33	On
015		E 126	26 Aug 98	1521	N19:38.37	W156:11.02	3	73	14	Off
015		E 135	3 Sep 98	1553	N12:33.69	W153:28.32	2	126	25	Off
015		E 157	9 Sep 98	1811	N12:44.94	W139:47.40	5	99	5	Off
015		E 202	18 Sep 98	1328	N12:34.55	W122:01.60	1	184	12	On
015		E 208	18 Sep 98	1654	N12:32.07	W121:36.74	1	126	12	On
015		E 221	20 Sep 98	1146	N14:19.83	W116:09.41	3	86	11	On
015		E 224	21 Sep 98	1304	N15:44.03	W113:09.97	3	186	6	On
015		E 349	21 Oct 98	1147	N10:08.37	W090:07.74	2	73	7	On
015	018	E 388	29 Oct 98	0935	N08:36.84	W084:28.96	5	181	15	On
015		E 422	4 Nov 98	1114	S03:10.70	W092:34.40	4	181	21	On
015	011	E 604	5 Dec 98	1214	N00:45.51	W085:02.50	3	149	153	On
015		E 606	5 Dec 98	1432	N00:54.35	W084:53.51	4	168	12	On
015		M 2004	3 Aug 98	1311	N22:34.93	W116:57.52	3	91	20	On
015		M 2005	3 Aug 98	1710	N22:05.07	W116:37.65	2	99	7	Off

Table 2 (continued)

Other Code	Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Efort	
015		M 2007	4 Aug 98	0642	N20:31.68	W115:43.89	2	92	12	On	
015		M 2026	8 Aug 98	1545	N13:41.31	W108:12.18	2	92	11	On	
015	018	M 2102	22 Aug 98	0946	N11:18.61	W090:20.69	2	181	5	On	
015	018	M 2199	15 Sep 98	1451	N06:45.49	W086:08.78	4	143	27	On	
015		M 2203	16 Sep 98	1533	N06:58.26	W089:36.14	5	99	1	On	
015		M 2208	17 Sep 98	1420	N07:12.91	W092:43.54	5	125	6	On	
015	018	M 2265	4 Oct 98	1501	N14:31.34	W100:44.69	4	143	10	On	
015		M 2289	13 Oct 98	1132	N16:42.97	W106:30.66	3	143	3	On	
015		M 2377	4 Nov 98	1507	N20:48.62	W112:08.99	3	147	13	On	
015	018	M 2413	7 Nov 98	1318	N21:03.37	W108:51.84	4	147	13	On	
015		M 2429	8 Nov 98	1749	N19:47.70	W106:16.56	1	74	10	On	
015	018	M 2447	15 Nov 98	1612	N17:17.10	W107:21.78	2	69	11	On	
015	018	J 3282	12 Aug 98	0740	N24:00.54	W108:56.14	1	143	11	On	
015		J 3346	21 Aug 98	1009	N20:52.21	W106:55.08	2	7	1	On	
015		J 3347	21 Aug 98	1013	N20:54.50	W106:54.15	2	143	3	On	
015		J 3349	21 Aug 98	1046	N20:52.45	W106:51.71	1	183	5	On	
015		J 3370	23 Aug 98	0827	N17:55.27	W103:10.39	4	4	2	Off	
015		J 3377	23 Aug 98	1301	N17:39.48	W102:36.95	2	74	5	On	
015		J 3378	23 Aug 98	1321	N17:39.70	W102:35.72	2	147	3	On	
015		J 3398	24 Aug 98	1813	N16:27.10	W099:18.38	4	125	5	On	
015		J 3414	25 Aug 98	1623	N15:30.66	W097:01.69	2	7	10	On	
015	018	J 3415	25 Aug 98	1711	N15:29.94	W096:58.14	2	143	15	On	
015		J 3471	28 Aug 98	0834	N12:13.92	W091:20.77	0	7	3	On	
015		J 3574	1 Sep 98	1709	N11:38.38	W087:26.31	2	183	5	On	
015		J 3606	2 Sep 98	1209	N10:41.67	W086:39.33	4	125	8	On	
015		J 3612	2 Sep 98	1314	N10:33.43	W086:39.34	3	143	3	Off	
015	018	J 3613	2 Sep 98	1429	N10:30.06	W086:38.58	3	74	24	On	
015	018	J 3633	4 Sep 98	0758	N08:55.15	W084:03.64	5	74	14	On	
015		J 3681	13 Sep 98	1213	N06:57.12	W080:58.68	4	152	12	On	
015		J 3757	24 Sep 98	1239	N10:25.16	W110:44.72	0	149	6	On	
015		J 3769	26 Sep 98	1146	N11:31.23	W114:30.71	3	91	26	On	
015		J 3808	5 Oct 98	1126	N19:03.64	W104:29.85	1	149	6	Off	
015		J 3868	14 Oct 98	1428	S08:46.56	W107:41.68	4	99	26	Off	
015		J 3870	15 Oct 98	1601	S06:26.91	W105:20.32	5	149	9	On	
015		J 3912	20 Oct 98	1630	N04:39.00	W094:02.56	4	149	8	On	
015		J 3918	23 Oct 98	0806	N09:11.74	W085:42.44	4	92	14	On	
015	018	J 4074	24 Nov 98	1727	N08:17.32	W086:07.34	3	153	13	On	
015	018	J 4102	28 Nov 98	1519	N15:00.28	W098:20.30	2	153	31	On	
015		J 4109	29 Nov 98	1124	N16:44.11	W100:24.67	2	126	8	On	
015		J 4111	29 Nov 98	1215	N16:44.74	W100:27.32	1	188	4	Off	
015		J 4118	29 Nov 98	1638	N16:34.16	W100:53.44	0	185	7	On	
015		J 4122	30 Nov 98	0754	N16:59.14	W102:54.26	2	185	4	On	
015		J 4123	30 Nov 98	0923	N17:04.36	W103:03.29	2	153	5	On	
015		J 4124	30 Nov 98	0929	N17:05.45	W103:04.55	2	188	1	On	
<i>Delphinus capensis</i>											
016	025	E 473	21 Nov 98	1333	S11:43.04	W077:40.82	3	168	157	On	
016	025	E 474	21 Nov 98	1423	S11:45.41	W077:44.50	3	152	35	On	
016	025	E 475	21 Nov 98	1444	S11:44.87	W077:43.64	3	91	260	Off	
016	025	PU	E 476	21 Nov 98	1518	S11:46.26	W077:50.99	3	91	57	On
016		E 483	22 Nov 98	0645	S10:35.11	W078:13.54	3	149	383	On	
016		E 484	22 Nov 98	0810	S10:32.09	W078:29.47	3	184	420	On	
016		E 486	22 Nov 98	0925	S10:27.60	W078:33.19	3	92	1350	On	
016	025	OB	E 514	25 Nov 98	1246	S08:39.71	W079:18.71	3	186	2025	On
016		E 515	25 Nov 98	1437	S08:28.63	W079:16.16	4	168	464	On	
016	025	E 516	25 Nov 98	1530	S08:20.86	W079:10.94	4	92	1368	On	
016		E 517	25 Nov 98	1648	S08:18.24	W079:14.77	4	186	390	Off	
016		E 519	26 Nov 98	0608	S08:09.82	W080:28.50	3	168	403	On	

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Effort
016		E 523	26 Nov 98	1215	S07:53.09	W079:37.96	3	152	893	Off
016	025	E 524	26 Nov 98	1329	S07:51.13	W079:34.44	3	181	65	On
016		E 525	26 Nov 98	1554	S07:42.79	W079:52.02	3	92	300	On
016	PU	E 531	27 Nov 98	0855	S07:11.14	W080:35.52	2	91	1140	On
016		E 535	27 Nov 98	1548	S06:58.97	W080:10.35	3	149	670	On
016		E 537	28 Nov 98	0724	S06:19.81	W081:14.16	2	186	100	Off
016		J 3001	31 Jul 98	1116	N32:22.29	W117:09.47	1	125	16	On
016		J 3006	31 Jul 98	1632	N32:05.50	W117:05.44	4	7	180	On
016		J 3007	31 Jul 98	1757	N32:00.83	W116:55.02	4	143	66	On
016		J 3009	1 Aug 98	0648	N30:54.17	W116:18.65	2	74	9	On
016		J 3013	1 Aug 98	1006	N30:27.59	W116:10.16	3	183	170	On
016		J 3026	1 Aug 98	1240	N30:06.75	W116:03.53	3	147	25	On
016		J 3027	1 Aug 98	1307	N30:06.03	W115:58.68	3	7	13	On
016		J 3041	2 Aug 98	0610	N28:43.72	W115:02.21	4	7	3	Off
016		J 3042	2 Aug 98	0646	N28:40.40	W115:05.74	4	147	22	Off
016		J 3047	2 Aug 98	0959	N28:23.25	W115:18.27	2	143	817	On
016		J 3049	2 Aug 98	1039	N28:19.37	W115:19.39	2	143	425	On
016		J 3054	2 Aug 98	1312	N28:14.21	W115:26.72	3	74	6	On
016	ZC	J 3063	2 Aug 98	1547	N28:04.02	W115:23.59	4	74	290	On
016		J 3066	2 Aug 98	1654	N27:57.01	W115:20.32	5	74	1238	On
016		J 3070	2 Aug 98	1756	N27:51.17	W115:15.06	5	125	191	On
016		J 3071	2 Aug 98	1816	N27:48.73	W115:13.62	5	147	1210	On
016		J 3072	2 Aug 98	1853	N27:45.44	W115:10.97	5	143	112	On
016		J 3085	3 Aug 98	1538	N26:04.20	W113:24.48	4	183	43	On
016		J 3086	3 Aug 98	1602	N26:05.19	W113:19.82	5	74	93	On
016		J 3093	4 Aug 98	0814	N24:31.25	W112:09.86	2	7	253	On
016		J 3094	4 Aug 98	0839	N24:28.65	W112:07.49	2	74	350	On
016	ZC	J 3118	5 Aug 98	0629	N23:27.63	W110:28.93	1	125	31	On
016		J 3161	7 Aug 98	0818	N24:36.51	W110:24.93	3	74	83	On
016		J 3163	9 Aug 98	0615	N26:06.53	W111:07.54	2	7	27	On
016		J 3168	9 Aug 98	0923	N26:29.19	W111:25.83	3	147	78	On
016		J 3206	10 Aug 98	0701	N27:38.40	W110:48.17	2	7	177	On
016		J 3232	10 Aug 98	1815	N25:56.19	W110:59.93	2	74	60	On
016		J 3237	10 Aug 98	1850	N25:48.44	W110:55.51	2	7	25	On
016		J 3238	10 Aug 98	1851	N25:49.14	W110:58.58	2	125	21	On
016		J 4168	8 Dec 98	1319	N30:45.49	W116:21.91	4	99	244	Off
<i>Delphinus delphis</i>										
017	013	E 19	31 Jul 98	1150	N06:39.17	W080:50.46	0	73	94	On
017		E 21	31 Jul 98	1456	N06:19.88	W081:00.27	3	186	50	On
017		E 64	7 Aug 98	1454	N00:17.91	W104:04.76	4	185	36	On
017	013	E 71	8 Aug 98	1130	S00:13.95	W106:56.11	2	182	22	On
017		E 180	16 Sep 98	1244	N12:31.23	W127:35.23	3	73	175	Off
017		E 181	16 Sep 98	1814	N12:43.04	W126:42.64	2	153	167	On
017		E 189	18 Sep 98	0800	N12:27.50	W122:31.18	2	184	66	On
017		E 190	18 Sep 98	0804	N12:26.65	W122:28.13	2	184	42	On
017		E 199	18 Sep 98	1045	N12:37.03	W122:14.98	2	153	33	On
017		E 206	18 Sep 98	1603	N12:32.15	W121:45.39	1	1	23	On
017		E 215	19 Sep 98	1118	N12:48.89	W119:20.34	3	73	157	On
017		E 323	20 Oct 98	1556	N10:21.92	W092:13.65	1	182	25	Off
017		E 326	20 Oct 98	1640	N10:20.10	W092:12.46	0	34	13	On
017		E 332	21 Oct 98	0638	N10:08.55	W090:44.36	1	153	29	On
017		E 334	21 Oct 98	0715	N10:13.30	W090:36.30	0	186	19	On
017		E 363	22 Oct 98	0608	N10:03.55	W089:33.72	2	56	215	On
017		E 365	22 Oct 98	0703	N10:06.96	W089:27.10	2	153	24	On
017		E 375	22 Oct 98	1155	N10:02.49	W088:58.22	1	186	150	On
017		E 378	22 Oct 98	1311	N09:57.61	W088:45.50	1	126	91	On
017		E 381	22 Oct 98	1606	N10:02.77	W088:24.46	3	126	128	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Efort
017		E 382	22 Oct 98	1634	N09:56.41	W088:19.06	3	184	118	On
017		E 383	22 Oct 98	1635	N09:57.60	W088:23.72	3	185	69	On
017		E 391	29 Oct 98	1122	N08:31.52	W084:41.91	5	149	35	On
017		E 396	30 Oct 98	0953	N07:00.30	W086:32.86	4	186	23	On
017		E 421	4 Nov 98	1019	S03:09.18	W092:31.16	4	181	40	On
017		E 464	14 Nov 98	1508	S14:16.55	W080:41.95	5	186	58	On
017		E 500	23 Nov 98	1628	S11:14.27	W081:13.46	4	92	1414	On
017		E 546	29 Nov 98	0614	S03:25.05	W081:17.24	2	152	100	On
017	018	E 550	29 Nov 98	0945	S03:37.12	W081:21.65	3	186	89	On
017		E 558	30 Nov 98	0656	S05:16.38	W083:31.86	3	152	660	On
017		E 559	30 Nov 98	0743	S05:20.99	W083:36.57	3	91	179	On
017		E 564	30 Nov 98	0952	S05:35.73	W083:55.20	3	92	131	On
017		E 565	30 Nov 98	1036	S05:40.82	W083:58.27	3	91	93	On
017		E 566	30 Nov 98	1327	S06:05.18	W084:19.38	3	186	168	On
017		E 593	4 Dec 98	1046	S01:44.23	W087:23.26	4	181	119	On
017		E 595	4 Dec 98	1507	S01:11.69	W086:59.15	4	184	96	On
017		E 621	7 Dec 98	1457	N03:45.42	W079:32.94	5	92	88	On
017		E 626	8 Dec 98	0914	N06:16.07	W079:24.63	4	184	86	On
017		M 2056	14 Aug 98	0818	N13:36.59	W094:31.45	5	181	44	On
017		M 2061	14 Aug 98	1210	N13:28.94	W094:08.76	4	91	62	On
017		M 2067	15 Aug 98	0757	N12:55.38	W092:01.91	5	91	53	On
017		M 2068	15 Aug 98	1104	N13:07.86	W091:42.75	4	92	43	On
017		M 2070	15 Aug 98	1148	N13:10.81	W091:36.57	4	181	35	On
017		M 2101	22 Aug 98	0928	N11:17.65	W090:18.34	2	99	2	Off
017		M 2162	5 Sep 98	1316	N05:23.27	W079:16.44	2	91	130	On
017		M 2170	6 Sep 98	1356	N06:52.93	W078:46.20	4	152	62	On
017		M 2173	6 Sep 98	1521	N07:06.87	W078:48.63	4	149	26	On
017		M 2184	13 Sep 98	0659	N07:22.17	W079:15.54	4	74	70	On
017		M 2207	17 Sep 98	0922	N07:07.81	W091:56.69	5	74	37	On
017		M 2210	18 Sep 98	1218	N07:24.33	W095:48.81	5	7	41	On
017		M 2213	18 Sep 98	1424	N07:26.69	W096:06.39	5	74	123	On
017		M 2214	18 Sep 98	1548	N07:30.12	W096:21.17	5	143	162	On
017		M 2216	19 Sep 98	1512	N07:37.74	W099:26.40	5	147	250	On
017		M 2245	2 Oct 98	1420	N11:39.63	W106:29.52	3	125	23	On
017		M 2286	6 Oct 98	1723	N18:32.75	W104:15.83	4	183	539	On
017		M 2351	26 Oct 98	1534	N11:59.44	W123:22.67	3	74	38	On
017		M 2383	5 Nov 98	1035	N21:34.76	W111:05.03	4	74	67	On
017		M 2390	5 Nov 98	1525	N20:55.41	W110:58.13	4	125	47	On
017		M 2405	6 Nov 98	1129	N21:12.13	W109:43.25	4	147	267	On
017		J 3002	31 Jul 98	1217	N32:18.97	W117:18.95	3	7	1680	On
017		J 3005	31 Jul 98	1604	N32:08.92	W117:08.63	4	7	820	On
017		J 3008	31 Jul 98	1839	N31:47.49	W116:52.83	4	143	2227	On
017	ZC	J 3023	1 Aug 98	1155	N30:09.71	W116:06.41	3	183	977	On
017		J 3033	1 Aug 98	1630	N29:43.62	W115:53.93	4	147	127	On
017		J 3099	4 Aug 98	1012	N24:17.61	W112:12.42	3	147	35	On
017		J 3103	4 Aug 98	1251	N24:04.45	W112:09.47	3	74	121	On
017		J 3269	11 Aug 98	1414	N24:43.02	W109:31.85	1	125	73	On
017		J 3299	13 Aug 98	0846	N23:39.31	W107:45.25	1	183	277	On
017		J 3374	23 Aug 98	1141	N17:42.66	W102:44.01	3	143	80	On
017		J 3375	23 Aug 98	1224	N17:40.02	W102:39.45	2	183	55	On
017		J 3409	25 Aug 98	1326	N15:40.90	W097:25.01	3	125	62	On
017		J 3458	28 Aug 98	0604	N12:28.83	W091:32.13	1	143	90	On
017		J 3460	28 Aug 98	0636	N12:23.41	W091:26.98	1	74	330	On
017		J 3462	28 Aug 98	0648	N12:24.53	W091:31.61	1	143	40	Off
017		J 3509	29 Aug 98	0656	N10:48.16	W090:07.29	4	143	110	On
017		J 3510	29 Aug 98	1238	N11:39.47	W090:20.26	4	147	77	On
017		J 3518	29 Aug 98	1652	N12:15.77	W090:26.19	2	125	16	On
017		J 3519	29 Aug 98	1727	N12:20.83	W090:26.96	2	147	163	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Ef-fort
017		J 3609	2 Sep 98	1248	N10:29.30	W086:39.43	3	147	140	On
017		J 3611	2 Sep 98	1302	N10:30.74	W086:38.64	3	143	153	On
017		J 3621	2 Sep 98	1800	N10:08.03	W086:25.77	3	7	30	On
017		J 3626	3 Sep 98	0846	N09:22.33	W085:26.33	2	74	65	Off
017		J 3640	4 Sep 98	1006	N08:35.31	W084:07.68	3	147	93	On
017		J 3642	4 Sep 98	1247	N08:22.96	W083:50.23	3	74	130	On
017		J 3643	4 Sep 98	1546	N08:08.75	W083:30.63	3	143	425	On
017		J 3645	5 Sep 98	0716	N07:50.37	W082:35.60	3	7	148	On
017		J 3651	5 Sep 98	1618	N07:17.02	W082:08.62	3	143	84	On
017		J 3683	13 Sep 98	1605	N06:54.87	W081:31.91	4	91	105	On
017		J 3684	13 Sep 98	1732	N06:57.36	W081:40.77	3	149	190	On
017		J 3690	14 Sep 98	0846	N07:01.89	W083:23.59	2	181	67	On
017		J 3693	14 Sep 98	0856	N07:04.49	W083:27.54	2	4	5	Off
017		J 3730	19 Sep 98	1752	N09:40.81	W098:26.18	4	149	145	On
017		J 3736	22 Sep 98	1518	N10:13.34	W106:59.31	4	92	23	On
017		J 3742	23 Sep 98	0822	N10:20.93	W108:48.19	2	92	14	Off
017		J 3743	23 Sep 98	0825	N10:18.94	W108:46.22	2	91	19	On
017		J 3746	23 Sep 98	0908	N10:19.05	W108:52.93	2	149	39	On
017		J 3766	26 Sep 98	0749	N11:20.89	W114:57.64	2	168	22	On
017		J 3811	5 Oct 98	1740	N18:23.79	W104:26.47	4	149	48	On
017		J 3841	11 Oct 98	1128	N00:41.39	W106:27.22	2	149	21	On
017		J 3844	11 Oct 98	1333	N00:33.66	W106:30.83	3	92	35	On
017		J 3847	12 Oct 98	0939	S02:03.18	W106:46.97	3	149	299	On
017		J 3850	12 Oct 98	1105	S02:11.57	W106:50.81	3	168	230	On
017		J 3854	12 Oct 98	1505	S02:28.95	W106:47.48	3	168	76	On
017		J 3855	12 Oct 98	1619	S02:40.77	W106:49.28	3	91	60	On
017		J 3889	18 Oct 98	0745	S00:49.20	W099:46.26	3	92	820	On
017	013	J 3891	18 Oct 98	1031	S00:32.04	W099:24.09	3	152	142	On
017		J 3892	18 Oct 98	1321	S00:16.42	W099:07.83	3	168	112	On
017		J 3930	4 Nov 98	0601	N00:06.16	W094:15.26	2	185	85	On
017		J 3932	4 Nov 98	0759	S00:05.10	W094:23.51	2	111	69	On
017		J 3933	4 Nov 98	0938	S00:18.90	W094:34.71	3	73	193	On
017	013	J 3937	4 Nov 98	1237	S00:30.56	W094:41.35	3	73	184	On
017	013	J 3949	5 Nov 98	0929	S01:44.43	W095:02.97	1	111	174	On
017		J 3951	5 Nov 98	1053	S01:53.57	W094:51.02	1	182	127	On
017		J 3952	5 Nov 98	1155	S01:55.60	W094:43.41	1	153	28	On
017		J 3959	6 Nov 98	0657	S01:18.34	W092:27.31	2	73	21	On
017		J 3965	6 Nov 98	1223	S01:12.99	W092:05.75	4	188	55	On
017		J 3968	6 Nov 98	1434	S01:10.85	W091:48.89	4	111	34	Off
017		J 3973	7 Nov 98	0558	S01:06.41	W091:19.32	3	73	29	On
017		J 3974	7 Nov 98	0614	S01:08.24	W091:11.22	3	153	135	On
017		J 3975	7 Nov 98	0653	S01:07.80	W091:13.03	3	182	510	On
017		J 3990	8 Nov 98	0831	S01:10.56	W088:33.25	4	153	195	On
017		J 3993	8 Nov 98	1000	S01:13.55	W088:26.97	5	153	24	On
017		J 3995	8 Nov 98	1040	S01:11.95	W088:23.82	5	73	193	Off
017		J 4003	10 Nov 98	0647	S02:23.17	W083:46.42	3	153	143	On
017		J 4008	11 Nov 98	0724	S01:56.88	W081:18.29	4	73	225	On
017		J 4037	15 Nov 98	1151	N06:53.52	W077:48.75	1	126	42	On
017		J 4062	23 Nov 98	1319	N06:59.61	W082:01.64	3	153	183	On
017		J 4069	24 Nov 98	1001	N07:55.44	W085:09.16	4	73	82	On
017		J 4071	24 Nov 98	1320	N08:05.80	W085:39.19	4	111	709	On
017		J 4073	24 Nov 98	1713	N08:14.61	W086:10.81	3	111	172	On
017		J 4075	25 Nov 98	0658	N08:41.81	W087:56.81	3	111	3	On
017		J 4076	25 Nov 98	0753	N08:45.47	W088:09.93	3	126	55	On
017		J 4082	25 Nov 98	1118	N08:52.53	W088:31.22	5	185	57	On
017		J 4085	25 Nov 98	1522	N09:02.49	W089:08.37	4	126	108	On
017		J 4090	25 Nov 98	1736	N09:05.78	W089:27.34	4	185	148	On
017		J 4091	25 Nov 98	1749	N09:09.99	W089:26.60	4	182	91	On



Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Efort
017		J 4096	26 Nov 98	1227	N10:03.85	W092:11.31	4	73	225	On
017		J 4153	4 Dec 98	1013	N21:55.29	W111:57.64	4	153	67	On
017		J 4157	4 Dec 98	1316	N22:02.06	W111:58.36	3	185	75	On
017		J 4159	4 Dec 98	1518	N22:13.70	W112:07.75	3	188	275	On
017		J 4162	4 Dec 98	1721	N22:21.76	W112:06.68	2	188	315	Off
017		J 4163	5 Dec 98	0724	N23:55.52	W112:57.26	5	126	347	On
017		J 4165	8 Dec 98	0815	N30:14.19	W116:18.19	3	188	950	On
017		J 4167	8 Dec 98	1147	N30:31.19	W116:24.42	3	182	392	On
<i>Tursiops truncatus</i>										
018	090	E 2	30 Jul 98	1359	N08:14.57	W079:41.61	2	182	260	On
018	090	E 3	30 Jul 98	1437	N08:11.36	W079:41.39	1	184	134	On
018		E 4	30 Jul 98	1444	N08:12.39	W079:39.65	1	184	23	On
018		E 5	30 Jul 98	1559	N08:03.08	W079:38.31	1	153	3	On
018		E 6	30 Jul 98	1635	N08:01.28	W079:40.23	1	126	42	On
018		E 7	30 Jul 98	1749	N07:52.38	W079:40.54	2	185	17	On
018		E 12	31 Jul 98	0748	N06:51.17	W080:21.74	2	73	15	Off
018	021	E 25	31 Jul 98	1726	N06:03.36	W081:11.79	3	153	27	On
018		E 30	1 Aug 98	0805	N05:05.42	W082:21.28	1	73	41	On
018		E 31	1 Aug 98	0847	N05:02.41	W082:23.14	2	153	14	On
018		E 32	1 Aug 98	0905	N04:59.34	W082:21.77	2	185	12	On
018	021	E 34	1 Aug 98	0932	N04:59.42	W082:28.63	2	73	35	On
018		E 39	1 Aug 98	1315	N04:34.46	W082:50.99	3	73	40	On
018		E 46	2 Aug 98	1150	N03:55.13	W085:08.38	4	186	24	On
018	036	E 51	5 Aug 98	1249	N01:35.66	W096:40.13	4	126	30	On
018	002	E 234	23 Sep 98	1550	N18:20.61	W107:00.96	4	186	60	On
018		E 299	17 Oct 98	0700	N11:12.57	W102:13.81	5	34	2	Off
018	002	E 302	19 Oct 98	0624	N10:43.36	W096:16.63	3	184	43	On
018	021	E 307	19 Oct 98	1530	N10:36.31	W094:51.62	2	56	44	On
018	021	E 314	20 Oct 98	0844	N10:30.72	W092:58.19	2	185	60	On
018	002	E 320	20 Oct 98	1316	N10:26.79	W092:22.94	1	126	101	On
018		E 327	20 Oct 98	1650	N10:19.36	W092:12.87	0	56	5	Off
018	021	E 341	21 Oct 98	0844	N10:17.96	W090:28.80	1	161	45	Off
018		E 369	22 Oct 98	0837	N10:16.23	W089:14.97	2	184	64	On
018		E 373	22 Oct 98	1053	N10:03.13	W089:01.19	2	186	5	On
018	090	E 384	23 Oct 98	1213	N09:31.04	W085:23.45	5	56	43	On
018	002	E 385	23 Oct 98	1521	N09:10.52	W085:05.09	4	73	75	On
018	015	E 388	29 Oct 98	0935	N08:36.84	W084:28.96	5	181	15	On
018		E 389	29 Oct 98	1026	N08:34.10	W084:34.43	5	92	12	On
018	002	E 397	30 Oct 98	1446	N06:19.01	W087:00.18	4	91	20	On
018	PU	E 417	2 Nov 98	1025	S00:55.52	W090:35.00	4	184	15	On
018	021 034 033	E 434	5 Nov 98	1522	S06:31.06	W095:17.83	3	168	38	On
018		E 487	22 Nov 98	1041	S10:29.91	W078:48.87	4	181	82	On
018		E 488	22 Nov 98	1145	S10:28.05	W078:54.80	4	181	24	On
018		E 490	22 Nov 98	1521	S10:33.44	W079:29.79	4	91	19	On
018	021	E 491	22 Nov 98	1546	S10:35.02	W079:32.31	4	181	11	On
018		E 492	22 Nov 98	1605	S10:38.23	W079:37.06	4	184	5	On
018	046	E 493	22 Nov 98	1610	S10:38.65	W079:38.83	4	92	15	Off
018		E 502	24 Nov 98	0625	S10:20.83	W082:20.78	4	181	3	On
018	034	E 504	24 Nov 98	1044	S10:00.09	W082:04.43	4	91	18	On
018	021	E 506	25 Nov 98	0711	S09:16.49	W079:37.38	4	92	8	On
018		E 507	25 Nov 98	0747	S09:15.95	W079:38.18	4	186	17	On
018		E 508	25 Nov 98	0812	S09:15.05	W079:38.38	4	152	6	On
018		E 510	25 Nov 98	0851	S09:09.37	W079:36.14	3	149	4	On
018		E 511	25 Nov 98	0909	S09:06.24	W079:32.24	3	152	6	On
018		E 520	26 Nov 98	0642	S08:07.24	W080:21.35	3	184	18	On
018		E 521	26 Nov 98	0717	S08:04.45	W080:16.78	3	186	4	On
018	PU	E 528	27 Nov 98	0726	S07:09.31	W080:44.84	2	186	8	Off

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Effort
018		E 533	27 Nov 98	1328	S07:07.59	W080:28.60	3	91	11	On
018	034	E 540	28 Nov 98	1135	S05:38.45	W081:24.98	3	91	80	On
018	017	E 550	29 Nov 98	0945	S03:37.12	W081:21.65	3	186	89	On
018	034	E 551	29 Nov 98	0949	S03:34.03	W081:21.95	3	99	23	Off
018		E 552	29 Nov 98	1035	S03:39.42	W081:22.16	3	92	15	Off
018		E 553	29 Nov 98	1041	S03:38.84	W081:23.95	4	186	14	On
018		E 554	29 Nov 98	1644	S04:12.71	W082:13.35	5	181	7	On
018	076	E 556	29 Nov 98	1753	S04:19.42	W082:20.27	4	92	18	On
018	034	E 578	2 Dec 98	0937	S07:54.09	W088:13.15	4	186	5	On
018		E 581	2 Dec 98	1424	S07:24.23	W088:46.59	5	152	9	On
018		E 627	8 Dec 98	1317	N06:52.47	W079:24.37	4	184	6	On
018		M 2014	5 Aug 98	0756	N17:33.83	W113:56.83	2	152	3	On
018		M 2029	9 Aug 98	1513	N13:09.71	W105:24.61	5	92	4	On
018	002	M 2033	10 Aug 98	1300	N12:36.14	W102:45.26	3	92	32	On
018	002	M 2034	10 Aug 98	1635	N12:25.05	W102:13.90	2	168	75	On
018		M 2038	12 Aug 98	1217	N14:20.85	W098:24.87	1	98	2	Off
018		M 2054	13 Aug 98	1800	N13:59.55	W095:25.08	2	149	3	On
018		M 2057	14 Aug 98	0932	N13:34.63	W094:24.42	3	168	3	On
018		M 2066	15 Aug 98	0642	N12:46.50	W092:09.10	4	149	5	On
018		M 2078	15 Aug 98	1521	N13:25.78	W091:20.48	1	92	17	On
018		M 2079	15 Aug 98	1528	N13:28.07	W091:26.17	1	91	12	On
018		M 2081	15 Aug 98	1625	N13:30.93	W091:19.24	2	149	2	On
018		M 2084	15 Aug 98	1750	N13:42.89	W091:11.59	0	92	5	On
018		M 2085	21 Aug 98	1049	N13:53.08	W090:45.49	0	181	2	Off
018		M 2086	21 Aug 98	1054	N13:51.56	W090:45.53	2	181	2	On
018	006	M 2088	21 Aug 98	1131	N13:44.37	W090:43.91	3	149	53	On
018		M 2090	21 Aug 98	1319	N13:36.12	W090:42.82	3	152	3	On
018		M 2091	21 Aug 98	1328	N13:34.12	W090:41.94	3	181	2	On
018		M 2093	21 Aug 98	1547	N13:16.39	W090:38.21	4	168	288	On
018		M 2096	21 Aug 98	1732	N13:07.36	W090:36.69	4	181	7	On
018	021	M 2100	22 Aug 98	0835	N11:15.66	W090:11.53	2	168	22	On
018	015	M 2102	22 Aug 98	0946	N11:18.61	W090:20.69	2	181	5	On
018		M 2112	22 Aug 98	1517	N11:37.61	W090:54.87	2	149	12	On
018	002	M 2116	22 Aug 98	1550	N11:39.04	W090:58.75	2	91	52	On
018		M 2123	23 Aug 98	1026	N12:16.50	W093:18.74	3	91	11	Off
018	034	M 2143	31 Aug 98	1445	N05:21.30	W092:13.09	4	92	25	On
018		M 2148	4 Sep 98	0842	N05:20.12	W082:47.26	4	92	1	On
018		M 2156	5 Sep 98	1044	N05:19.73	W079:34.60	2	91	6	On
018	013	M 2166	5 Sep 98	1748	N05:22.41	W078:54.68	2	168	64	On
018		M 2191	14 Sep 98	1515	N06:30.79	W083:09.54	4	74	4	On
018	015	M 2199	15 Sep 98	1451	N06:45.49	W086:08.78	4	143	27	On
018		M 2242	30 Sep 98	1459	N10:18.09	W109:11.00	4	147	70	Off
018	002 003	M 2247	2 Oct 98	1521	N11:43.23	W106:19.69	3	74	92	On
018	002	M 2264	4 Oct 98	1135	N14:21.01	W101:14.90	4	74	114	On
018	015	M 2265	4 Oct 98	1501	N14:31.34	W100:44.69	4	143	10	On
018	021	M 2280	6 Oct 98	1040	N17:36.81	W103:37.53	3	125	66	On
018	002	M 2291	13 Oct 98	1735	N15:55.36	W106:41.09	3	7	147	On
018	034	M 2299	18 Oct 98	1842	N03:10.95	W112:53.00	5	125	23	On
018	032	M 2361	31 Oct 98	0744	N19:35.01	W118:41.10	5	74	19	On
018		M 2371	4 Nov 98	1003	N20:15.84	W112:11.44	3	74	293	On
018		M 2373	4 Nov 98	1214	N20:29.93	W112:10.49	4	99	15	Off
018		M 2374	4 Nov 98	1404	N20:42.34	W112:10.44	4	147	17	On
018		M 2376	4 Nov 98	1418	N20:42.95	W112:06.52	4	74	17	On
018		M 2378	4 Nov 98	1537	N20:50.03	W112:12.34	3	143	11	On
018		M 2412	7 Nov 98	1252	N21:05.17	W108:53.05	4	125	14	On
018	015	M 2413	7 Nov 98	1318	N21:03.37	W108:51.84	4	147	13	On
018		M 2418	7 Nov 98	1624	N20:42.85	W108:35.46	5	125	10	On
018	002	M 2423	8 Nov 98	1122	N20:13.21	W106:57.89	3	143	173	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Effort
018		M 2437	14 Nov 98	1410	N18:59.53	W104:52.00	1	147	4	On
018		M 2446	15 Nov 98	1544	N17:18.71	W107:21.03	2	147	7	On
018	015	M 2447	15 Nov 98	1612	N17:17.10	W107:21.78	2	69	11	On
018		M 2450	16 Nov 98	0835	N16:06.27	W108:55.04	3	147	13	On
018		M 2468	19 Nov 98	0703	N12:13.54	W117:21.38	4	183	178	On
018		M 2470	19 Nov 98	1405	N11:59.68	W118:27.58	2	147	293	On
018		M 2471	19 Nov 98	1447	N11:57.16	W118:26.68	3	69	27	On
018	036	J 3078	3 Aug 98	0910	N26:26.94	W114:00.33	3	74	108	Off
018	ZC	J 3097	4 Aug 98	0943	N24:23.34	W112:08.05	3	125	10	On
018		J 3100	4 Aug 98	1059	N24:14.54	W112:12.80	3	7	35	On
018		J 3108	4 Aug 98	1522	N23:59.17	W112:02.87	2	147	17	On
018		J 3109	4 Aug 98	1543	N24:00.01	W111:59.88	3	143	10	On
018		J 3110	4 Aug 98	1600	N24:01.87	W111:57.28	3	143	16	On
018		J 3114	4 Aug 98	1829	N24:04.57	W111:36.35	4	147	40	On
018		J 3125	5 Aug 98	1140	N23:03.10	W110:13.72	1	125	11	On
018		J 3126	5 Aug 98	1221	N23:07.50	W110:07.71	3	143	4	On
018		J 3130	5 Aug 98	1822	N22:43.17	W109:31.55	3	125	4	On
018		J 3131	5 Aug 98	1841	N22:42.54	W109:30.51	3	84	50	Off
018		J 3135	6 Aug 98	0628	N23:44.42	W108:27.92	3	143	6	On
018		J 3136	6 Aug 98	0632	N23:43.90	W108:26.63	3	143	4	On
018		J 3137	6 Aug 98	0635	N23:48.57	W108:26.95	3	74	6	On
018		J 3139	6 Aug 98	0648	N23:54.78	W108:20.00	3	4	1	Off
018		J 3140	6 Aug 98	0648	N23:47.88	W108:25.60	3	125	20	Off
018		J 3141	6 Aug 98	0654	N23:49.13	W108:25.96	3	125	25	On
018	021	J 3142	6 Aug 98	0657	N23:48.53	W108:25.23	3	74	8	On
018		J 3147	6 Aug 98	1145	N24:18.81	W107:54.71	3	74	8	On
018		J 3148	6 Aug 98	1208	N24:20.55	W107:56.55	3	7	10	On
018		J 3150	6 Aug 98	1611	N24:35.24	W108:23.18	3	147	9	On
018		J 3151	6 Aug 98	1618	N24:35.49	W108:24.38	3	147	13	On
018		J 3152	6 Aug 98	1622	N24:37.50	W108:24.49	3	125	8	On
018		J 3154	6 Aug 98	1653	N24:31.40	W108:31.31	3	143	7	On
018	021	J 3156	6 Aug 98	1736	N24:29.99	W108:41.01	3	74	17	On
018		J 3158	6 Aug 98	1810	N24:29.67	W108:42.32	4	143	4	On
018		J 3162	9 Aug 98	0612	N26:05.99	W111:06.92	2	7	1	On
018		J 3165	9 Aug 98	0749	N26:20.07	W111:14.61	2	143	13	On
018		J 3166	9 Aug 98	0900	N26:30.51	W111:24.34	3	125	15	On
018		J 3171	9 Aug 98	0953	N26:35.07	W111:26.40	2	74	58	On
018		J 3173	9 Aug 98	1118	N26:49.51	W111:37.45	2	143	5	On
018		J 3174	9 Aug 98	1138	N26:53.82	W111:34.09	2	183	40	On
018		J 3175	9 Aug 98	1220	N26:57.76	W111:35.56	3	143	1	On
018	036	J 3178	9 Aug 98	1626	N27:18.18	W111:38.71	2	143	33	On
018		J 3181	9 Aug 98	1730	N27:19.56	W111:41.68	2	147	9	On
018		J 3183	9 Aug 98	1740	N27:25.68	W111:43.19	2	7	200	On
018		J 3184	9 Aug 98	1740	N27:21.44	W111:42.70	2	147	7	On
018		J 3186	9 Aug 98	1757	N27:24.40	W111:43.30	2	74	6	Off
018		J 3189	9 Aug 98	1806	N27:25.01	W111:43.73	2	119	12	Off
018		J 3190	9 Aug 98	1807	N27:30.52	W111:43.71	2	7	75	On
018		J 3194	9 Aug 98	1826	N27:29.93	W111:39.88	2	125	10	On
018		J 3195	9 Aug 98	1835	N27:33.08	W111:48.45	2	7	25	On
018		J 3196	9 Aug 98	1839	N27:35.37	W111:45.20	2	7	15	On
018		J 3197	9 Aug 98	1852	N27:36.77	W111:44.95	2	143	6	On
018		J 3199	10 Aug 98	0609	N27:43.39	W110:46.42	1	147	3	On
018		J 3205	10 Aug 98	0700	N27:39.16	W110:49.35	2	125	5	On
018		J 3209	10 Aug 98	1009	N27:10.55	W110:49.58	3	74	3	On
018		J 3210	10 Aug 98	1019	N27:08.56	W110:49.29	3	74	34	On
018		J 3211	10 Aug 98	1033	N27:05.07	W110:48.47	3	147	7	On
018		J 3212	10 Aug 98	1054	N27:00.97	W110:52.07	3	125	28	On
018		J 3213	10 Aug 98	1119	N26:58.61	W110:46.71	3	143	11	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
018		J 3214	10 Aug 98	1121	N26:57.56	W110:50.81	3	143	19	On
018		J 3215	10 Aug 98	1141	N26:56.11	W110:51.67	3	143	18	On
018		J 3222	10 Aug 98	1337	N26:37.72	W110:56.94	1	183	5	On
018		J 3240	11 Aug 98	0721	N25:48.78	W109:37.90	2	125	10	On
018		J 3242	11 Aug 98	0753	N25:42.73	W109:30.72	1	7	9	On
018		J 3252	11 Aug 98	1118	N25:13.23	W109:34.76	1	74	10	On
018		J 3254	11 Aug 98	1134	N25:14.41	W109:33.82	1	147	5	On
018		J 3256	11 Aug 98	1153	N25:07.84	W109:32.54	1	125	10	On
018		J 3278	11 Aug 98	1708	N24:29.97	W109:32.56	1	7	6	Off
018	015	J 3282	12 Aug 98	0740	N24:00.54	W108:56.14	1	143	11	On
018		J 3285	12 Aug 98	0840	N23:57.57	W109:02.89	2	74	30	On
018	021	J 3296	13 Aug 98	0804	N23:42.30	W107:43.44	0	143	200	On
018	021	J 3313	13 Aug 98	1522	N22:55.11	W107:32.30	2	183	153	On
018		J 3324	18 Aug 98	1327	N22:54.77	W106:26.74	1	125	6	On
018		J 3325	18 Aug 98	1348	N22:53.25	W106:26.85	1	147	4	On
018		J 3326	18 Aug 98	1349	N22:51.51	W106:22.57	1	147	12	On
018		J 3328	18 Aug 98	1429	N22:46.65	W106:26.22	1	7	8	On
018		J 3332	18 Aug 98	1745	N22:26.51	W106:29.31	3	74	24	On
018		J 3348	21 Aug 98	1041	N20:52.66	W106:53.31	1	7	1	Off
018		J 3359	21 Aug 98	1802	N20:14.09	W106:01.41	4	143	20	On
018		J 3360	21 Aug 98	1816	N20:05.91	W106:00.50	4	7	1350	On
018		J 3366	22 Aug 98	1300	N18:32.20	W104:00.96	5	125	28	Off
018		J 3368	23 Aug 98	0701	N17:58.16	W103:22.25	3	143	25	On
018	021	J 3371	23 Aug 98	0848	N17:54.37	W103:05.59	4	147	24	On
018	021	J 3386	23 Aug 98	1802	N17:22.56	W101:58.06	3	147	20	On
018		J 3387	23 Aug 98	1811	N17:26.80	W101:56.17	3	143	21	On
018	033	J 3390	24 Aug 98	0928	N16:29.33	W100:20.07	4	74	24	On
018		J 3408	25 Aug 98	1226	N15:41.02	W097:32.03	2	7	167	On
018		J 3411	25 Aug 98	1428	N15:36.27	W097:12.58	2	74	95	On
018	015	J 3415	25 Aug 98	1711	N15:29.94	W096:58.14	2	143	15	On
018	077	J 3424	26 Aug 98	1249	N15:52.23	W094:45.28	1	183	9	On
018		J 3426	26 Aug 98	1321	N15:54.16	W094:37.21	1	143	1	On
018		J 3428	26 Aug 98	1349	N15:55.07	W094:37.68	1	144	2	On
018		J 3431	26 Aug 98	1519	N15:56.68	W094:24.67	2	125	1	On
018		J 3432	26 Aug 98	1553	N15:58.84	W094:19.63	2	143	1	On
018		J 3433	26 Aug 98	1716	N15:44.56	W094:18.97	3	143	2	On
018		J 3437	27 Aug 98	0703	N14:50.77	W093:17.69	2	74	3	On
018		J 3438	27 Aug 98	0715	N14:48.56	W093:12.66	2	74	2	On
018		J 3442	27 Aug 98	0824	N14:52.03	W093:09.76	2	143	1	On
018		J 3447	27 Aug 98	0938	N14:51.95	W092:59.67	2	143	1	On
018		J 3448	27 Aug 98	0940	N14:50.93	W092:59.34	2	143	1	On
018		J 3449	27 Aug 98	0947	N14:50.90	W092:56.67	2	143	7	On
018		J 3454	27 Aug 98	1632	N14:05.47	W092:19.75	4	143	2	On
018		J 3463	28 Aug 98	0710	N12:24.34	W091:28.46	0	4	1	Off
018		J 3464	28 Aug 98	0722	N12:22.19	W091:27.42	0	74	10	On
018		J 3465	28 Aug 98	0724	N12:18.16	W091:25.57	0	74	9	On
018		J 3473	28 Aug 98	0908	N12:12.13	W091:20.09	0	143	2	On
018		J 3474	28 Aug 98	0917	N12:10.28	W091:18.44	0	147	5	On
018		J 3475	28 Aug 98	0919	N12:10.94	W091:18.91	0	143	6	On
018		J 3495	28 Aug 98	1233	N11:47.53	W091:04.37	1	183	22	On
018		J 3498	28 Aug 98	1303	N11:45.19	W091:02.35	2	143	8	On
018		J 3514	29 Aug 98	1501	N12:03.26	W090:27.29	2	4	73	On
018		J 3521	30 Aug 98	1224	N13:47.81	W090:42.82	4	74	5	On
018		J 3522	30 Aug 98	1340	N13:38.43	W090:38.02	4	4	2	Off
018		J 3523	30 Aug 98	1346	N13:37.63	W090:37.59	4	99	7	Off
018		J 3524	30 Aug 98	1349	N13:37.12	W090:36.20	4	7	15	On
018		J 3525	30 Aug 98	1411	N13:32.86	W090:33.42	3	143	23	On
018		J 3526	30 Aug 98	1429	N13:32.90	W090:30.03	3	143	21	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Effort
018		J 3527	30 Aug 98	1449	N13:27.50	W090:30.90	3	7	158	On
018		J 3529	30 Aug 98	1537	N13:23.77	W090:29.08	3	143	5	On
018		J 3530	30 Aug 98	1556	N13:13.76	W090:26.55	3	143	3	On
018		J 3536	31 Aug 98	0741	N13:06.53	W089:03.87	4	143	10	On
018	003	J 3544	31 Aug 98	1149	N12:26.31	W088:55.62	5	7	467	Off
018		J 3555	1 Sep 98	1150	N11:58.36	W087:46.06	3	125	11	Off
018		J 3559	1 Sep 98	1447	N11:45.38	W087:40.12	2	74	1	On
018		J 3561	1 Sep 98	1501	N11:44.02	W087:47.13	2	74	2	Off
018		J 3562	1 Sep 98	1518	N11:45.69	W087:37.65	2	74	1	Off
018		J 3563	1 Sep 98	1528	N11:45.16	W087:36.09	2	125	10	Off
018	077	J 3565	1 Sep 98	1555	N11:38.51	W087:35.32	1	125	18	On
018		J 3573	1 Sep 98	1704	N11:34.96	W087:25.84	2	7	3	On
018		J 3579	1 Sep 98	1809	N11:33.47	W087:20.99	2	74	2	On
018		J 3594	2 Sep 98	1017	N10:56.61	W086:37.70	4	143	6	On
018		J 3595	2 Sep 98	1023	N10:55.06	W086:38.25	4	143	1	On
018		J 3596	2 Sep 98	1056	N10:52.02	W086:38.18	4	74	7	On
018		J 3598	2 Sep 98	1103	N10:50.47	W086:38.54	4	183	54	On
018		J 3599	2 Sep 98	1115	N10:47.99	W086:38.33	4	125	8	On
018		J 3600	2 Sep 98	1124	N10:45.73	W086:35.30	4	147	8	On
018		J 3601	2 Sep 98	1128	N10:45.35	W086:39.01	4	74	26	Off
018		J 3602	2 Sep 98	1130	N10:46.88	W086:38.34	4	4	15	Off
018		J 3603	2 Sep 98	1144	N10:44.37	W086:34.51	4	143	1	On
018		J 3604	2 Sep 98	1145	N10:45.05	W086:36.76	4	143	5	On
018		J 3605	2 Sep 98	1207	N10:39.43	W086:41.42	4	7	3	On
018	015	J 3613	2 Sep 98	1429	N10:30.06	W086:38.58	3	74	24	On
018	036	J 3618	2 Sep 98	1636	N10:15.83	W086:39.61	3	125	87	On
018		J 3620	2 Sep 98	1740	N10:09.02	W086:30.60	3	7	26	On
018		J 3622	2 Sep 98	1810	N10:07.12	W086:25.81	3	74	4	On
018	036	J 3629	3 Sep 98	1328	N09:04.35	W084:59.57	4	147	86	On
018	015	J 3633	4 Sep 98	0758	N08:55.15	W084:03.64	5	74	14	On
018		J 3637	4 Sep 98	0945	N08:40.09	W084:04.81	3	7	7	On
018		J 3649	5 Sep 98	1204	N07:28.38	W082:15.34	4	125	5	On
018	036	J 3653	5 Sep 98	1730	N07:10.72	W082:02.59	4	74	59	On
018		J 3659	6 Sep 98	1046	N07:05.95	W081:02.97	2	125	22	On
018		J 3660	6 Sep 98	1305	N07:09.14	W080:44.20	3	125	48	On
018		J 3664	6 Sep 98	1646	N07:12.63	W080:16.32	4	74	79	On
018		J 3665	6 Sep 98	1704	N07:12.49	W080:16.91	4	74	11	On
018		J 3668	7 Sep 98	1514	N07:58.39	W079:08.97	4	125	10	On
018		J 3669	7 Sep 98	1527	N07:57.98	W079:09.16	4	125	4	On
018		J 3671	7 Sep 98	1534	N07:58.79	W079:09.04	4	147	1	On
018		J 3696	14 Sep 98	1830	N07:17.22	W084:56.12	3	4	12	Off
018		J 3700	15 Sep 98	1152	N07:29.44	W086:30.69	4	91	3	On
018		J 3701	15 Sep 98	1744	N07:40.97	W087:21.32	5	149	2	On
018		J 3705	16 Sep 98	0849	N07:46.60	W088:53.42	3	149	11	On
018		J 3750	23 Sep 98	1135	N10:16.44	W109:06.93	1	92	9	Off
018	002	J 3806	30 Sep 98	1649	N18:21.99	W104:56.91	3	149	198	On
018	021	J 3807	30 Sep 98	1755	N18:25.48	W104:57.51	3	181	68	On
018		J 3831	8 Oct 98	0814	N10:04.62	W105:04.04	3	92	1	On
018		J 3835	9 Oct 98	0819	N06:50.65	W105:31.20	5	4	1	Off
018	036	J 3843	11 Oct 98	1159	N00:39.77	W106:29.24	2	181	68	On
018	036	J 3867	14 Oct 98	1158	S08:37.15	W107:45.30	4	168	17	On
018	034	J 3871	15 Oct 98	1735	S06:15.66	W105:08.95	4	92	39	On
018		J 3920	23 Oct 98	1131	N09:26.92	W085:10.88	5	91	4	On
018	036	J 3922	1 Nov 98	1017	N08:25.12	W089:57.68	5	73	61	On
018		J 3923	1 Nov 98	1300	N08:12.04	W090:03.09	5	111	3	On
018		J 3924	1 Nov 98	1307	N08:11.14	W090:03.53	5	111	4	On
018	036	J 3938	4 Nov 98	1239	S00:27.51	W094:41.05	3	153	24	Off
018	036	J 3979	7 Nov 98	0805	S01:06.03	W091:04.53	3	111	34	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Effort
018	PU	J 3982	7 Nov 98	1344	S01:01.00	W090:44.50	5	182	293	On
018		J 3983	7 Nov 98	1414	S01:00.59	W090:42.48	4	182	17	On
018	ZC	J 3986	7 Nov 98	1541	S00:56.47	W090:25.54	4	126	64	On
018		J 3988	7 Nov 98	1720	S00:59.05	W090:16.03	4	153	30	On
018		J 4010	11 Nov 98	0821	S01:58.89	W081:17.63	4	73	14	Off
018	036	J 4011	11 Nov 98	0910	S01:55.26	W081:17.80	4	73	60	On
018		J 4012	11 Nov 98	1011	S01:50.34	W081:17.09	4	126	7	On
018		J 4014	11 Nov 98	1045	S01:48.50	W081:16.54	4	4	8	Off
018		J 4016	11 Nov 98	1124	S01:40.19	W081:14.08	4	73	23	Off
018		J 4018	12 Nov 98	0730	N00:15.41	W080:32.51	4	185	58	On
018		J 4021	12 Nov 98	1427	N01:00.33	W080:08.03	4	111	17	On
018		J 4024	13 Nov 98	0755	N02:34.51	W078:55.86	5	73	1	On
018	077	J 4049	22 Nov 98	1604	N08:27.02	W079:39.02	3	126	25	On
018		J 4051	22 Nov 98	1716	N08:17.23	W079:39.35	3	126	4	On
018		J 4057	23 Nov 98	0858	N07:02.74	W081:21.69	3	126	1	On
018		J 4058	23 Nov 98	0859	N06:58.93	W081:21.78	3	153	1	On
018	036	J 4059	23 Nov 98	0917	N07:02.79	W081:28.81	3	126	224	On
018		J 4061	23 Nov 98	1126	N06:59.51	W081:41.08	2	73	5	On
018	036	J 4064	23 Nov 98	1551	N07:03.33	W082:19.14	3	126	33	On
018		J 4067	24 Nov 98	0835	N07:52.73	W084:58.53	4	153	16	On
018		J 4070	24 Nov 98	1244	N08:02.52	W085:28.87	4	182	5	On
018	015	J 4074	24 Nov 98	1727	N08:17.32	W086:07.34	3	153	13	On
018		J 4079	25 Nov 98	0950	N08:48.52	W088:21.42	4	182	28	On
018		J 4080	25 Nov 98	1031	N08:51.23	W088:24.88	4	126	8	On
018	002	J 4081	25 Nov 98	1035	N08:51.35	W088:31.86	4	126	65	On
018	002	J 4083	25 Nov 98	1208	N08:56.75	W088:43.13	5	73	119	On
018		J 4084	25 Nov 98	1358	N08:58.57	W088:52.76	5	182	7	On
018	002	J 4087	25 Nov 98	1600	N09:01.24	W089:09.09	4	73	3	Off
018		J 4097	26 Nov 98	1356	N10:06.05	W092:18.70	4	126	9	On
018		J 4101	27 Nov 98	0737	N11:10.03	W094:43.15	3	153	5	Off
018	015	J 4102	28 Nov 98	1519	N15:00.28	W098:20.30	2	153	31	On
018		J 4106	29 Nov 98	0953	N16:45.38	W100:08.39	2	111	1	On
018	021	J 4115	29 Nov 98	1344	N16:38.94	W100:36.80	0	111	56	On
018		J 4119	29 Nov 98	1650	N16:31.20	W100:55.85	2	153	38	On
018	032	J 4136	30 Nov 98	1542	N17:21.33	W103:50.56	2	185	44	On
018		J 4142	1 Dec 98	1226	N18:07.37	W106:44.80	3	153	14	On
018		J 4147	3 Dec 98	1407	N19:21.68	W110:58.69	4	153	4	On
018		J 4148	3 Dec 98	1422	N19:21.47	W110:51.85	4	99	4	Off
018		J 4149	3 Dec 98	1426	N19:22.45	W110:59.03	4	153	1	On
018		J 4150	3 Dec 98	1433	N19:26.74	W110:55.16	4	153	100	On
018		J 4151	3 Dec 98	1732	N19:47.69	W111:06.94	3	110	3	Off
<i>Grampus griseus</i>										
021		E 17	31 Jul 98	1107	N06:45.63	W080:41.71	0	153	10	Off
021		E 18	31 Jul 98	1128	N06:38.76	W080:42.88	0	73	9	On
021	018	E 25	31 Jul 98	1726	N06:03.36	W081:11.79	3	153	27	On
021		E 33	1 Aug 98	0922	N04:59.81	W082:23.71	2	186	6	On
021	018	E 34	1 Aug 98	0932	N04:59.42	W082:28.63	2	73	35	On
021		E 70	8 Aug 98	1020	S00:12.08	W106:44.99	2	1	4	Off
021		E 72	8 Aug 98	1237	S00:15.88	W107:06.39	2	186	8	On
021	037	E 78	9 Aug 98	1038	S01:02.92	W110:18.00	3	186	8	On
021		E 237	24 Sep 98	1135	N18:48.99	W105:46.05	3	153	12	On
021		E 292	13 Oct 98	1206	N04:37.97	W113:58.16	4	73	9	On
021	018	E 307	19 Oct 98	1530	N10:36.31	W094:51.62	2	56	44	On
021	018	E 314	20 Oct 98	0844	N10:30.72	W092:58.19	2	185	60	On
021		E 328	20 Oct 98	1657	N10:19.42	W092:14.97	0	186	8	Off
021	018	E 341	21 Oct 98	0844	N10:17.96	W090:28.80	1	161	45	Off
021		E 414	2 Nov 98	0641	S01:07.61	W091:12.06	2	152	14	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Effort
021	034	E 428	5 Nov 98	0852	S05:42.32	W094:40.04	3	186	7	On
021	034 033 018	E 434	5 Nov 98	1522	S06:31.06	W095:17.83	3	168	38	On
021	034	E 436	6 Nov 98	0814	S08:16.30	W096:56.20	4	186	12	On
021		E 445	8 Nov 98	0856	S12:15.96	W098:02.83	5	152	4	On
021		E 446	8 Nov 98	0935	S12:11.68	W097:56.64	5	168	6	On
021	018	E 491	22 Nov 98	1546	S10:35.02	W079:32.31	4	181	11	On
021	018	E 506	25 Nov 98	0711	S09:16.49	W079:37.38	4	92	8	On
021		E 568	1 Dec 98	0812	S07:42.97	W086:04.99	4	92	4	On
021		M 2050	13 Aug 98	1130	N14:18.64	W096:17.94	3	152	9	On
021		M 2052	13 Aug 98	1535	N14:04.88	W095:44.22	4	98	6	Off
021		M 2053	13 Aug 98	1646	N14:01.30	W095:35.00	4	181	5	On
021	018	M 2100	22 Aug 98	0835	N11:15.66	W090:11.53	2	168	22	On
021		M 2114	22 Aug 98	1535	N11:43.31	W090:58.64	2	149	9	Off
021		M 2125	23 Aug 98	1139	N12:20.83	W093:26.87	3	168	4	On
021		M 2134	24 Aug 98	1338	N12:11.20	W096:39.96	4	181	9	On
021		M 2144	3 Sep 98	0900	N05:21.94	W085:10.64	4	181	4	On
021		M 2153	5 Sep 98	0927	N05:20.63	W079:38.93	2	91	18	On
021		M 2157	5 Sep 98	1103	N05:16.88	W079:29.89	2	168	12	On
021		M 2160	5 Sep 98	1221	N05:15.95	W079:24.06	2	181	26	On
021		M 2187	13 Sep 98	1340	N06:27.55	W079:41.28	4	143	1	On
021		M 2190	14 Sep 98	1034	N06:26.26	W082:23.95	4	143	10	On
021		M 2200	16 Sep 98	0951	N06:54.51	W088:41.47	4	74	7	On
021		M 2202	16 Sep 98	1245	N06:56.36	W089:09.90	4	125	12	On
021	018	M 2280	6 Oct 98	1040	N17:36.81	W103:37.53	3	125	66	On
021		M 2282	6 Oct 98	1240	N17:52.17	W103:44.77	2	143	12	On
021	013	M 2305	19 Oct 98	1600	N01:18.89	W113:18.88	4	74	69	On
021		M 2317	21 Oct 98	1216	N01:20.62	W118:45.34	3	125	23	On
021	018	J 3142	6 Aug 98	0657	N23:48.53	W108:25.23	3	74	8	On
021		J 3144	6 Aug 98	0715	N23:48.72	W108:25.10	3	74	5	On
021		J 3155	6 Aug 98	1731	N24:31.29	W108:36.45	3	183	4	On
021	018	J 3156	6 Aug 98	1736	N24:29.99	W108:41.01	3	74	17	On
021		J 3159	6 Aug 98	1813	N24:28.53	W108:42.95	4	99	1	Off
021		J 3216	10 Aug 98	1143	N26:59.28	W110:53.28	3	147	30	On
021		J 3218	10 Aug 98	1250	N26:46.84	W110:57.42	3	143	45	On
021		J 3219	10 Aug 98	1317	N26:42.18	W110:56.72	2	74	4	On
021		J 3221	10 Aug 98	1321	N26:43.58	W110:57.75	2	143	12	On
021		J 3224	10 Aug 98	1511	N26:22.72	W111:01.96	1	125	39	On
021		J 3225	10 Aug 98	1537	N26:17.80	W111:03.48	1	147	23	On
021		J 3226	10 Aug 98	1608	N26:15.53	W111:04.34	1	7	11	On
021	077	J 3250	11 Aug 98	1000	N25:20.50	W109:32.36	1	74	353	On
021		J 3262	11 Aug 98	1254	N24:58.96	W109:35.63	1	7	68	On
021		J 3284	12 Aug 98	0813	N23:53.10	W108:56.15	2	125	13	On
021		J 3286	12 Aug 98	0848	N23:49.63	W109:00.94	2	74	7	On
021		J 3295	13 Aug 98	0743	N23:43.66	W107:44.46	0	143	21	On
021	018	J 3296	13 Aug 98	0804	N23:42.30	W107:43.44	0	143	200	On
021		J 3297	13 Aug 98	0805	N23:42.70	W107:47.88	0	143	20	On
021	018	J 3313	13 Aug 98	1522	N22:55.11	W107:32.30	2	183	153	On
021		J 3352	21 Aug 98	1259	N20:46.83	W106:34.67	1	125	15	On
021		J 3362	22 Aug 98	0717	N18:57.68	W104:48.01	3	143	14	On
021		J 3367	22 Aug 98	1305	N18:32.40	W103:59.66	5	4	7	Off
021	018	J 3371	23 Aug 98	0848	N17:54.37	W103:05.59	4	147	24	On
021		J 3379	23 Aug 98	1325	N17:37.64	W102:30.66	2	74	50	On
021		J 3382	23 Aug 98	1343	N17:37.05	W102:31.09	1	7	35	On
021	018	J 3386	23 Aug 98	1802	N17:22.56	W101:58.06	3	147	20	On
021		J 3407	25 Aug 98	1225	N15:39.62	W097:29.74	2	7	33	On
021		J 3487	28 Aug 98	1205	N11:51.47	W091:05.47	1	143	1	On
021	077	J 3488	28 Aug 98	1208	N11:48.47	W091:05.68	1	143	12	On
021		J 3490	28 Aug 98	1210	N11:51.57	W091:07.67	1	143	10	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Ef-fort	
021		J 3491	28 Aug 98	1211	N11:52.67	W091:06.19	1	183	1	On	
021		J 3492	28 Aug 98	1226	N11:47.38	W091:04.36	1	125	8	On	
021		J 3493	28 Aug 98	1227	N11:47.99	W090:59.46	1	183	1	On	
021		J 3496	28 Aug 98	1248	N11:46.39	W091:06.01	2	147	9	On	
021		J 3497	28 Aug 98	1300	N11:45.56	W091:02.75	2	143	1	On	
021		J 3520	29 Aug 98	1732	N12:23.63	W090:27.86	2	143	4	On	
021		J 3608	2 Sep 98	1242	N10:36.70	W086:38.95	3	143	6	On	
021		J 3704	16 Sep 98	0735	N07:45.30	W088:44.95	3	152	17	On	
021		J 3706	16 Sep 98	0927	N07:45.75	W088:58.50	3	168	11	On	
021		J 3723	19 Sep 98	0723	N09:38.88	W097:36.24	4	149	5	On	
021		J 3789	28 Sep 98	1316	N12:47.28	W108:08.67	3	92	26	On	
021	018	J 3807	30 Sep 98	1755	N18:25.48	W104:57.51	3	181	68	On	
021		J 4019	12 Nov 98	0924	N00:27.58	W080:27.97	4	153	3	On	
021		J 4066	24 Nov 98	0815	N07:51.30	W084:55.24	4	153	1	On	
021		J 4107	29 Nov 98	0958	N16:43.98	W100:11.47	2	182	3	On	
021		J 4108	29 Nov 98	1030	N16:47.73	W100:14.96	2	153	25	On	
021	018	J 4115	29 Nov 98	1344	N16:38.94	W100:36.80	0	111	56	On	
021		J 4134	30 Nov 98	1315	N17:12.00	W103:33.19	0	182	15	Off	
<i>Lagenorhynchus obliquidens</i>											
022	ZC	J 3028	1 Aug 98	1323	N30:00.97	W115:57.36	3	143	102	On	
022		J 3029	1 Aug 98	1409	N30:01.29	W115:56.22	3	7	6	On	
022		J 3030	1 Aug 98	1412	N30:00.69	W115:53.92	3	183	2	On	
022		J 3032	1 Aug 98	1515	N29:47.68	W115:53.40	4	74	24	On	
022		J 3039	1 Aug 98	1856	N29:32.60	W115:35.76	4	143	12	On	
022	ZC	J 3040	1 Aug 98	1914	N29:32.50	W115:34.37	4	143	38	On	
022		J 3061	2 Aug 98	1520	N28:06.38	W115:27.56	4	183	5	On	
022		J 3065	2 Aug 98	1619	N28:01.06	W115:23.58	5	183	4	Off	
022		J 3067	2 Aug 98	1656	N27:58.50	W115:20.26	5	4	2	Off	
022		J 3068	2 Aug 98	1732	N27:50.87	W115:15.46	5	7	23	On	
<i>Lagenorhynchus obscurus</i>											
025		E 466	21 Nov 98	1201	S11:55.60	W077:25.74	2	149	48	On	
025		E 467	21 Nov 98	1211	S11:54.81	W077:27.37	2	184	50	On	
025		E 468	21 Nov 98	1219	S11:53.29	W077:30.49	2	91	284	On	
025		E 469	21 Nov 98	1235	S11:51.65	W077:32.72	2	181	58	On	
025		E 470	21 Nov 98	1247	S11:51.06	W077:35.74	2	168	60	On	
025		E 471	21 Nov 98	1300	S11:50.96	W077:35.15	2	92	207	On	
025		E 472	21 Nov 98	1313	S11:51.54	W077:39.42	2	92	56	On	
025	016	E 473	21 Nov 98	1333	S11:43.04	W077:40.82	3	168	157	On	
025	016	E 474	21 Nov 98	1423	S11:45.41	W077:44.50	3	152	35	On	
025	016	E 475	21 Nov 98	1444	S11:44.87	W077:43.64	3	91	260	Off	
025	016	PU	E 476	21 Nov 98	1518	S11:46.26	W077:50.99	3	91	57	On
025	016	OB	E 514	25 Nov 98	1246	S08:39.71	W079:18.71	3	186	2025	On
025	016	E 516	25 Nov 98	1530	S08:20.86	W079:10.94	4	92	1368	On	
025	016	E 524	26 Nov 98	1329	S07:51.13	W079:34.44	3	181	65	On	
025		E 545	28 Nov 98	1628	S05:00.88	W081:37.17	3	181	31	On	
<i>Lagenodelphis hosei</i>											
026	077	E 104	16 Aug 98	0716	N01:30.17	W129:35.37	4	153	299	On	
026		E 113	19 Aug 98	0951	N06:59.32	W136:59.10	4	184	42	On	
026	031	E 143	6 Sep 98	1326	N05:29.23	W146:37.59	4	73	475	On	
<i>Peponocephala electra</i>											
031	026	E 143	6 Sep 98	1326	N05:29.23	W146:37.59	4	73	475	On	
<i>Feresa attenuata</i>											
032		E 92	11 Aug 98	1005	S02:31.94	W116:01.71	4	182	8	On	



Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
032		E 142	6 Sep 98	1149	N05:36.89	W146:41.37	5 86		13	On
032		E 297	16 Oct 98	1131	N10:11.23	W104:33.13	5 99		5	Off
032		E 608	5 Dec 98	1606	N01:05.42	W084:38.87	4 149		51	On
032		M 2037	12 Aug 98	1135	N14:18.98	W098:26.08	2 91		12	On
032		M 2039	12 Aug 98	1426	N14:31.52	W098:17.44	1 152		19	Off
032		M 2041	12 Aug 98	1540	N14:34.73	W098:16.88	1 92		23	On
032		M 2075	15 Aug 98	1325	N13:18.50	W091:34.73	1 92	120		On
032		M 2124	23 Aug 98	1056	N12:17.59	W093:20.35	3 91		23	On
032		M 2128	23 Aug 98	1338	N12:27.72	W093:38.48	3 91		17	On
032		M 2263	4 Oct 98	1031	N14:13.08	W101:18.58	4 143		23	Off
032	018	M 2361	31 Oct 98	0744	N19:35.01	W118:41.10	5 74		19	On
032		J 4103	28 Nov 98	1521	N14:58.01	W098:18.00	2 4		11	Off
032		J 4104	28 Nov 98	1620	N15:02.65	W098:21.75	2 73		28	On
032	018	J 4136	30 Nov 98	1542	N17:21.33	W103:50.56	2 185		44	On
032		J 4137	30 Nov 98	1636	N17:23.76	W103:55.20	1 126		27	On
<i>Pseudorca crassidens</i>										
033		E 130	3 Sep 98	0951	N13:19.51	W153:34.51	3 186		8	Off
033	096	E 431	5 Nov 98	1418	S06:26.78	W095:15.08	4 181		2	On
033	021 034 018	E 434	5 Nov 98	1522	S06:31.06	W095:17.83	3 168		38	On
033		E 435	5 Nov 98	1643	S06:32.20	W095:24.77	3 186		12	On
033		M 2076	15 Aug 98	1334	N13:19.78	W091:29.20	1 92		20	Off
033	018	J 3390	24 Aug 98	0928	N16:29.33	W100:20.07	4 74		24	On
<i>Globicephala sp.</i>										
034		E 56	6 Aug 98	1032	N01:12.89	W099:41.96	4 126		11	On
034		E 122	26 Aug 98	1110	N19:23.41	W156:01.70	0 15		3	Off
034		E 125	26 Aug 98	1139	N19:23.33	W156:06.39	1 184		18	Off
034		E 128	26 Aug 98	1808	N19:14.52	W156:07.73	2 186		8	Off
034		E 387	29 Oct 98	0920	N08:42.78	W084:31.34	4 99		9	Off
034	021	E 428	5 Nov 98	0852	S05:42.32	W094:40.04	3 186		7	On
034	021 033 018	E 434	5 Nov 98	1522	S06:31.06	W095:17.83	3 168		38	On
034	021	E 436	6 Nov 98	0814	S08:16.30	W096:56.20	4 186		12	On
034		E 442	7 Nov 98	0955	S11:05.38	W099:31.51	5 184		10	On
034	018	E 504	24 Nov 98	1044	S10:00.09	W082:04.43	4 91		18	On
034	018	E 540	28 Nov 98	1135	S05:38.45	W081:24.98	3 91		80	On
034	018	E 551	29 Nov 98	0949	S03:34.03	W081:21.95	3 99		23	Off
034		E 577	2 Dec 98	0825	S08:05.12	W088:16.82	3 168		10	Off
034	018	E 578	2 Dec 98	0937	S07:54.09	W088:13.15	4 186		5	On
034		E 588	3 Dec 98	1320	S04:30.69	W088:20.63	5 149		8	On
034		E 603	5 Dec 98	1118	N00:36.39	W085:08.71	3 168		5	On
034		E 612	6 Dec 98	1423	N02:58.76	W082:34.17	5 92		6	On
034	077	M 2140	30 Aug 98	0905	N05:01.48	W095:44.70	3 181		16	On
034	018	M 2143	31 Aug 98	1445	N05:21.30	W092:13.09	4 92		25	On
034		M 2161	5 Sep 98	1226	N05:13.71	W079:23.33	2 152		12	Off
034		M 2171	6 Sep 98	1358	N06:51.39	W078:43.63	4 91		6	Off
034	018	M 2299	18 Oct 98	1842	N03:10.95	W112:53.00	5 125		23	On
034		M 2302	19 Oct 98	0905	N01:55.96	W113:06.01	2 7		12	On
034		M 2311	20 Oct 98	1723	N01:23.77	W116:37.04	3 143		50	On
034		M 2312	20 Oct 98	1755	N01:26.38	W116:42.43	3 7		30	On
034	077	M 2314	21 Oct 98	0713	N01:16.67	W118:06.11	2 183		35	On
034		M 2315	21 Oct 98	0741	N01:22.16	W118:05.42	2 143		9	On
034		M 2352	26 Oct 98	1710	N12:08.25	W123:18.67	3 125		28	On
034		M 2353	26 Oct 98	1753	N12:13.94	W123:21.98	3 143		23	On
034		M 2366	2 Nov 98	1747	N22:05.03	W115:49.92	5 147		9	On
034		J 3044	2 Aug 98	0825	N28:36.77	W115:06.61	4 125		20	Off
034		J 3724	19 Sep 98	1056	N09:46.75	W097:48.45	4 99		3	Off
034		J 3852	12 Oct 98	1407	S02:18.37	W106:44.64	3 99		15	Off

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Ef-fort
034		J 3858	12 Oct 98	1846	S02:55.98	W106:51.97	3	149	8	On
034	018	J 3871	15 Oct 98	1735	S06:15.66	W105:08.95	4	92	39	On
034		J 4013	11 Nov 98	1026	S01:50.24	W081:13.84	4	4	13	Off
034		J 4043	15 Nov 98	1639	N07:16.95	W078:21.90	1	4	24	On
034		J 4063	23 Nov 98	1355	N07:01.86	W082:01.71	3	182	11	On
<i>Globicephala macrorhynchus</i>										
036	018	E 51	5 Aug 98	1249	N01:35.66	W096:40.13	4	126	30	On
036		E 94	11 Aug 98	1038	S02:35.34	W116:02.45	4	73	39	On
036		E 118	26 Aug 98	0629	N19:00.77	W155:58.65	4	186	27	Off
036		E 120	26 Aug 98	0911	N19:21.35	W156:02.08	1	184	22	Off
036		E 124	26 Aug 98	1133	N19:27.03	W156:04.33	1	184	14	Off
036		E 134	3 Sep 98	1516	N12:36.69	W153:29.62	2	185	20	Off
036		E 138	5 Sep 98	0845	N07:40.88	W149:40.52	4	73	6	Off
036		E 144	6 Sep 98	1622	N05:45.17	W146:15.42	4	153	17	On
036		E 153	8 Sep 98	1622	N10:30.36	W141:53.87	3	184	32	On
036		E 171	15 Sep 98	1157	N09:51.41	W129:17.79	4	73	24	On
036		E 187	17 Sep 98	1649	N12:35.89	W124:01.36	3	184	40	On
036		E 353	21 Oct 98	1235	N10:06.90	W090:00.98	2	73	13	On
036		E 390	29 Oct 98	1054	N08:33.39	W084:39.01	5	186	11	On
036		M 2248	2 Oct 98	1615	N11:42.32	W106:15.60	2	147	8	On
036		M 2300	19 Oct 98	0724	N01:59.22	W113:05.03	2	125	10	On
036		M 2486	23 Nov 98	0744	N05:56.77	W125:59.49	3	183	79	On
036		J 3043	2 Aug 98	0659	N28:38.65	W115:07.04	4	4	24	Off
036		J 3045	2 Aug 98	0921	N28:32.16	W115:12.93	4	125	10	Off
036	018	J 3078	3 Aug 98	0910	N26:26.94	W114:00.33	3	74	108	Off
036	018	J 3178	9 Aug 98	1626	N27:18.18	W111:38.71	2	143	33	On
036		J 3230	10 Aug 98	1719	N26:04.07	W110:56.78	1	7	20	On
036	018	J 3618	2 Sep 98	1636	N10:15.83	W086:39.61	3	125	87	On
036	018	J 3629	3 Sep 98	1328	N09:04.35	W084:59.57	4	147	86	On
036	018	J 3653	5 Sep 98	1730	N07:10.72	W082:02.59	4	74	59	On
036		J 3758	24 Sep 98	1416	N10:27.73	W110:53.17	3	168	18	On
036	018	J 3843	11 Oct 98	1159	N00:39.77	W106:29.24	2	181	68	On
036	018	J 3867	14 Oct 98	1158	S08:37.15	W107:45.30	4	168	17	On
036	018	J 3922	1 Nov 98	1017	N08:25.12	W089:57.68	5	73	61	On
036	018	J 3938	4 Nov 98	1239	S00:27.51	W094:41.05	3	153	24	Off
036	018	J 3979	7 Nov 98	0805	S01:06.03	W091:04.53	3	111	34	On
036		J 4009	11 Nov 98	0754	S01:57.75	W081:17.74	4	73	29	On
036	018	J 4011	11 Nov 98	0910	S01:55.26	W081:17.80	4	73	60	On
036	018	J 4059	23 Nov 98	0917	N07:02.79	W081:28.81	3	126	224	On
036	018	J 4064	23 Nov 98	1551	N07:03.33	W082:19.14	3	126	33	On
<i>Orcinus orca</i>										
037	021	E 78	9 Aug 98	1038	S01:02.92	W110:18.00	3	186	8	On
037		E 112	18 Aug 98	1314	N05:54.58	W135:36.92	3	184	3	On
037		E 133	3 Sep 98	1442	N12:38.69	W153:26.80	2	184	2	Off
037		E 147	7 Sep 98	0833	N07:27.63	W144:42.18	6	73	1	On
037		E 178	16 Sep 98	0943	N12:11.96	W127:49.51	2	184	5	On
037		E 322	20 Oct 98	1452	N10:21.72	W092:16.30	1	126	4	Off
037		E 380	22 Oct 98	1434	N09:57.72	W088:34.61	1	186	2	On
037		E 460	13 Nov 98	1020	S16:03.76	W083:24.49	4	181	9	On
037		E 499	23 Nov 98	1158	S11:00.66	W080:48.01	3	149	13	On
037		E 501	23 Nov 98	1810	S11:17.30	W081:15.10	4	91	4	On
037		E 536	27 Nov 98	1718	S06:59.45	W080:04.62	4	184	3	On
037		M 2177	6 Sep 98	1732	N07:23.09	W078:55.85	2	152	5	On
037		M 2209	17 Sep 98	1633	N07:19.22	W093:06.57	5	74	5	On
037		M 2219	21 Sep 98	0839	N08:00.89	W104:38.49	4	125	8	On
037		M 2271	5 Oct 98	1102	N15:54.18	W100:58.95	4	143	8	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Ef-fort
037		M 2295	17 Oct 98	1456	N06:12.28	W112:19.41	5	147	4	On
037		M 2308	20 Oct 98	0733	N01:18.25	W115:10.42	4	125	7	On
037		M 2320	22 Oct 98	1057	N01:24.70	W121:35.75	4	147	13	On
037		M 2324	24 Oct 98	0912	N05:02.03	W123:24.68	4	183	3	On
037		M 2370	3 Nov 98	1623	N21:41.04	W114:13.26	4	143	22	On
037		M 2428	8 Nov 98	1631	N19:48.78	W106:22.14	2	143	4	On
037		M 2452	16 Nov 98	1431	N15:33.18	W109:45.93	4	143	9	On
037		M 2473	20 Nov 98	1135	N09:33.17	W119:03.41	2	143	5	On
037		M 2484	22 Nov 98	0928	N07:19.68	W123:23.47	4	143	1	On
037		M 2501	24 Nov 98	1205	N05:23.31	W128:52.31	4	125	4	On
037		M 2502	24 Nov 98	1241	N05:27.33	W128:56.24	4	147	5	On
037		J 3759	24 Sep 98	1630	N10:27.27	W111:07.79	3	168	3	On
<i>Physeter macrocephalus</i>										
046		E 102	13 Aug 98	1655	S03:16.19	W123:12.15	4	182	14	On
046		E 158	10 Sep 98	0841	N13:49.12	W138:38.58	3	126	3	On
046		E 172	15 Sep 98	1744	N10:34.34	W128:48.35	3	126	1	Off
046		E 287	11 Oct 98	1709	N03:31.14	W117:34.13	4	153	19	On
046		E 405	1 Nov 98	1059	N01:12.40	W090:50.73	4	184	1	On
046		E 406	1 Nov 98	1123	N01:13.63	W090:56.51	4	99	1	Off
046		E 419	4 Nov 98	0736	S03:01.69	W092:26.36	4	92	2	On
046		E 451	9 Nov 98	1457	S12:15.59	W093:40.37	5	91	1	On
046		E 453	10 Nov 98	1024	S13:54.33	W091:29.66	5	149	1	On
046	018	E 493	22 Nov 98	1610	S10:38.65	W079:38.83	4	92	15	Off
046		E 494	22 Nov 98	1724	S10:35.84	W079:41.11	4	92	2	On
046		E 495	22 Nov 98	1732	S10:38.81	W079:41.13	4	152	2	On
046		E 496	22 Nov 98	1740	S10:35.33	W079:43.23	4	186	5	On
046		E 497	22 Nov 98	1741	S10:37.86	W079:41.91	4	149	8	On
046		E 539	28 Nov 98	1054	S05:46.78	W081:22.26	2	92	1	On
046		E 573	1 Dec 98	1526	S08:33.14	W086:52.50	4	184	1	On
046		E 574	1 Dec 98	1646	S08:37.87	W087:02.63	4	186	1	On
046		E 575	1 Dec 98	1842	S08:45.91	W087:10.01	4	99	1	Off
046		E 576	2 Dec 98	0706	S08:04.05	W088:16.03	3	184	7	On
046		M 2137	28 Aug 98	1054	N05:24.28	W101:34.47	5	91	1	On
046		M 2165	5 Sep 98	1555	N05:20.86	W079:02.70	1	181	1	On
046		M 2296	18 Oct 98	1032	N03:54.83	W112:47.14	4	143	1	On
046		M 2298	18 Oct 98	1826	N03:08.23	W112:56.79	5	74	5	On
046		J 3101	4 Aug 98	1118	N24:08.80	W112:12.93	3	143	25	On
046		J 3176	9 Aug 98	1325	N27:08.27	W111:34.05	2	74	11	On
046	077	J 3179	9 Aug 98	1709	N27:17.47	W111:41.85	2	125	7	On
046		J 3180	9 Aug 98	1729	N27:21.05	W111:39.68	2	7	2	On
046		J 3182	9 Aug 98	1733	N27:25.32	W111:43.49	2	7	2	On
046		J 3185	9 Aug 98	1741	N27:24.14	W111:46.57	2	147	4	On
046		J 3187	9 Aug 98	1758	N27:25.05	W111:43.19	2	7	1	On
046		J 3191	9 Aug 98	1810	N27:26.52	W111:43.90	2	7	1	On
046		J 3193	9 Aug 98	1812	N27:27.48	W111:43.59	2	125	1	On
046		J 3277	11 Aug 98	1656	N24:28.00	W109:30.01	1	183	15	On
046		J 3860	13 Oct 98	1228	S05:34.81	W107:15.70	4	149	1	On
046		J 3861	13 Oct 98	1355	S05:43.08	W107:19.17	4	149	1	On
046		J 3863	13 Oct 98	1522	S05:50.12	W107:20.40	4	152	1	On
046		J 3864	13 Oct 98	1717	S06:10.95	W107:23.14	5	91	1	On
046		J 3872	16 Oct 98	0711	S05:01.47	W103:53.46	5	92	8	On
046		J 3874	16 Oct 98	1107	S04:49.61	W103:38.81	5	168	1	On
046		J 3879	16 Oct 98	1744	S04:05.59	W103:04.88	4	92	2	On
046		J 3994	8 Nov 98	1025	S01:12.90	W088:23.22	5	182	25	On
046		J 3999	9 Nov 98	1446	S02:02.29	W085:36.01	2	185	2	On
046		J 4015	11 Nov 98	1120	S01:44.08	W081:12.99	4	111	6	On
046		J 4029	14 Nov 98	1111	N04:08.49	W077:42.87	4	73	28	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
046		J 4130	30 Nov 98	1147	N17:08.97	W103:25.50	2	126	1	Off
<i>Kogia breviceps</i>										
047		J 3567	1 Sep 98	1607	N11:41.18	W087:31.68	1	143	1	Off
<i>Kogia sima</i>										
048		E 205	18 Sep 98	1556	N12:31.14	W121:45.83	1	73	1	On
048		E 325	20 Oct 98	1610	N10:19.79	W092:15.91	1	186	1	Off
048		M 2244	2 Oct 98	1158	N11:28.08	W106:54.13	3	74	2	On
048		M 2246	2 Oct 98	1452	N11:37.91	W106:26.71	3	74	1	On
048		M 2253	3 Oct 98	0616	N12:34.26	W104:40.48	0	143	2	On
048		M 2275	5 Oct 98	1601	N16:04.46	W101:19.58	2	143	1	On
048		M 2276	5 Oct 98	1810	N16:19.20	W101:36.02	2	125	1	On
048		M 2335	25 Oct 98	0926	N08:08.16	W123:19.59	2	143	1	On
048		M 2338	25 Oct 98	1243	N08:37.43	W123:20.65	1	125	2	Off
048		M 2339	25 Oct 98	1249	N08:34.90	W123:21.20	1	99	2	Off
048		M 2340	25 Oct 98	1302	N08:40.09	W123:22.49	1	143	1	On
048		M 2343	25 Oct 98	1322	N08:42.32	W123:20.31	1	143	1	Off
048		M 2348	26 Oct 98	1214	N11:27.00	W123:22.88	2	125	2	On
048		M 2430	8 Nov 98	1750	N19:49.22	W106:15.74	1	143	2	Off
048		M 2431	14 Nov 98	1259	N19:05.85	W104:45.22	2	143	1	On
048		M 2432	14 Nov 98	1302	N19:04.95	W104:45.46	2	143	2	On
048		M 2434	14 Nov 98	1337	N19:00.26	W104:48.62	2	143	1	On
048		M 2436	14 Nov 98	1355	N19:00.06	W104:48.57	1	125	3	On
048		M 2445	15 Nov 98	1413	N17:23.43	W107:06.42	2	125	1	On
048		J 3167	9 Aug 98	0908	N26:29.97	W111:24.60	3	7	2	Off
048		J 3223	10 Aug 98	1419	N26:34.74	W110:58.48	1	4	3	Off
048		J 3234	10 Aug 98	1840	N25:53.83	W110:53.61	2	4	1	Off
048		J 3243	11 Aug 98	0823	N25:39.29	W109:34.11	0	147	1	On
048		J 3244	11 Aug 98	0843	N25:36.20	W109:36.49	0	7	1	On
048		J 3260	11 Aug 98	1237	N25:03.05	W109:32.28	1	143	1	On
048		J 3261	11 Aug 98	1156	N25:11.95	W109:33.74	1	143	2	Off
048		J 3264	11 Aug 98	1334	N24:55.35	W109:37.64	1	143	1	On
048		J 3266	11 Aug 98	1344	N24:53.08	W109:36.16	1	143	2	On
048		J 3276	11 Aug 98	1645	N24:32.73	W109:36.12	1	7	2	On
048		J 3283	12 Aug 98	0745	N24:01.02	W108:56.30	1	125	1	Off
048		J 3293	13 Aug 98	0714	N23:51.37	W107:42.82	0	7	1	On
048		J 3311	13 Aug 98	1433	N23:04.33	W107:36.94	1	143	4	On
048		J 3329	18 Aug 98	1454	N22:42.84	W106:28.93	2	125	6	On
048		J 3482	28 Aug 98	1030	N12:00.49	W091:17.28	1	143	1	On
048		J 3615	2 Sep 98	1512	N10:26.00	W086:41.77	3	183	3	On
048		J 3792	28 Sep 98	1603	N12:50.39	W107:56.45	1	181	1	On
048		J 3795	28 Sep 98	1653	N12:53.05	W107:49.72	0	4	1	Off
048		J 3798	28 Sep 98	1738	N12:54.45	W107:44.00	1	91	2	On
048		J 3821	6 Oct 98	1756	N15:10.28	W104:23.01	0	92	1	On
048		J 4036	15 Nov 98	1147	N06:52.38	W077:51.52	1	153	1	On
048		J 4044	15 Nov 98	1645	N07:19.00	W078:18.48	1	4	1	Off
<i>ziphiid whale</i>										
049		E 37	1 Aug 98	1105	N04:43.81	W082:35.77	1	153	1	On
049		E 65	7 Aug 98	1618	N00:13.43	W104:16.43	3	153	1	On
049		E 69	8 Aug 98	1009	S00:10.74	W106:44.15	2	185	2	Off
049		E 146	7 Sep 98	0727	N07:16.63	W144:53.56	6	186	1	On
049		E 195	18 Sep 98	0924	N12:34.65	W122:23.90	2	184	1	On
049		E 201	18 Sep 98	1323	N12:35.45	W122:03.58	1	182	1	On
049		E 223	21 Sep 98	0851	N15:26.68	W113:40.38	3	1	4	On
049		E 244	24 Sep 98	1711	N19:01.30	W104:59.65	2	73	1	On
049		E 427	5 Nov 98	0609	S05:23.43	W094:19.41	3	181	1	On

Table 2 (continued)

Other Code	Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Ef- fort
049		E 567	30 Nov 98	1722	S06:27.74	W084:40.37	5	186	1	Off
049		E 597	4 Dec 98	1621	S01:06.73	W086:53.78	4	186	1	On
049		M 2025	8 Aug 98	1405	N13:45.71	W108:26.82	2	92	1	On
049		M 2073	12 Aug 98	0915	N14:07.22	W098:36.69	3	99	2	Off
049		M 2074	15 Aug 98	1325	N13:14.33	W091:31.56	1	98	1	Off
049	077	M 2131	23 Aug 98	1631	N12:35.43	W093:59.59	3	181	7	On
049		M 2136	27 Aug 98	1748	N05:19.75	W103:50.80	5	92	4	On
049		M 2139	30 Aug 98	0659	N05:01.18	W096:05.74	3	152	1	On
049		M 2318	22 Oct 98	0730	N01:19.96	W120:59.23	4	143	1	On
049		M 2326	24 Oct 98	1450	N05:52.19	W123:18.63	2	99	2	Off
049		J 3102	4 Aug 98	1243	N24:07.77	W112:11.80	3	74	1	Off
049		J 3153	6 Aug 98	1632	N24:32.60	W108:26.45	3	7	1	On
049		J 3207	10 Aug 98	0853	N27:20.62	W110:49.52	5	143	2	On
049		J 3388	24 Aug 98	0738	N16:43.88	W100:36.88	4	7	2	On
049		J 3417	25 Aug 98	1732	N15:29.91	W096:57.58	1	183	1	On
049		J 3472	28 Aug 98	0907	N12:11.85	W091:14.76	0	143	1	On
049		J 3734	22 Sep 98	1016	N10:09.14	W106:14.88	2	91	2	On
049		J 3753	24 Sep 98	1015	N10:31.85	W110:42.44	2	92	3	On
049		J 3815	6 Oct 98	1145	N15:54.17	W104:14.41	2	168	1	On
049		J 3822	7 Oct 98	0748	N13:22.46	W104:36.13	3	92	2	On
049		J 3838	10 Oct 98	1605	N02:33.53	W106:09.81	6	91	1	Off
049		J 3910	20 Oct 98	1403	N04:22.59	W094:25.61	4	92	1	On
049		J 4031	14 Nov 98	1547	N04:15.30	W077:56.37	4	111	1	On
049		J 4135	30 Nov 98	1420	N17:16.09	W103:40.63	1	185	1	On
<i>Mesoplodon sp.</i>										
051		E 11	31 Jul 98	0748	N06:53.03	W080:28.96	2	73	2	Off
051		E 20	31 Jul 98	1158	N06:37.60	W080:43.36	0	1	3	Off
051		E 60	7 Aug 98	1038	N00:19.14	W103:26.56	4	185	2	On
051		E 63	7 Aug 98	1257	N00:18.95	W103:45.54	4	186	2	On
051		E 73	8 Aug 98	1259	S00:16.09	W107:10.40	2	99	1	Off
051		E 103	14 Aug 98	1742	S01:24.66	W125:43.00	3	99	2	Off
051		E 132	3 Sep 98	1228	N13:02.51	W153:28.13	3	153	2	Off
051		E 165	12 Sep 98	1412	N09:52.61	W134:40.92	3	186	2	On
051		E 169	13 Sep 98	1449	N06:41.59	W132:42.87	6	1	1	On
051		E 193	18 Sep 98	0858	N12:31.88	W122:27.41	2	1	2	Off
051		E 346	21 Oct 98	1110	N10:07.08	W090:13.91	2	182	3	On
051		E 462	14 Nov 98	1208	S14:31.09	W081:05.11	4	184	1	On
051		E 542	28 Nov 98	1346	S05:26.92	W081:32.13	2	92	4	On
051		E 601	5 Dec 98	0924	N00:23.84	W085:23.65	3	91	2	On
051		E 610	6 Dec 98	1007	N02:27.76	W083:06.56	5	92	1	On
051		E 622	7 Dec 98	1535	N03:48.18	W079:28.64	4	91	1	On
051		M 2012	4 Aug 98	1930	N18:45.57	W114:38.66	2	99	2	Off
051		M 2077	15 Aug 98	1452	N13:21.80	W091:29.58	1	92	2	On
051		M 2147	4 Sep 98	0834	N05:19.91	W082:48.64	4	92	1	On
051		M 2175	6 Sep 98	1648	N07:16.83	W078:52.67	2	152	4	On
051		M 2256	3 Oct 98	0957	N12:51.31	W104:15.61	3	7	2	On
051		M 2267	5 Oct 98	0837	N15:40.53	W100:36.98	2	74	1	On
051		J 3119	5 Aug 98	0806	N23:12.48	W110:29.34	2	143	2	On
051		J 3235	10 Aug 98	1844	N25:50.52	W110:51.50	2	7	1	On
051		J 3247	11 Aug 98	0912	N25:31.49	W109:36.06	0	4	2	Off
051		J 3258	11 Aug 98	1204	N25:10.79	W109:27.40	1	143	2	Off
051		J 3265	11 Aug 98	1339	N24:54.62	W109:39.94	1	143	3	On
051		J 3279	12 Aug 98	0708	N24:03.21	W108:53.67	1	143	2	On
051		J 3280	12 Aug 98	0734	N24:01.29	W108:57.93	1	143	2	On
051		J 3300	13 Aug 98	0927	N23:35.50	W107:42.55	1	147	2	On
051		J 3309	13 Aug 98	1207	N23:20.32	W107:36.29	1	74	1	On
051		J 3318	13 Aug 98	1819	N22:36.80	W107:28.42	1	7	3	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Ef-fort
051		J 3416	25 Aug 98	1730	N15:29.16	W096:55.67	1	7	2	On
051		J 3794	28 Sep 98	1625	N12:49.08	W107:50.59	0	152	2	Off
051		J 4038	15 Nov 98	1233	N06:56.25	W077:51.11	1	111	2	On
051		J 4039	15 Nov 98	1256	N06:59.12	W078:00.67	2	73	3	On
051		J 4131	30 Nov 98	1212	N17:09.90	W103:25.52	1	126	1	On
<i>Mesoplodon densirostris</i>										
059		E 48	2 Aug 98	1715	N03:42.43	W085:55.86	5	184	3	On
059		E 139	6 Sep 98	0806	N05:55.35	W147:10.86	5	153	2	On
059		J 3248	11 Aug 98	0925	N25:29.58	W109:37.48	0	143	2	On
059		J 3837	9 Oct 98	1235	N06:11.52	W105:35.60	5	91	3	On
<i>Ziphius cavirostris</i>										
061		E 38	1 Aug 98	1146	N04:37.84	W082:39.81	2	73	1	On
061		E 74	8 Aug 98	1317	S00:17.08	W107:14.60	3	185	2	On
061		E 79	9 Aug 98	1217	S00:58.13	W110:28.85	3	73	3	On
061		E 197	18 Sep 98	1026	N12:41.11	W122:19.52	2	182	1	On
061		E 203	18 Sep 98	1430	N12:27.58	W121:57.13	1	153	2	Off
061		E 348	21 Oct 98	1138	N10:10.92	W090:05.15	2	73	2	Off
061		E 448	8 Nov 98	1225	S12:15.18	W097:37.77	5	152	4	On
061		E 452	10 Nov 98	0826	S13:35.34	W091:41.76	5	168	3	On
061		E 570	1 Dec 98	1405	S08:19.59	W086:46.76	4	152	5	On
061		E 587	3 Dec 98	1207	S04:39.89	W088:23.29	5	149	3	On
061		E 605	5 Dec 98	1308	N00:48.03	W085:01.69	3	186	1	Off
061		M 2045	12 Aug 98	1713	N14:45.44	W098:10.59	2	92	2	On
061		M 2198	15 Sep 98	1024	N06:39.12	W085:30.43	4	183	1	Off
061		M 2220	22 Sep 98	0959	N07:36.79	W108:11.32	3	147	1	On
061		M 2221	22 Sep 98	1206	N07:23.26	W108:25.32	3	183	2	On
061		M 2225	22 Sep 98	1724	N06:51.42	W109:00.44	2	125	2	On
061		M 2237	27 Sep 98	1341	N07:43.72	W117:55.54	5	7	1	On
061		M 2251	2 Oct 98	1730	N11:48.34	W106:05.74	1	143	2	On
061		M 2334	24 Oct 98	1853	N06:26.30	W123:20.29	2	29	2	Off
061		M 2342	25 Oct 98	1319	N08:41.37	W123:20.61	1	99	2	Off
061		M 2427	8 Nov 98	1556	N19:55.49	W106:26.82	2	183	2	On
061		J 3121	5 Aug 98	0849	N23:08.06	W110:33.71	2	7	1	On
061		J 3123	5 Aug 98	1026	N23:02.65	W110:24.07	2	4	3	Off
061		J 3129	5 Aug 98	1803	N22:41.86	W109:34.23	3	125	1	On
061		J 3220	10 Aug 98	1319	N26:39.85	W110:53.94	2	74	1	On
061		J 3229	10 Aug 98	1713	N26:06.32	W110:55.13	1	74	1	On
061		J 3249	11 Aug 98	0953	N25:28.34	W109:32.41	1	74	2	On
061		J 3253	11 Aug 98	1119	N25:12.86	W109:36.53	1	7	3	Off
061		J 3259	11 Aug 98	1223	N25:04.41	W109:29.92	1	143	2	On
061		J 3263	11 Aug 98	1316	N24:56.92	W109:34.72	1	7	2	On
061		J 3267	11 Aug 98	1349	N24:49.65	W109:30.75	1	74	1	On
061		J 3268	11 Aug 98	1352	N24:50.59	W109:33.95	1	74	2	On
061		J 3305	13 Aug 98	1045	N23:24.49	W107:50.67	1	147	1	On
061		J 3355	21 Aug 98	1429	N20:36.15	W106:22.69	2	74	1	On
061		J 3356	21 Aug 98	1502	N20:34.45	W106:20.90	2	125	1	On
061		J 3361	21 Aug 98	1859	N20:07.70	W105:55.74	3	125	1	On
061		J 3373	23 Aug 98	1100	N17:45.27	W102:54.30	3	7	1	On
061		J 3380	23 Aug 98	1331	N17:37.43	W102:34.58	1	125	1	On
061		J 3507	28 Aug 98	1635	N11:18.10	W090:55.87	2	125	2	On
061		J 3581	1 Sep 98	1847	N11:29.44	W087:17.02	2	74	1	On
061		J 3617	2 Sep 98	1616	N10:19.84	W086:40.15	3	7	2	On
061		J 3710	16 Sep 98	1817	N08:00.10	W089:52.46	4	152	2	On
061		J 3884	17 Oct 98	1444	S02:13.58	W101:14.50	3	168	2	On
061		J 3953	5 Nov 98	1355	S01:52.37	W094:26.41	2	185	3	On
061		J 3954	5 Nov 98	1447	S01:53.03	W094:19.95	2	111	3	On

Table 2 (continued)

Other Code	Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
061		J 3966	6 Nov 98	1225	S01:15.73	W092:06.17	4	4	1	Off
061		J 4000	9 Nov 98	1449	S01:57.82	W085:37.56	2	144	5	Off
061		J 4007	10 Nov 98	1801	S02:42.64	W082:22.09	4	73	1	On
061		J 4042	15 Nov 98	1526	N07:11.82	W078:11.63	2	153	4	Off
<i>Berardius bairdii</i>										
063		J 3076	3 Aug 98	0716	N26:32.25	W114:03.13	3	147	15	On
063		J 3077	3 Aug 98	0838	N26:30.63	W114:02.30	3	74	10	Off
063		J 3084	3 Aug 98	1334	N26:05.61	W113:41.21	4	125	8	On
<i>Balaenoptera sp.</i>										
070		E 198	18 Sep 98	1036	N12:48.46	W122:17.37	2	73	1	On
070		E 222	20 Sep 98	1704	N14:43.05	W115:16.16	3	153	1	On
070		E 251	1 Oct 98	1645	N19:29.54	W107:58.55	4	126	1	On
070		E 261	5 Oct 98	1407	N16:42.17	W117:24.06	5	126	1	On
070		E 415	2 Nov 98	0847	S01:02.56	W090:52.93	3	149	1	On
070		E 429	5 Nov 98	0927	S05:47.37	W094:46.00	3	149	1	On
070		E 433	5 Nov 98	1429	S06:27.21	W095:19.96	4	181	1	Off
070		E 547	29 Nov 98	0645	S03:17.38	W081:12.55	2	152	56	On
070		E 557	30 Nov 98	0629	S05:15.67	W083:26.30	3	186	1	On
070		E 560	30 Nov 98	0825	S05:26.71	W083:43.60	3	181	2	On
070		E 596	4 Dec 98	1523	S01:08.43	W086:57.43	4	168	1	Off
070		M 2032	9 Aug 98	1727	N13:10.32	W105:14.12	5	152	1	On
070		M 2379	4 Nov 98	1547	N20:50.47	W112:10.56	3	29	1	Off
070		M 2393	5 Nov 98	1643	N20:47.46	W110:53.90	4	143	1	On
070		M 2396	6 Nov 98	0752	N20:39.13	W109:40.04	4	125	1	On
070		M 2397	6 Nov 98	0821	N20:41.40	W109:39.21	4	147	1	On
070		M 2399	6 Nov 98	0852	N20:49.99	W109:36.14	4	147	1	On
070		M 2400	6 Nov 98	0859	N20:49.71	W109:44.57	4	143	1	On
070		M 2402	6 Nov 98	1004	N21:02.72	W109:40.86	4	143	1	On
070		M 2406	6 Nov 98	1205	N21:16.15	W109:49.04	4	7	1	On
070		M 2409	6 Nov 98	1246	N21:26.16	W109:41.04	4	98	1	Off
070		M 2411	6 Nov 98	1638	N21:57.23	W109:39.66	4	99	1	Off
070		M 2458	17 Nov 98	1247	N14:04.41	W112:00.64	4	143	1	On
070		M 2481	21 Nov 98	1459	N08:34.08	W121:20.03	3	147	1	Off
070		M 2483	21 Nov 98	1714	N08:12.37	W121:31.51	3	147	1	Off
070		M 2488	23 Nov 98	1255	N05:27.24	W126:37.09	4	125	1	On
070		M 2496	23 Nov 98	1727	N05:07.62	W127:15.85	4	143	1	On
070		M 2497	23 Nov 98	1827	N05:11.58	W127:26.12	4	69	1	On
070		M 2499	24 Nov 98	1042	N05:15.70	W128:54.99	4	183	1	On
070		M 2510	26 Nov 98	1728	N11:24.57	W130:41.32	5	147	1	On
070		M 2512	27 Nov 98	0828	N13:11.78	W131:23.06	5	69	1	On
070		M 2513	27 Nov 98	0850	N13:15.72	W131:24.56	5	143	1	On
070		M 2514	27 Nov 98	1047	N13:32.67	W131:32.60	5	125	1	On
070		J 3075	3 Aug 98	0711	N26:37.88	W114:04.58	3	4	1	Off
070		J 3092	3 Aug 98	1903	N26:10.28	W113:01.02	5	4	1	Off
070		J 3112	4 Aug 98	1714	N24:03.32	W111:45.69	3	99	1	Off
070		J 3275	11 Aug 98	1639	N24:29.58	W109:28.13	1	143	1	On
070		J 3288	12 Aug 98	1406	N23:15.82	W109:20.98	3	143	1	On
070		J 3941	4 Nov 98	1433	S00:34.55	W094:43.32	2	126	1	On
070		J 3942	4 Nov 98	1439	S00:31.88	W094:54.33	2	185	1	On
070		J 3943	4 Nov 98	1505	S00:40.39	W094:52.62	2	111	1	On
070		J 3945	4 Nov 98	1527	S00:41.26	W094:58.90	2	126	1	On
070		J 3971	6 Nov 98	1656	S01:05.41	W091:40.19	4	111	1	On
070		J 3976	7 Nov 98	0732	S01:09.76	W091:05.28	3	73	1	On
070		J 3977	7 Nov 98	0747	S01:12.62	W091:03.03	3	73	1	On
070		J 3992	8 Nov 98	0835	S01:13.44	W088:32.77	4	126	1	Off
070		J 3996	8 Nov 98	1354	S01:12.43	W088:35.29	4	4	1	Off

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
070		J 4156	4 Dec 98	1158	N21:56.99	W112:01.04	3	99	1	Off
070		J 4164	8 Dec 98	0651	N30:00.25	W116:14.99	4	153	1	On
<i>Balaenoptera edeni</i>										
072		E 8	31 Jul 98	0659	N06:57.35	W080:18.43	2	73	1	Off
072		E 9	31 Jul 98	0703	N06:52.70	W080:22.26	2	186	1	On
072		E 59	6 Aug 98	1652	N00:53.22	W101:00.84	5	73	7	On
072		E 76	9 Aug 98	0724	S00:57.59	W109:53.17	3	73	1	On
072		E 77	9 Aug 98	0923	S00:59.84	W110:08.09	3	126	2	On
072		E 81	9 Aug 98	1647	S01:06.50	W111:09.69	3	126	3	On
072		E 82	10 Aug 98	0653	S01:23.18	W112:33.60	3	153	4	On
072		E 87	10 Aug 98	1321	S01:35.90	W113:37.77	3	184	3	On
072		E 98	12 Aug 98	1652	S04:43.95	W120:16.96	6	1	1	On
072		E 99	12 Aug 98	1734	S04:49.25	W120:23.37	6	1	3	On
072		E 100	12 Aug 98	1823	S04:49.52	W120:29.31	6	182	1	On
072		E 105	16 Aug 98	0926	N01:35.34	W129:49.80	4	126	1	On
072		E 107	17 Aug 98	1750	N04:39.74	W134:02.38	5	126	1	Off
072		E 109	17 Aug 98	1817	N04:43.15	W133:59.96	5	1	3	Off
072		E 177	16 Sep 98	0936	N12:08.45	W127:52.81	2	99	1	Off
072		E 185	17 Sep 98	1145	N12:33.98	W124:52.78	3	185	1	On
072		E 186	17 Sep 98	1609	N12:33.99	W124:04.09	3	73	1	On
072		E 263	5 Oct 98	1706	N16:25.90	W117:48.31	5	73	1	On
072		E 264	6 Oct 98	0747	N15:31.73	W119:11.44	4	186	1	On
072		E 267	6 Oct 98	1713	N14:25.03	W119:48.45	4	73	1	Off
072		E 408	1 Nov 98	1314	N00:58.20	W091:06.24	3	186	1	On
072		E 518	25 Nov 98	1758	S08:18.89	W079:29.79	3	181	1	On
072		M 2233	25 Sep 98	1644	N06:19.31	W115:47.57	5	143	2	On
072		M 2234	26 Sep 98	0956	N06:04.66	W117:05.78	5	99	1	Off
072		M 2304	19 Oct 98	1322	N01:23.03	W113:12.35	4	147	1	On
072		M 2310	20 Oct 98	1335	N01:20.39	W116:05.15	4	143	1	On
072		M 2313	20 Oct 98	1758	N01:22.66	W116:41.00	3	183	2	On
072		M 2316	21 Oct 98	0805	N01:23.23	W118:09.23	2	183	2	On
072		M 2333	24 Oct 98	1818	N06:29.67	W123:17.29	2	143	2	Off
072		M 2356	27 Oct 98	1604	N15:06.47	W123:21.92	4	74	1	On
072		M 2365	2 Nov 98	0921	N20:46.20	W116:10.60	4	7	1	On
072		M 2372	4 Nov 98	1212	N20:36.17	W112:10.05	4	7	1	On
072		M 2391	5 Nov 98	1550	N20:52.14	W110:57.57	4	143	1	On
072		M 2392	5 Nov 98	1623	N20:49.77	W110:59.03	4	143	1	On
072		M 2395	5 Nov 98	1700	N20:46.60	W110:57.30	4	143	1	Off
072		M 2398	6 Nov 98	0822	N20:41.42	W109:42.32	4	143	1	On
072		M 2401	6 Nov 98	0919	N20:49.58	W109:40.47	4	143	2	On
072		M 2407	6 Nov 98	1215	N21:19.64	W109:43.96	4	7	1	On
072		M 2408	6 Nov 98	1223	N21:17.41	W109:42.91	4	143	1	On
072		M 2463	18 Nov 98	1335	N12:58.56	W115:12.73	3	143	1	On
072		M 2466	18 Nov 98	1646	N12:51.93	W115:38.35	4	147	2	On
072		M 2467	18 Nov 98	1734	N12:48.12	W115:43.89	4	143	1	On
072		M 2472	19 Nov 98	1547	N11:56.74	W118:40.00	4	143	1	On
072		M 2491	23 Nov 98	1418	N05:22.96	W126:48.91	4	143	1	On
072		M 2494	23 Nov 98	1609	N05:17.48	W127:01.60	4	125	1	On
072		M 2500	24 Nov 98	1100	N05:14.09	W128:53.00	4	143	1	On
072		J 3053	2 Aug 98	1154	N28:13.91	W115:26.68	3	99	1	Off
072		J 3059	2 Aug 98	1410	N28:06.10	W115:31.35	3	143	2	On
072		J 3087	3 Aug 98	1620	N26:07.57	W113:15.52	5	74	1	On
072		J 3088	3 Aug 98	1725	N26:04.41	W113:23.75	5	4	1	Off
072		J 3090	3 Aug 98	1839	N26:09.51	W113:03.65	5	7	1	On
072		J 3091	3 Aug 98	1841	N26:08.21	W113:02.21	5	99	1	Off
072		J 3095	4 Aug 98	0911	N24:22.18	W112:08.65	3	74	1	On
072		J 3105	4 Aug 98	1352	N24:00.82	W112:16.14	2	74	1	On



Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Effort
072		J 3111	4 Aug 98	1658	N24:04.48	W111:49.20	3	74	1	On
072		J 3113	4 Aug 98	1719	N24:02.30	W111:48.50	3	143	1	Off
072		J 3122	5 Aug 98	1026	N23:00.02	W110:26.07	2	74	1	On
072		J 3422	26 Aug 98	1207	N15:49.19	W094:49.18	1	147	2	On
072		J 3532	30 Aug 98	1646	N13:11.40	W090:20.50	4	147	1	On
072		J 3556	1 Sep 98	1242	N11:51.67	W087:46.45	3	7	1	Off
072		J 3557	1 Sep 98	1345	N11:53.97	W087:40.99	2	74	1	On
072		J 3558	1 Sep 98	1349	N11:50.91	W087:43.23	2	74	1	On
072		J 3564	1 Sep 98	1543	N11:41.95	W087:32.91	2	143	1	Off
072		J 3654	6 Sep 98	0740	N07:24.17	W081:21.50	4	143	1	On
072		J 3848	12 Oct 98	0945	S02:03.81	W106:44.17	3	4	2	Off
072		J 3849	12 Oct 98	1041	S02:00.69	W106:46.31	3	168	1	On
072		J 3851	12 Oct 98	1318	S02:20.10	W106:43.76	3	92	1	On
072		J 3862	13 Oct 98	1422	S05:41.87	W107:17.46	4	99	1	Off
072	079	J 3897	18 Oct 98	1642	N00:02.70	W098:47.91	3	92	2	Off
072		J 3906	20 Oct 98	0818	N03:48.06	W095:06.25	4	91	1	On
072		J 3931	4 Nov 98	0642	S00:00.14	W094:18.53	2	126	1	On
072		J 3939	4 Nov 98	1328	S00:32.41	W094:46.51	3	73	1	On
072		J 3940	4 Nov 98	1428	S00:29.09	W094:51.73	3	185	1	On
072	075	J 3946	4 Nov 98	1533	S00:46.58	W094:56.02	2	153	3	Off
072	075	J 3947	4 Nov 98	1627	S00:50.39	W094:50.22	2	73	6	Off
072		J 3969	6 Nov 98	1529	S01:12.48	W091:43.23	4	182	1	On
072		J 4154	4 Dec 98	1100	N21:57.33	W112:00.92	3	4	1	Off
072		J 4161	4 Dec 98	1648	N22:20.85	W112:04.69	2	120	1	Off
<i>Balaenoptera physalus</i>										
074		J 3127	5 Aug 98	1432	N22:50.11	W110:00.03	5	74	1	On
<i>Balaenoptera musculus</i>										
075		E 359	21 Oct 98	1527	N10:04.04	W089:36.53	3	186	2	On
075		E 532	27 Nov 98	0916	S07:11.77	W080:36.42	2	181	7	Off
075		E 592	4 Dec 98	0840	S01:58.33	W087:30.16	3	149	1	On
075		M 2369	3 Nov 98	1003	N22:26.73	W114:54.43	4	147	1	On
075		M 2382	5 Nov 98	0854	N21:34.19	W111:01.42	4	7	1	On
075		M 2386	5 Nov 98	1249	N21:16.78	W110:56.10	4	143	1	On
075		M 2388	5 Nov 98	1355	N21:11.29	W111:01.40	4	183	2	On
075		M 2403	6 Nov 98	1052	N21:07.03	W109:40.35	4	125	1	On
075		M 2515	7 Dec 98	1307	N29:00.43	W121:08.18	5	125	1	On
075		J 3934	4 Nov 98	0947	S00:23.27	W094:36.31	3	73	1	Off
075	072	J 3946	4 Nov 98	1533	S00:46.58	W094:56.02	2	153	3	Off
075	072	J 3947	4 Nov 98	1627	S00:50.39	W094:50.22	2	73	6	Off
075		J 3962	6 Nov 98	0908	S01:16.29	W092:12.46	3	111	9	On
075		J 3963	6 Nov 98	1204	S01:21.26	W092:02.72	3	73	1	On
075		J 3964	6 Nov 98	1208	S01:19.82	W092:03.14	3	73	2	On
075		J 3970	6 Nov 98	1635	S01:17.42	W091:36.81	4	126	3	On
075		J 3985	7 Nov 98	1535	S01:08.20	W090:22.45	4	73	1	On
075		J 3998	9 Nov 98	1002	S01:50.84	W086:02.82	4	73	1	On
075		J 4095	26 Nov 98	1052	N10:06.00	W092:00.18	4	120	2	Off
075		J 4155	4 Dec 98	1131	N21:56.78	W112:00.54	3	182	1	Off
075		J 4158	4 Dec 98	1412	N22:07.71	W111:59.47	3	153	1	On
075		J 4160	4 Dec 98	1605	N22:19.52	W112:04.65	2	4	1	Off
075		J 4169	8 Dec 98	1615	N30:50.55	W116:24.49	4	182	2	On
<i>Megaptera novaeangliae</i>										
076		E 527	27 Nov 98	0714	S07:11.04	W080:42.33	2	99	2	Off
076	018	E 556	29 Nov 98	1753	S04:19.42	W082:20.27	4	92	18	On
076		J 3630	3 Sep 98	1622	N09:13.98	W084:32.11	2	147	2	On
076		J 3661	6 Sep 98	1431	N07:10.97	W080:34.06	3	147	2	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Ef-fort
076		J 3675	12 Sep 98	1557	N08:19.83	W079:59.05	3	149	2	Off
076		J 3679	13 Sep 98	0734	N07:05.95	W080:27.84	4	4	1	Off
076		J 3981	7 Nov 98	1050	S00:56.55	W090:53.43	4	185	2	On
076		J 4005	10 Nov 98	1222	S02:31.32	W083:01.57	4	99	1	Off
076		J 4166	8 Dec 98	0839	N30:13.74	W116:17.86	3	4	1	Off
unid. dolphin										
077		E 1	30 Jul 98	1240	N08:31.29	W079:37.22	3	126	12	On
077		E 10	31 Jul 98	0705	N06:56.31	W080:22.50	2	153	3	On
077		E 14	31 Jul 98	0832	N06:50.79	W080:32.84	2	186	2	On
077		E 22	31 Jul 98	1522	N06:11.72	W081:04.77	4	185	33	On
077		E 26	31 Jul 98	1808	N06:01.52	W081:17.00	2	126	4	On
077		E 27	31 Jul 98	1827	N06:00.61	W081:19.00	2	126	4	Off
077		E 35	1 Aug 98	0958	N04:52.17	W082:22.85	2	126	2	On
077		E 40	1 Aug 98	1405	N04:27.72	W082:58.36	2	126	3	On
077		E 42	1 Aug 98	1758	N04:12.59	W083:27.12	2	126	2	On
077		E 47	2 Aug 98	1257	N04:01.17	W085:19.64	4	1	10	On
077		E 57	6 Aug 98	1500	N01:03.59	W100:39.63	5	126	2	On
077		E 83	10 Aug 98	1103	S01:32.48	W113:11.51	3	99	10	Off
077	026	E 104	16 Aug 98	0716	N01:30.17	W129:35.37	4	153	299	On
077		E 106	17 Aug 98	1707	N04:41.03	W133:56.66	5	184	30	On
077		E 108	17 Aug 98	1809	N04:41.34	W134:00.64	5	184	4	On
077		E 110	18 Aug 98	0843	N05:32.06	W135:01.95	4	126	2	On
077	011	E 117	21 Aug 98	1639	N11:09.09	W142:55.52	2	153	153	On
077		E 123	26 Aug 98	1122	N19:25.46	W156:04.57	0	185	3	Off
077		E 136	4 Sep 98	1210	N09:27.63	W152:08.52	3	186	4	On
077		E 137	4 Sep 98	1335	N09:20.64	W151:53.04	3	126	3	On
077		E 140	6 Sep 98	0813	N05:57.18	W147:03.11	5	73	1	On
077		E 145	7 Sep 98	0642	N07:14.08	W144:54.92	5	153	1	On
077	003	E 151	8 Sep 98	0856	N10:00.05	W142:35.76	2	126	90	Off
077		E 161	11 Sep 98	0756	N13:40.99	W137:01.47	4	184	113	On
077		E 163	11 Sep 98	1745	N12:18.43	W136:08.78	4	186	2	On
077		E 164	12 Sep 98	1135	N10:09.99	W134:54.17	3	126	2	On
077		E 167	13 Sep 98	0829	N07:39.49	W133:26.36	5	99	4	Off
077		E 170	14 Sep 98	1215	N06:52.07	W131:04.14	5	153	20	On
077		E 174	16 Sep 98	0810	N11:57.63	W128:02.39	2	126	120	On
077		E 175	16 Sep 98	0849	N12:08.61	W127:54.01	2	184	110	On
077		E 176	16 Sep 98	0902	N11:59.93	W127:48.16	2	185	2	On
077		E 183	17 Sep 98	0820	N12:40.56	W125:12.17	3	126	8	Off
077		E 192	18 Sep 98	0818	N12:28.15	W122:28.93	2	185	2	Off
077		E 194	18 Sep 98	0915	N12:34.48	W122:19.29	2	184	35	On
077		E 209	18 Sep 98	1718	N12:25.82	W121:34.31	1	184	60	On
077	002	E 211	18 Sep 98	1738	N12:35.55	W121:33.34	1	153	40	On
077		E 217	19 Sep 98	1334	N12:59.20	W118:59.31	3	186	2	On
077		E 240	24 Sep 98	1357	N18:58.03	W105:32.34	3	126	4	On
077		E 245	30 Sep 98	1722	N19:09.65	W105:33.00	4	153	2	On
077		E 248	1 Oct 98	1224	N19:01.63	W107:38.79	4	185	2	On
077		E 252	2 Oct 98	0853	N19:33.75	W108:16.36	5	184	1	On
077		E 256	4 Oct 98	0656	N18:55.39	W113:42.69	4	184	1	On
077		E 257	4 Oct 98	1133	N18:27.95	W114:24.10	4	153	1	On
077		E 259	4 Oct 98	1615	N18:07.78	W114:48.76	4	182	2	On
077		E 262	5 Oct 98	1418	N16:39.91	W117:25.48	5	56	1	Off
077		E 270	8 Oct 98	1634	N09:28.55	W116:58.95	4	56	4	On
077		E 271	8 Oct 98	1817	N09:19.87	W116:51.79	4	186	1	On
077		E 272	9 Oct 98	1527	N07:20.31	W117:18.36	5	73	1	On
077		E 274	10 Oct 98	1043	N05:27.84	W119:10.37	4	73	5	On
077		E 275	10 Oct 98	1048	N05:19.15	W119:09.54	4	126	3	Off
077		E 276	10 Oct 98	1359	N05:05.67	W119:30.45	5	153	1	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Ef- fort
077		E 281	11 Oct 98	0757	N03:58.27	W118:07.93	5	73	2	On
077		E 291	13 Oct 98	1117	N04:38.10	W114:07.17	4	153	1	Off
077		E 295	14 Oct 98	1209	N06:29.25	W111:01.81	5	126	1	On
077		E 298	16 Oct 98	1655	N10:38.86	W103:39.56	5	184	5	On
077		E 301	18 Oct 98	1750	N10:31.10	W097:28.33	4	73	1	On
077		E 309	19 Oct 98	1537	N10:33.67	W094:51.28	2	185	23	Off
077		E 310	20 Oct 98	0619	N10:25.80	W093:23.69	2	99	2	Off
077		E 316	20 Oct 98	1111	N10:33.45	W092:38.92	1	56	20	On
077		E 318	20 Oct 98	1218	N10:31.03	W092:32.11	2	73	10	On
077		E 319	20 Oct 98	1314	N10:26.53	W092:18.46	1	126	1	On
077		E 324	20 Oct 98	1606	N10:16.75	W092:19.47	1	186	40	Off
077		E 329	20 Oct 98	1703	N10:14.76	W092:17.57	0	126	6	Off
077		E 339	21 Oct 98	0823	N10:15.17	W090:28.30	1	185	15	On
077		E 343	21 Oct 98	1018	N10:12.44	W090:20.49	1	153	3	Off
077		E 345	21 Oct 98	1049	N10:06.76	W090:14.56	1	153	2	On
077		E 347	21 Oct 98	1116	N10:08.95	W090:09.42	2	186	18	On
077		E 350	21 Oct 98	1206	N10:08.03	W090:05.21	2	161	3	Off
077		E 351	21 Oct 98	1211	N10:10.08	W090:03.56	2	34	3	On
077		E 352	21 Oct 98	1231	N10:08.66	W089:56.54	2	126	2	On
077		E 354	21 Oct 98	1315	N10:07.43	W089:57.61	2	153	1	On
077		E 367	22 Oct 98	0752	N10:07.76	W089:23.46	3	185	3	Off
077		E 392	29 Oct 98	1134	N08:35.78	W084:43.70	5	91	10	Off
077		E 393	29 Oct 98	1210	N08:28.91	W084:45.34	5	152	2	On
077		E 395	29 Oct 98	1641	N08:03.13	W085:13.05	4	184	3	Off
077		E 400	31 Oct 98	0622	N04:35.12	W088:21.41	4	186	45	Off
077		E 403	1 Nov 98	0758	N01:44.74	W090:37.50	4	184	1	On
077		E 404	1 Nov 98	1019	N01:21.68	W090:47.39	4	149	1	On
077		E 411	1 Nov 98	1544	N00:55.31	W091:18.52	3	184	7	On
077		E 412	1 Nov 98	1629	N00:45.15	W091:14.17	2	168	10	On
077		E 416	2 Nov 98	0957	S00:59.24	W090:37.57	4	149	2	On
077		E 418	2 Nov 98	1112	S00:56.71	W090:25.27	4	184	12	On
077		E 420	4 Nov 98	0831	S03:00.22	W092:20.14	4	186	3	Off
077		E 424	4 Nov 98	1429	S03:37.60	W092:51.87	3	181	1	On
077		E 430	5 Nov 98	1111	S05:55.73	W094:56.34	3	181	1	On
077		E 439	6 Nov 98	1205	S08:31.02	W097:22.54	4	186	4	On
077		E 444	7 Nov 98	1652	S12:02.17	W100:03.39	4	92	1	On
077		E 447	8 Nov 98	1139	S12:14.63	W097:41.80	6	149	11	On
077		E 450	9 Nov 98	1215	S12:20.89	W094:06.58	5	152	10	On
077		E 459	13 Nov 98	0725	S16:18.25	W083:49.09	3	168	3	On
077		E 478	21 Nov 98	1646	S11:41.72	W077:57.13	3	181	1	On
077		E 489	22 Nov 98	1218	S10:29.41	W078:57.74	4	91	6	On
077		E 509	25 Nov 98	0838	S09:11.83	W079:39.49	3	186	10	Off
077		E 538	28 Nov 98	0931	S06:01.84	W081:18.86	2	168	2	Off
077		E 549	29 Nov 98	0929	S03:35.13	W081:23.68	4	184	1	On
077		E 561	30 Nov 98	0854	S05:27.31	W083:43.20	3	99	100	Off
077		E 562	30 Nov 98	0906	S05:24.21	W083:49.16	3	168	10	On
077		E 569	1 Dec 98	0834	S07:42.85	W086:11.11	4	168	3	On
077		E 572	1 Dec 98	1512	S08:32.89	W086:53.21	4	184	1	On
077		E 579	2 Dec 98	0948	S07:53.10	W088:23.86	4	149	30	On
077	003	E 580	2 Dec 98	1106	S07:43.08	W088:31.12	4	184	312	On
077		E 582	2 Dec 98	1502	S07:13.09	W088:48.08	5	91	4	On
077		E 583	2 Dec 98	1526	S07:12.75	W088:54.25	4	184	6	On
077		E 584	2 Dec 98	1628	S07:07.23	W089:02.61	4	92	86	On
077		E 594	4 Dec 98	1116	S01:37.75	W087:21.61	4	184	1	On
077		E 599	5 Dec 98	0803	N00:20.10	W085:29.49	3	149	25	On
077		E 607	5 Dec 98	1518	N00:57.25	W084:46.81	4	92	6	Off
077		E 617	7 Dec 98	0839	N03:57.52	W080:40.38	5	184	1	On
077		E 618	7 Dec 98	0847	N03:50.21	W080:36.21	5	184	17	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
077		E 619	7 Dec 98	1104	N03:56.10	W080:17.08	5	149	5	On
077		E 620	7 Dec 98	1113	N03:50.99	W080:16.08	5	136	2	Off
077		E 625	8 Dec 98	0725	N05:56.07	W079:25.73	4	91	5	On
077		E 628	8 Dec 98	1500	N07:05.18	W079:30.51	4	149	1	On
077		E 629	8 Dec 98	1527	N07:09.40	W079:26.16	4	99	3	Off
077		E 631	8 Dec 98	1719	N07:32.90	W079:24.87	4	91	9	On
077		E 632	8 Dec 98	1722	N07:34.33	W079:21.98	4	184	1	On
077		M 2009	4 Aug 98	1349	N19:31.77	W115:09.38	3	149	1	On
077		M 2011	4 Aug 98	1842	N18:50.01	W114:41.21	2	181	1	On
077	002	M 2020	7 Aug 98	1028	N14:08.31	W110:26.48	3	91	26	On
077		M 2035	11 Aug 98	1649	N12:29.37	W099:28.45	3	152	1	On
077	010	M 2040	12 Aug 98	1447	N14:35.24	W098:17.92	1	152	42	Off
077		M 2043	12 Aug 98	1655	N14:40.03	W098:12.71	1	91	5	Off
077		M 2059	14 Aug 98	1015	N13:32.23	W094:20.06	3	98	2	Off
077		M 2064	14 Aug 98	1828	N13:08.29	W093:30.03	2	168	20	On
077		M 2069	15 Aug 98	1126	N13:11.09	W091:41.06	4	91	2	On
077		M 2080	15 Aug 98	1603	N13:29.48	W091:21.38	2	168	2	On
077		M 2089	21 Aug 98	1257	N13:38.03	W090:42.36	4	92	1	On
077		M 2097	21 Aug 98	1755	N13:01.79	W090:37.62	4	99	3	Off
077		M 2103	22 Aug 98	1025	N11:22.78	W090:23.70	2	181	4	On
077		M 2111	22 Aug 98	1501	N11:34.46	W090:51.39	1	168	3	On
077		M 2115	22 Aug 98	1543	N11:40.36	W090:53.91	2	98	30	Off
077	010 002	M 2117	22 Aug 98	1647	N11:37.87	W091:07.34	2	149	56	On
077	049	M 2131	23 Aug 98	1631	N12:35.43	W093:59.59	3	181	7	On
077		M 2138	30 Aug 98	0657	N05:01.21	W096:07.07	3	99	1	Off
077	034	M 2140	30 Aug 98	0905	N05:01.48	W095:44.70	3	181	16	On
077		M 2152	5 Sep 98	0859	N05:20.14	W079:43.23	2	92	1	On
077		M 2163	5 Sep 98	1529	N05:19.39	W079:05.75	1	92	15	On
077		M 2167	5 Sep 98	1749	N05:18.77	W078:50.38	2	92	40	On
077		M 2172	6 Sep 98	1459	N07:02.92	W078:41.86	4	152	10	On
077		M 2174	6 Sep 98	1606	N07:15.84	W078:51.07	3	181	1	On
077		M 2176	6 Sep 98	1701	N07:16.48	W078:53.00	2	98	12	Off
077		M 2188	13 Sep 98	1611	N06:17.84	W079:55.44	4	147	10	On
077		M 2193	14 Sep 98	1805	N06:37.35	W083:37.94	4	143	5	On
077		M 2195	15 Sep 98	0907	N06:41.10	W085:19.18	4	99	1	Off
077		M 2201	16 Sep 98	1132	N06:54.58	W089:04.18	4	7	1	On
077	002 013	M 2204	16 Sep 98	1637	N07:07.43	W089:48.10	4	143	55	On
077		M 2206	17 Sep 98	0746	N07:08.09	W091:43.25	5	183	1	On
077		M 2211	18 Sep 98	1248	N07:18.97	W095:51.21	5	74	20	On
077		M 2218	20 Sep 98	1205	N07:48.74	W102:03.35	5	147	10	On
077		M 2227	23 Sep 98	1209	N05:29.69	W109:24.15	4	143	1	On
077		M 2235	26 Sep 98	1108	N06:14.45	W117:18.78	5	183	10	On
077		M 2238	28 Sep 98	1754	N07:50.84	W113:54.74	3	125	1	On
077		M 2252	2 Oct 98	1732	N11:49.63	W106:02.58	1	143	20	On
077		M 2258	4 Oct 98	0648	N14:03.04	W101:45.03	2	183	1	On
077		M 2262	4 Oct 98	1029	N14:18.99	W101:15.51	4	143	5	On
077		M 2270	5 Oct 98	0935	N15:48.88	W100:42.08	2	125	1	Off
077		M 2273	5 Oct 98	1415	N16:12.00	W101:07.35	3	125	250	On
077		M 2285	6 Oct 98	1639	N18:31.39	W104:03.76	4	147	100	On
077		M 2292	13 Oct 98	1902	N15:43.88	W106:46.22	2	7	3	On
077		M 2293	13 Oct 98	1905	N15:47.39	W106:39.64	2	183	5	On
077		M 2294	13 Oct 98	1919	N15:44.81	W106:45.56	2	125	10	Off
077		M 2301	19 Oct 98	0854	N02:00.57	W113:03.43	2	7	1	On
077	034	M 2314	21 Oct 98	0713	N01:16.67	W118:06.11	2	183	35	On
077		M 2329	24 Oct 98	1725	N06:25.27	W123:18.37	3	7	50	On
077		M 2357	28 Oct 98	1113	N17:37.62	W123:06.61	4	143	10	On
077		M 2363	31 Oct 98	1529	N18:18.23	W118:12.20	5	183	5	On
077		M 2367	3 Nov 98	0822	N22:38.58	W115:03.02	5	143	5	On

Table 2 (continued)

Other Code	Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Ef- fort
077		M 2368	3 Nov 98	0849	N22:36.77	W115:01.31	5	183	20	On
077		M 2385	5 Nov 98	1231	N21:19.89	W111:05.31	4	74	30	Off
077		M 2416	7 Nov 98	1523	N20:58.91	W108:40.24	5	183	80	On
077		M 2420	8 Nov 98	0837	N20:11.37	W107:27.95	3	143	10	On
077		M 2438	14 Nov 98	1419	N18:59.43	W104:52.75	1	99	2	Off
077	002	M 2440	15 Nov 98	0814	N17:51.27	W106:21.99	4	143	92	On
077		M 2444	15 Nov 98	1243	N17:23.03	W106:49.82	3	183	10	On
077		M 2449	15 Nov 98	1735	N17:19.29	W107:39.17	3	143	5	On
077		M 2451	16 Nov 98	1003	N16:00.94	W109:12.17	4	143	2	On
077		M 2457	17 Nov 98	1215	N14:10.44	W112:01.93	4	69	3	Off
077		M 2460	17 Nov 98	1644	N13:55.44	W112:41.78	4	143	1	On
077		M 2469	19 Nov 98	1026	N12:05.92	W117:48.40	4	143	5	On
077		M 2474	20 Nov 98	1345	N09:30.00	W119:16.37	2	147	5	On
077		M 2487	23 Nov 98	0811	N05:56.65	W126:03.68	3	7	10	On
077		M 2489	23 Nov 98	1313	N05:24.64	W126:40.78	4	69	2	On
077		M 2493	23 Nov 98	1453	N05:20.39	W126:56.11	4	7	3	On
077		M 2495	23 Nov 98	1700	N05:09.57	W127:05.01	4	69	50	Off
077		M 2498	24 Nov 98	0742	N04:41.01	W128:43.04	4	99	1	Off
077		M 2506	25 Nov 98	1431	N08:36.35	W129:56.10	4	99	1	Off
077		M 2507	25 Nov 98	1540	N08:47.42	W130:01.11	4	147	1	On
077		M 2511	26 Nov 98	1735	N11:28.52	W130:44.59	5	147	55	Off
077		J 3003	31 Jul 98	1238	N32:19.94	W117:23.11	3	7	95	Off
077		J 3038	1 Aug 98	1821	N29:36.53	W115:39.85	4	183	1	On
077		J 3069	2 Aug 98	1741	N27:50.45	W115:13.42	5	74	20	On
077		J 3081	3 Aug 98	1153	N26:11.51	W113:51.23	4	74	20	On
077		J 3104	4 Aug 98	1339	N24:04.03	W112:16.29	2	99	2	Off
077		J 3134	6 Aug 98	0615	N23:46.15	W108:27.75	3	74	1	On
077		J 3149	6 Aug 98	1457	N24:30.33	W108:11.63	2	183	2	On
077		J 3160	7 Aug 98	0624	N24:44.13	W110:07.97	3	7	8	On
077		J 3172	9 Aug 98	1116	N26:52.67	W111:31.90	2	143	6	On
077		J 3177	9 Aug 98	1416	N27:12.02	W111:35.61	2	7	70	Off
077	046	J 3179	9 Aug 98	1709	N27:17.47	W111:41.85	2	125	7	On
077		J 3188	9 Aug 98	1804	N27:23.90	W111:48.75	2	7	20	On
077		J 3192	9 Aug 98	1812	N27:30.25	W111:42.34	2	125	10	On
077		J 3198	9 Aug 98	1854	N27:38.61	W111:44.80	2	147	10	On
077		J 3204	10 Aug 98	0653	N27:36.90	W110:47.85	2	7	35	On
077		J 3217	10 Aug 98	1200	N26:58.06	W110:54.65	3	147	35	Off
077		J 3227	10 Aug 98	1620	N26:13.71	W111:06.28	1	7	30	On
077		J 3228	10 Aug 98	1621	N26:13.46	W111:08.04	1	7	110	On
077		J 3231	10 Aug 98	1755	N25:57.59	W110:57.05	3	125	4	On
077		J 3236	10 Aug 98	1848	N25:50.43	W110:50.74	2	7	6	On
077		J 3246	11 Aug 98	0857	N25:34.76	W109:41.44	0	7	130	On
077	021	J 3250	11 Aug 98	1000	N25:20.50	W109:32.36	1	74	353	On
077		J 3255	11 Aug 98	1144	N25:11.71	W109:37.91	1	125	5	On
077		J 3272	11 Aug 98	1533	N24:36.78	W109:36.91	1	125	80	On
077		J 3281	12 Aug 98	0738	N24:03.37	W109:00.65	1	143	15	On
077		J 3289	12 Aug 98	1434	N23:20.80	W109:10.95	4	183	50	On
077		J 3291	12 Aug 98	1821	N22:54.09	W108:45.92	4	7	1	On
077		J 3294	13 Aug 98	0739	N23:48.69	W107:40.62	0	7	3	On
077		J 3298	13 Aug 98	0843	N23:37.43	W107:44.58	1	183	12	On
077		J 3301	13 Aug 98	0930	N23:35.21	W107:39.01	1	147	30	On
077		J 3304	13 Aug 98	1040	N23:24.99	W107:38.79	1	143	50	On
077		J 3306	13 Aug 98	1050	N23:21.91	W107:45.19	1	143	100	On
077		J 3321	18 Aug 98	1244	N23:03.13	W106:33.87	1	143	10	On
077		J 3323	18 Aug 98	1256	N23:00.91	W106:37.22	0	143	5	On
077		J 3343	20 Aug 98	1641	N21:19.67	W107:55.61	3	143	10	On
077		J 3357	21 Aug 98	1534	N20:26.37	W106:22.06	2	183	30	On
077		J 3358	21 Aug 98	1546	N20:21.59	W106:14.76	2	74	30	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
077		J 3365	22 Aug 98	1026	N18:31.96	W104:21.00	5	7	2	On
077		J 3389	24 Aug 98	0757	N16:41.13	W100:32.66	4	183	22	On
077		J 3402	25 Aug 98	0908	N16:01.11	W097:52.50	3	74	8	On
077		J 3412	25 Aug 98	1436	N15:34.39	W097:14.17	2	74	20	On
077		J 3418	26 Aug 98	0740	N15:46.13	W095:13.89	4	7	1	On
077		J 3419	26 Aug 98	1026	N15:53.24	W094:51.31	2	74	2	On
077		J 3420	26 Aug 98	1041	N15:50.95	W094:49.95	2	74	1	On
077	018	J 3424	26 Aug 98	1249	N15:52.23	W094:45.28	1	183	9	On
077		J 3427	26 Aug 98	1324	N15:56.36	W094:40.89	1	74	1	On
077		J 3429	26 Aug 98	1406	N15:57.13	W094:33.01	0	144	1	On
077		J 3443	27 Aug 98	0833	N14:45.30	W093:08.39	2	147	1	On
077		J 3453	27 Aug 98	1612	N14:06.13	W092:21.77	3	147	1	On
077		J 3455	27 Aug 98	1715	N13:59.44	W092:20.89	4	7	5	On
077		J 3456	27 Aug 98	1720	N13:54.89	W092:14.87	4	7	30	Off
077		J 3457	27 Aug 98	1732	N13:59.56	W092:19.48	3	147	2	Off
077		J 3459	28 Aug 98	0632	N12:28.07	W091:32.35	1	7	5	Off
077		J 3470	28 Aug 98	0810	N12:11.48	W091:19.99	0	125	15	On
077		J 3476	28 Aug 98	0937	N12:04.20	W091:22.99	2	7	6	On
077	002 010	J 3483	28 Aug 98	1033	N11:57.32	W091:08.86	1	74	211	On
077		J 3484	28 Aug 98	1131	N11:59.05	W091:00.98	1	147	10	On
077		J 3486	28 Aug 98	1139	N11:52.09	W091:04.59	1	147	20	On
077	021	J 3488	28 Aug 98	1208	N11:48.47	W091:05.68	1	143	12	On
077		J 3489	28 Aug 98	1209	N11:46.43	W091:07.54	1	143	20	On
077		J 3494	28 Aug 98	1230	N11:42.75	W091:02.74	1	183	10	On
077		J 3501	28 Aug 98	1351	N11:36.96	W091:04.76	2	7	2	On
077		J 3502	28 Aug 98	1404	N11:33.92	W090:56.52	2	4	5	On
077		J 3506	28 Aug 98	1542	N11:19.14	W090:57.40	2	74	20	On
077		J 3508	28 Aug 98	1811	N11:05.42	W090:47.41	3	74	1	On
077		J 3511	29 Aug 98	1327	N11:47.42	W090:20.86	1	143	1	On
077		J 3513	29 Aug 98	1446	N11:55.98	W090:23.74	2	4	1	On
077		J 3517	29 Aug 98	1558	N12:09.29	W090:26.80	2	125	7	On
077		J 3528	30 Aug 98	1533	N13:24.87	W090:28.80	3	99	5	Off
077		J 3531	30 Aug 98	1612	N13:14.57	W090:28.44	4	183	5	On
077		J 3553	1 Sep 98	1139	N11:56.62	W087:43.58	3	7	10	On
077	018	J 3565	1 Sep 98	1555	N11:38.51	W087:35.32	1	125	18	On
077		J 3569	1 Sep 98	1648	N11:45.96	W087:28.41	2	183	3	On
077		J 3570	1 Sep 98	1650	N11:36.77	W087:27.63	2	7	4	On
077		J 3571	1 Sep 98	1652	N11:40.91	W087:27.24	2	183	4	On
077		J 3572	1 Sep 98	1700	N11:37.80	W087:28.92	2	143	1	On
077		J 3576	1 Sep 98	1727	N11:35.16	W087:21.59	2	147	2	On
077		J 3578	1 Sep 98	1758	N11:33.02	W087:21.01	2	143	1	On
077		J 3580	1 Sep 98	1828	N11:26.96	W087:16.60	2	183	10	On
077		J 3587	2 Sep 98	0752	N11:19.51	W086:39.39	2	74	6	On
077		J 3591	2 Sep 98	0818	N11:10.27	W086:29.52	2	7	1	Off
077		J 3592	2 Sep 98	0835	N11:13.72	W086:33.95	3	7	3	On
077		J 3593	2 Sep 98	0844	N11:08.76	W086:28.88	3	143	3	On
077		J 3607	2 Sep 98	1235	N10:37.09	W086:40.10	3	7	2	On
077		J 3623	2 Sep 98	1829	N10:02.36	W086:24.43	3	143	50	On
077		J 3628	3 Sep 98	1204	N09:14.20	W085:06.95	4	74	1	On
077		J 3632	3 Sep 98	1824	N09:04.67	W084:26.51	2	7	40	On
077		J 3644	5 Sep 98	0637	N07:46.68	W082:52.92	2	147	50	On
077		J 3656	6 Sep 98	0939	N07:16.24	W081:08.08	3	147	10	On
077		J 3666	6 Sep 98	1810	N07:19.34	W080:05.51	4	147	5	On
077		J 3667	7 Sep 98	1503	N07:57.34	W079:10.11	4	99	7	On
077		J 3672	12 Sep 98	1215	N08:41.31	W079:27.47	3	168	4	On
077		J 3680	13 Sep 98	1136	N06:59.46	W080:54.92	5	149	1	On
077		J 3682	13 Sep 98	1317	N06:57.09	W081:04.39	4	152	18	On
077		J 3685	14 Sep 98	0646	N07:06.17	W083:05.82	2	80	1	Off

Table 2 (continued)

Other Code	Sighting Codes	Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Ef- Size	fort
077		J 3686	14 Sep 98	0647	N07:03.98	W083:12.59	2	149	4	On
077		J 3688	14 Sep 98	0802	N06:59.40	W083:21.08	2	92	50	On
077		J 3691	14 Sep 98	0850	N07:03.66	W083:27.93	2	4	20	Off
077		J 3692	14 Sep 98	0851	N07:02.55	W083:29.27	2	4	2	Off
077		J 3694	14 Sep 98	1054	N07:02.50	W083:37.97	5	4	2	Off
077		J 3695	14 Sep 98	1710	N07:16.01	W084:34.38	3	181	4	On
077		J 3699	15 Sep 98	0929	N07:30.62	W086:11.28	3	181	6	On
077		J 3703	16 Sep 98	0714	N07:43.91	W088:43.21	3	92	1	On
077		J 3707	16 Sep 98	1328	N07:49.55	W089:26.92	4	168	1	On
077		J 3713	17 Sep 98	1616	N08:35.45	W092:29.09	4	92	60	On
077		J 3714	17 Sep 98	1618	N08:29.07	W092:31.56	4	99	4	Off
077		J 3716	17 Sep 98	1809	N08:44.89	W092:42.83	4	91	10	On
077		J 3720	18 Sep 98	1309	N09:02.29	W095:17.34	4	91	20	On
077		J 3740	23 Sep 98	0709	N10:17.03	W108:37.53	2	152	6	On
077		J 3747	23 Sep 98	1005	N10:22.39	W108:55.56	2	91	50	On
077		J 3768	26 Sep 98	0954	N11:18.73	W114:44.05	4	152	10	On
077		J 3773	26 Sep 98	1452	N11:36.82	W114:02.77	3	149	15	Off
077		J 3776	26 Sep 98	1839	N11:37.29	W113:29.66	3	92	40	On
077		J 3780	27 Sep 98	1408	N12:16.20	W110:54.28	4	181	4	Off
077		J 3783	27 Sep 98	1843	N12:20.36	W110:18.69	5	149	2	On
077		J 3788	28 Sep 98	1239	N12:48.22	W108:17.22	3	92	40	Off
077		J 3791	28 Sep 98	1453	N12:49.67	W107:59.34	2	149	1	Off
077		J 3800	29 Sep 98	0856	N14:06.47	W106:24.73	3	91	6	On
077		J 3803	29 Sep 98	1641	N15:10.83	W106:05.11	3	91	50	On
077		J 3805	30 Sep 98	1252	N17:41.15	W105:15.29	3	168	5	On
077		J 3810	5 Oct 98	1551	N18:37.26	W104:36.31	4	168	1	On
077		J 3813	6 Oct 98	0941	N16:15.07	W104:12.13	2	149	2	On
077		J 3814	6 Oct 98	1021	N16:12.80	W104:13.00	2	91	5	On
077		J 3816	6 Oct 98	1230	N15:48.08	W104:09.45	2	92	20	On
077		J 3825	7 Oct 98	1412	N12:13.70	W104:38.30	2	152	10	On
077		J 3828	7 Oct 98	1520	N12:02.90	W104:48.73	3	92	20	Off
077	010 002	J 3830	7 Oct 98	1755	N11:54.07	W104:44.64	3	91	63	On
077		J 3836	9 Oct 98	0820	N06:49.25	W105:31.05	5	149	2	On
077		J 3842	11 Oct 98	1137	N00:36.96	W106:26.85	2	91	30	Off
077		J 3846	11 Oct 98	1828	S00:04.74	W106:35.50	3	168	1	On
077		J 3856	12 Oct 98	1724	S02:46.18	W106:43.90	3	152	35	On
077		J 3869	15 Oct 98	1520	S06:27.59	W105:20.70	5	181	10	On
077		J 3875	16 Oct 98	1249	S04:42.90	W103:22.39	5	91	1	On
077		J 3882	17 Oct 98	1214	S02:26.04	W101:33.62	3	181	100	On
077		J 3885	17 Oct 98	1623	S02:02.07	W101:03.07	3	91	4	On
077		J 3887	17 Oct 98	1643	S02:07.18	W101:00.27	3	91	30	Off
077		J 3888	17 Oct 98	1753	S01:59.55	W101:02.25	3	149	11	On
077		J 3903	19 Oct 98	0808	N01:24.53	W097:26.73	4	92	3	On
077		J 3905	19 Oct 98	1738	N02:26.12	W096:29.29	4	91	8	On
077		J 3913	21 Oct 98	0653	N05:38.87	W092:18.71	4	92	3	On
077		J 3915	21 Oct 98	1710	N06:30.90	W090:55.28	4	181	1	On
077		J 3916	22 Oct 98	0857	N07:25.88	W088:51.96	4	92	1	On
077		J 3917	23 Oct 98	0618	N09:01.91	W085:58.21	5	91	2	On
077		J 3928	3 Nov 98	1406	N02:03.47	W092:58.05	4	73	1	On
077		J 3929	3 Nov 98	1456	N01:57.09	W093:00.32	5	126	9	On
077		J 3935	4 Nov 98	1144	S00:22.10	W094:36.17	3	111	23	On
077		J 3958	6 Nov 98	0654	S01:23.53	W092:30.14	2	153	1	On
077		J 3967	6 Nov 98	1425	S01:15.46	W091:47.90	4	111	24	On
077		J 3972	6 Nov 98	1704	S01:06.37	W091:36.58	4	111	4	On
077		J 3984	7 Nov 98	1446	S00:54.11	W090:36.05	4	185	1	On
077		J 3989	8 Nov 98	0610	S01:11.94	W088:54.35	5	185	2	On
077		J 4006	10 Nov 98	1324	S02:30.17	W082:56.76	5	126	3	On
077		J 4023	12 Nov 98	1748	N01:24.50	W079:45.29	6	153	4	On

Table 2 (continued)

Other Code	Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Efort
077		J 4027	14 Nov 98	0604	N03:18.78	W077:39.79	4	185	6	On
077		J 4034	15 Nov 98	0747	N06:24.20	W077:39.02	2	153	4	Off
077		J 4040	15 Nov 98	1334	N07:04.86	W078:04.84	3	185	1	On
077		J 4047	22 Nov 98	1545	N08:25.98	W079:33.78	3	185	6	On
077		J 4048	22 Nov 98	1556	N08:28.45	W079:37.60	3	185	25	On
077	018	J 4049	22 Nov 98	1604	N08:27.02	W079:39.02	3	126	25	On
077		J 4052	22 Nov 98	1727	N08:14.95	W079:40.59	3	126	1	On
077		J 4056	23 Nov 98	0826	N07:04.98	W081:16.20	3	185	4	On
077		J 4060	23 Nov 98	1030	N07:05.05	W081:35.44	3	153	2	On
077		J 4065	23 Nov 98	1723	N07:10.09	W082:32.42	3	111	8	On
077		J 4088	25 Nov 98	1706	N09:10.82	W089:16.07	4	153	1	On
077		J 4089	25 Nov 98	1732	N09:11.18	W089:17.99	4	182	1	On
077		J 4092	26 Nov 98	0630	N09:51.86	W091:22.87	4	126	1	On
077		J 4093	26 Nov 98	0658	N09:55.03	W091:32.62	4	126	1	On
077		J 4113	29 Nov 98	1334	N16:38.22	W100:34.81	0	111	4	On
077		J 4114	29 Nov 98	1336	N16:35.71	W100:32.80	0	182	20	On
077		J 4121	30 Nov 98	0746	N16:54.21	W102:54.09	2	111	4	On
077		J 4125	30 Nov 98	0942	N17:04.11	W103:01.63	2	153	3	On
077		J 4126	30 Nov 98	0944	N17:06.44	W103:10.57	2	188	4	On
077		J 4139	1 Dec 98	0628	N17:53.32	W105:51.84	3	126	3	On
077		J 4146	2 Dec 98	1154	N18:14.92	W109:43.60	4	188	3	On
077		J 4152	4 Dec 98	0840	N21:48.83	W111:55.21	3	126	3	On
unid. small whale										
078		E 24	31 Jul 98	1628	N06:09.10	W081:04.53	4	184	26	On
078		E 52	5 Aug 98	1636	N01:34.19	W097:13.83	4	126	1	On
078		E 127	26 Aug 98	1654	N19:29.61	W156:11.39	2	1	1	Off
078		E 154	9 Sep 98	1145	N12:07.05	W140:22.39	4	184	1	On
078		E 191	18 Sep 98	0805	N12:27.29	W122:35.73	2	185	1	On
078		E 200	18 Sep 98	1049	N12:38.33	W122:10.15	2	73	1	Off
078		E 214	19 Sep 98	0733	N12:33.05	W119:53.79	3	184	2	On
078		E 288	12 Oct 98	0642	N03:18.15	W116:59.60	3	99	1	Off
078		E 317	20 Oct 98	1118	N10:32.73	W092:41.27	1	153	150	On
078		E 356	21 Oct 98	1409	N10:05.68	W089:48.81	2	184	19	On
078		E 563	30 Nov 98	0950	S05:37.41	W083:55.91	3	92	1	On
078		M 2240	30 Sep 98	0958	N09:45.98	W109:44.59	4	125	1	On
078		M 2257	3 Oct 98	1046	N12:50.23	W104:07.26	2	183	1	On
078		M 2268	5 Oct 98	0845	N15:45.49	W100:33.27	2	183	2	On
078		M 2321	22 Oct 98	1630	N01:27.65	W122:26.60	4	143	1	On
078		J 3055	2 Aug 98	1330	N28:11.12	W115:24.76	2	7	1	On
078		J 3499	28 Aug 98	1327	N11:37.38	W090:58.38	2	7	2	On
078		J 3715	17 Sep 98	1655	N08:32.53	W092:37.04	4	181	1	On
078		J 3786	28 Sep 98	0737	N12:39.86	W108:59.44	2	168	1	On
078		J 3797	28 Sep 98	1730	N12:54.75	W107:40.61	1	168	1	On
unid. large whale										
079		E 97	12 Aug 98	1325	S04:25.49	W119:43.12	6	182	1	On
079		E 101	13 Aug 98	0800	S04:16.92	W121:58.49	5	126	1	On
079		E 268	6 Oct 98	1817	N14:23.07	W119:32.86	4	56	1	On
079		E 289	12 Oct 98	1508	N03:14.86	W116:03.60	4	184	1	On
079		E 290	12 Oct 98	1559	N03:19.86	W115:58.22	5	99	1	Off
079		E 413	1 Nov 98	1631	N00:41.96	W091:20.39	2	168	1	Off
079		E 457	12 Nov 98	1212	S17:24.44	W085:29.66	4	184	1	On
079		E 461	14 Nov 98	1007	S14:43.59	W081:19.63	5	181	1	On
079		E 463	14 Nov 98	1418	S14:19.50	W080:46.94	5	181	1	On
079		M 2354	27 Oct 98	0921	N14:02.03	W123:18.33	4	99	1	Off
079		J 3089	3 Aug 98	1741	N26:09.58	W113:09.08	5	147	1	On
079		J 3128	5 Aug 98	1705	N22:39.35	W109:42.74	3	7	1	On



Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	Size	Effort
079		J 3376	23 Aug 98	1231	N17:38.40	W102:37.20	2	74	1	Off
079		J 3423	26 Aug 98	1228	N15:52.62	W094:50.98	1	183	1	Off
079		J 3542	31 Aug 98	1131	N12:26.65	W088:55.66	5	7	1	On
079		J 3566	1 Sep 98	1558	N11:39.17	W087:28.19	1	7	1	On
079		J 3752	24 Sep 98	0834	N10:29.81	W110:21.21	2	99	1	Off
079		J 3764	25 Sep 98	1719	N10:59.53	W114:07.34	5	91	1	On
079		J 3896	18 Oct 98	1634	N00:02.97	W098:48.53	3	149	1	Off
079	072	J 3897	18 Oct 98	1642	N00:02.70	W098:47.91	3	92	2	Off
079		J 3900	18 Oct 98	1718	N00:06.25	W098:48.29	3	4	2	Off
079		J 3901	18 Oct 98	1734	N00:06.45	W098:39.54	3	92	1	On
079		J 3950	5 Nov 98	0929	S01:44.43	W095:02.97	1	111	1	On
079		J 3997	8 Nov 98	1425	S01:16.45	W088:20.26	4	185	4	On
<i>Kogia sp.</i>										
080		E 58	6 Aug 98	1539	N00:57.79	W100:42.32	5	153	1	On
080		J 3208	10 Aug 98	0956	N27:11.53	W110:48.40	4	125	1	On
080		J 3274	11 Aug 98	1635	N24:34.44	W109:34.68	1	147	1	On
080		J 3751	24 Sep 98	0730	N10:25.83	W110:12.32	2	181	1	On
<i>Mesoplodon sp. A</i>										
083		J 3233	10 Aug 98	1816	N25:54.75	W110:54.96	2	147	2	On
083		J 3790	28 Sep 98	1433	N12:47.66	W107:58.91	2	149	5	On
<i>Stenella longirostris centroamericana</i>										
088		J 3421	26 Aug 98	1054	N15:50.81	W094:47.55	2	74	247	On
088		J 3641	4 Sep 98	1215	N08:26.96	W083:52.70	3	125	32	On
088		J 4033	15 Nov 98	0723	N06:26.73	W077:35.87	2	153	199	On
<i>Stenella attenuata</i> (unid. subsp.)										
090	018	E 2	30 Jul 98	1359	N08:14.57	W079:41.61	2	182	260	On
090	018	E 3	30 Jul 98	1437	N08:11.36	W079:41.39	1	184	134	On
090		E 119	26 Aug 98	0839	N19:20.56	W156:06.76	1	1	1	Off
090	018	E 384	23 Oct 98	1213	N09:31.04	W085:23.45	5	56	43	On
090		M 2055	14 Aug 98	0640	N13:43.72	W094:44.42	4	181	9	Off
090		M 2083	15 Aug 98	1641	N13:34.65	W091:16.49	2	168	417	On
090		M 2178	7 Sep 98	1228	N08:16.56	W079:08.57	3	149	2	On
090		M 2180	7 Sep 98	1305	N08:19.25	W079:11.86	3	152	11	Off
090		M 2181	7 Sep 98	1324	N08:19.92	W079:12.43	3	92	13	On
090		M 2182	7 Sep 98	1400	N08:25.40	W079:14.52	2	92	11	On
090		M 2185	13 Sep 98	0813	N07:14.74	W079:25.46	5	147	277	On
090		M 2194	14 Sep 98	1808	N06:30.98	W083:37.90	4	74	60	On
090		M 2281	6 Oct 98	1213	N17:53.79	W103:42.11	2	125	65	On
090	010	M 2288	12 Oct 98	1737	N18:26.53	W105:04.51	4	183	95	On
090		M 2435	14 Nov 98	1348	N19:00.80	W104:49.30	1	125	9	On
090		M 2442	15 Nov 98	1115	N17:36.72	W106:38.86	3	125	3	On
090		J 3322	18 Aug 98	1255	N23:03.13	W106:36.96	0	74	60	On
090		J 3330	18 Aug 98	1514	N22:37.74	W106:30.06	2	4	117	On
090		J 3334	19 Aug 98	1059	N21:27.80	W105:44.45	3	147	22	On
090		J 3335	19 Aug 98	1306	N21:06.87	W105:38.36	4	74	30	On
090		J 3354	21 Aug 98	1350	N20:40.79	W106:29.10	1	183	26	On
090		J 3396	24 Aug 98	1731	N16:31.98	W099:25.17	4	147	6	On
090		J 3397	24 Aug 98	1744	N16:31.92	W099:22.92	4	147	10	On
090		J 3399	24 Aug 98	1820	N16:27.27	W099:16.60	4	143	34	Off
090		J 3405	25 Aug 98	1038	N15:47.88	W097:46.74	3	74	23	On
090		J 3406	25 Aug 98	1049	N15:47.18	W097:46.25	3	147	37	On
090		J 3410	25 Aug 98	1338	N15:44.03	W097:25.34	3	125	30	Off
090		J 3413	25 Aug 98	1531	N15:32.57	W097:08.38	2	147	45	On
090	010	J 3436	27 Aug 98	0630	N14:52.72	W093:19.80	2	125	115	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Bft	Obs. No.	School Size	Ef-fort
090		J 3450	27 Aug 98	1038	N14:44.43	W092:48.41	2	183	40	On
090		J 3481	28 Aug 98	1007	N12:01.74	W091:13.58	1	74	30	Off
090		J 3547	1 Sep 98	1008	N12:08.66	W087:49.74	3	125	25	On
090		J 3554	1 Sep 98	1145	N11:59.02	W087:45.56	3	4	6	Off
090		J 3616	2 Sep 98	1524	N10:22.98	W086:38.04	3	147	20	On
090		J 3634	4 Sep 98	0829	N08:52.18	W084:04.02	5	125	6	On
090		J 3635	4 Sep 98	0851	N08:49.20	W084:04.12	4	125	1	On
090		J 3697	15 Sep 98	0640	N07:22.77	W085:50.12	3	152	7	On
090		J 3698	15 Sep 98	0800	N07:26.78	W086:01.79	3	168	16	On
090		J 3702	15 Sep 98	1748	N07:40.96	W087:25.72	5	91	38	On
090		J 3719	18 Sep 98	1231	N08:57.39	W095:10.65	4	168	20	On
090		J 3779	27 Sep 98	1403	N12:15.44	W110:54.33	4	181	8	On
090		J 4050	22 Nov 98	1619	N08:26.69	W079:40.92	3	73	10	On
unid. cetacean										
096		E 13	31 Jul 98	0816	N06:48.09	W080:25.62	2	184	1	On
096		E 80	9 Aug 98	1307	S00:58.25	W110:35.75	3	1	3	On
096		E 148	7 Sep 98	0958	N07:38.17	W144:34.01	6	184	1	On
096		E 253	2 Oct 98	1426	N19:10.98	W109:00.09	4	153	2	On
096		E 407	1 Nov 98	1234	N00:59.73	W090:54.10	3	186	1	On
096		E 423	4 Nov 98	1348	S03:31.63	W092:47.04	4	91	5	On
096	033	E 431	5 Nov 98	1418	S06:26.78	W095:15.08	4	181	2	On
096		E 443	7 Nov 98	1051	S11:08.89	W099:39.85	5	92	3	On
096		E 503	24 Nov 98	0823	S10:04.32	W082:29.46	4	168	1	On
096		E 526	26 Nov 98	1741	S07:35.89	W080:06.19	4	91	2	On
096		E 543	28 Nov 98	1411	S05:19.80	W081:28.18	2	168	1	On
096		E 555	29 Nov 98	1721	S04:16.45	W082:18.37	4	184	8	On
096		E 590	3 Dec 98	1814	S03:39.13	W088:04.93	4	181	9	On
096		E 630	8 Dec 98	1647	N07:25.15	W079:23.80	4	181	2	On
096		M 2006	3 Aug 98	1827	N21:56.45	W116:31.87	2	149	1	On
096		M 2072	15 Aug 98	1231	N13:12.76	W091:35.50	2	168	2	Off
096		M 2155	5 Sep 98	1014	N05:21.12	W079:36.52	2	168	1	On
096		M 2303	19 Oct 98	0957	N01:49.96	W113:04.73	4	143	1	On
096		J 3239	11 Aug 98	0633	N25:49.04	W109:32.79	2	125	3	On
096		J 3245	11 Aug 98	0850	N25:35.01	W109:38.37	0	7	1	On
096		J 3535	31 Aug 98	0727	N13:06.34	W089:00.26	4	7	1	On
096		J 3546	1 Sep 98	0904	N12:18.12	W087:55.23	3	7	1	On
096		J 3725	19 Sep 98	1335	N09:44.74	W097:54.06	3	181	1	On
096		J 3774	26 Sep 98	1538	N11:40.03	W113:58.12	3	168	1	On
096		J 3796	28 Sep 98	1715	N12:53.36	W107:45.25	1	149	2	On
096		J 3853	12 Oct 98	1454	S02:28.11	W106:45.08	3	91	3	On
096		J 3907	20 Oct 98	1120	N04:05.54	W094:45.78	4	149	1	On
096		J 4041	15 Nov 98	1348	N07:05.02	W078:00.10	3	185	1	Off
096		J 4055	23 Nov 98	0709	N07:05.12	W081:02.40	3	182	2	On
unid. whale										
098		E 44	2 Aug 98	0750	N04:08.00	W084:34.73	3	186	1	On
098		E 84	10 Aug 98	1107	S01:36.55	W113:13.54	3	73	1	On
098		E 93	11 Aug 98	1030	S02:33.02	W116:01.29	4	126	1	Off
098		E 213	19 Sep 98	0659	N12:30.27	W119:58.19	3	126	1	On
098		E 278	11 Oct 98	0659	N04:06.85	W118:14.18	5	184	2	On
098		E 441	6 Nov 98	1516	S08:53.21	W097:35.74	4	92	3	On
098		E 454	11 Nov 98	0853	S16:02.27	W088:51.22	5	149	1	On
098		E 455	11 Nov 98	1050	S16:16.31	W088:42.51	5	181	1	On
098		M 2503	24 Nov 98	1316	N05:30.44	W128:58.60	4	147	1	On
098		J 3034	1 Aug 98	1654	N29:40.53	W115:50.57	4	7	1	On
098		J 3074	3 Aug 98	0627	N26:42.10	W114:06.81	3	147	1	On
098		J 3908	20 Oct 98	1238	N04:14.58	W094:33.10	4	149	1	On

Table 2 (continued)

Other Code	Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
098		J 3978	7 Nov 98	0759	S01:06.53	W091:02.16	3	126	2	On
<i>Balaenoptera borealis/edeni</i>										
099		E 28	31 Jul 98	1831	N06:00.56	W081:22.46	2	126	1	Off
099		E 41	1 Aug 98	1458	N04:22.37	W083:04.67	3	15	1	On
099		E 86	10 Aug 98	1158	S01:34.08	W113:27.01	3	1	2	On
099		E 88	10 Aug 98	1625	S01:37.55	W113:42.76	4	126	1	On
099		E 89	10 Aug 98	1811	S01:37.32	W114:03.71	4	1	1	On
099		E 95	12 Aug 98	0848	S04:02.97	W119:03.34	5	184	1	On
099		E 204	18 Sep 98	1452	N12:34.87	W121:51.50	1	73	1	On
099		E 216	19 Sep 98	1235	N12:53.84	W119:10.47	3	182	1	On
099		E 250	1 Oct 98	1535	N19:18.60	W107:54.65	4	126	1	On
099		E 280	11 Oct 98	0731	N04:05.93	W118:15.18	5	182	1	Off
099		E 294	13 Oct 98	1805	N04:59.50	W113:12.69	4	126	1	On
099		E 440	6 Nov 98	1344	S08:48.53	W097:22.10	4	181	1	On
099		E 456	11 Nov 98	1544	S16:49.01	W088:03.59	4	168	4	On
099		E 458	12 Nov 98	1627	S17:02.50	W084:48.38	4	186	1	On
099		E 480	21 Nov 98	1717	S11:42.79	W078:03.48	3	92	2	On
099		E 485	22 Nov 98	0902	S10:28.22	W078:30.20	3	186	1	On
099		E 505	24 Nov 98	1715	S09:48.39	W081:08.52	4	186	2	On
099		E 571	1 Dec 98	1420	S08:24.52	W086:47.87	4	91	1	On
099		M 2071	15 Aug 98	1218	N13:11.52	W091:34.76	2	149	2	On
099		M 2092	21 Aug 98	1442	N13:21.54	W090:38.64	4	181	1	On
099		M 2094	21 Aug 98	1613	N13:13.10	W090:39.67	4	152	1	On
099		M 2455	17 Nov 98	1027	N14:10.88	W111:44.97	4	183	1	On
099		M 2464	18 Nov 98	1429	N12:57.90	W115:17.76	4	99	1	Off
099		M 2490	23 Nov 98	1350	N05:24.21	W126:42.03	4	69	2	On
099		J 3728	19 Sep 98	1640	N09:43.85	W098:17.85	3	92	4	On
099		J 3729	19 Sep 98	1641	N09:41.16	W098:13.92	3	120	2	Off
099		J 3738	22 Sep 98	1803	N10:13.41	W107:13.98	4	152	1	On
099		J 3772	26 Sep 98	1445	N11:36.70	W114:03.49	3	149	1	Off
099		J 3781	27 Sep 98	1508	N12:11.05	W110:45.99	4	149	1	On
099		J 3886	17 Oct 98	1624	S02:01.93	W101:02.59	3	91	1	On
099		J 3899	18 Oct 98	1657	N00:01.67	W098:45.79	3	181	1	On
099		J 3944	4 Nov 98	1524	S00:42.51	W094:52.00	2	182	1	On
<i>Stenella longirostris</i> (Tres Marias)										
100		J 3331	18 Aug 98	1630	N22:26.68	W106:28.68	3	74	420	On
100		J 3336	19 Aug 98	1331	N20:57.70	W105:41.64	4	74	2633	On
<i>Stenella longirostris</i> (southwestern)										
101	002	M 2297	18 Oct 98	1545	N03:27.92	W112:53.73	5	74	500	On
101	002	M 2322	23 Oct 98	0715	N02:05.70	W123:20.37	4	7	347	On
101	002	M 2509	26 Nov 98	1401	N11:00.75	W130:42.50	5	69	453	On
101		J 3865	14 Oct 98	0758	S08:02.76	W107:38.21	3	181	60	On
101		J 3866	14 Oct 98	0858	S08:04.70	W107:35.94	3	92	168	On
101	002	J 3876	16 Oct 98	1354	S04:32.31	W103:23.72	4	92	77	On
101	002	J 3878	16 Oct 98	1704	S04:13.47	W103:06.87	4	181	613	On
101		J 3880	17 Oct 98	0826	S02:46.42	W101:37.16	4	91	192	On
101	002	J 3881	17 Oct 98	1111	S02:35.50	W101:35.94	3	149	153	On
unid. pinniped										
PU	018	E 417	2 Nov 98	1025	S00:55.52	W090:35.00	4	184	15	On
PU	016 025	E 476	21 Nov 98	1518	S11:46.26	W077:50.99	3	91	57	On
PU		E 477	21 Nov 98	1614	S11:43.04	W077:51.88	3	91	2	On
PU		E 481	22 Nov 98	0610	S10:34.35	W078:04.61	2	91	1	On
PU		E 512	25 Nov 98	1007	S08:58.69	W079:30.38	2	184	1	On
PU		E 522	26 Nov 98	1120	S07:57.16	W079:45.53	3	92	1	Off

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
PU	018	E 528	27 Nov 98	0726	S07:09.31	W080:44.84	2	186	8	Off
PU		E 529	27 Nov 98	0808	S07:11.97	W080:43.33	1	149	1	Off
PU		E 530	27 Nov 98	0851	S07:12.66	W080:39.87	2	91	1	On
PU	016	E 531	27 Nov 98	0855	S07:11.14	W080:35.52	2	91	1140	On
PU		M 2001	1 Aug 98	0920	N29:10.15	W119:07.37	4	91	1	On
PU		M 2002	1 Aug 98	1322	N28:33.48	W119:26.71	3	91	1	On
PU		M 2044	12 Aug 98	1712	N14:43.30	W098:12.03	2	149	1	On
PU		J 3057	2 Aug 98	1356	N28:09.78	W115:27.24	3	7	1	On
PU		J 3060	2 Aug 98	1516	N28:05.52	W115:29.42	4	7	2	On
PU		J 3080	3 Aug 98	1144	N26:13.96	W113:53.35	4	7	1	On
PU		J 3106	4 Aug 98	1453	N24:00.42	W112:08.01	2	7	3	On
PU		J 3980	7 Nov 98	1038	S01:05.50	W090:54.37	4	153	1	On
PU	018	J 3982	7 Nov 98	1344	S01:01.00	W090:44.50	5	182	293	On
unid. sea lion										
UO		J 3010	1 Aug 98	0840	N30:41.40	W116:07.67	2	74	1	On
<i>Zalophus californianus</i>										
ZC		J 3011	1 Aug 98	0842	N30:42.12	W116:06.76	2	7	1	On
ZC		J 3012	1 Aug 98	0847	N30:40.47	W116:05.71	2	7	1	On
ZC		J 3014	1 Aug 98	1053	N30:21.69	W116:09.37	3	74	1	On
ZC		J 3018	1 Aug 98	1126	N30:16.68	W116:09.08	3	125	1	On
ZC		J 3021	1 Aug 98	1150	N30:13.28	W116:07.52	3	183	1	On
ZC		J 3022	1 Aug 98	1152	N30:12.48	W116:06.87	3	125	1	On
ZC	017	J 3023	1 Aug 98	1155	N30:09.71	W116:06.41	3	183	977	On
ZC	022	J 3028	1 Aug 98	1323	N30:00.97	W115:57.36	3	143	102	On
ZC		J 3031	1 Aug 98	1510	N29:52.98	W115:52.04	3	143	1	On
ZC		J 3035	1 Aug 98	1749	N29:39.35	W115:46.44	4	143	1	On
ZC		J 3036	1 Aug 98	1808	N29:37.83	W115:43.30	4	143	1	On
ZC		J 3037	1 Aug 98	1820	N29:36.94	W115:41.24	4	143	1	On
ZC	022	J 3040	1 Aug 98	1914	N29:32.50	W115:34.37	4	143	38	On
ZC		J 3046	2 Aug 98	0933	N28:30.34	W115:15.23	4	147	1	Off
ZC		J 3048	2 Aug 98	1025	N28:23.28	W115:18.55	2	147	1	On
ZC		J 3052	2 Aug 98	1139	N28:14.82	W115:25.36	3	143	1	On
ZC		J 3058	2 Aug 98	1404	N28:10.22	W115:28.69	3	7	7	On
ZC		J 3062	2 Aug 98	1539	N28:03.73	W115:25.98	4	74	1	On
ZC	016	J 3063	2 Aug 98	1547	N28:04.02	W115:23.59	4	74	290	On
ZC		J 3096	4 Aug 98	0923	N24:24.40	W112:07.64	3	74	1	Off
ZC	018	J 3097	4 Aug 98	0943	N24:23.34	W112:08.05	3	125	10	On
ZC		J 3107	4 Aug 98	1500	N23:58.54	W112:07.76	2	125	5	On
ZC		J 3116	5 Aug 98	0623	N23:27.16	W110:28.22	1	125	1	On
ZC		J 3117	5 Aug 98	0627	N23:29.09	W110:31.05	1	74	1	On
ZC	016	J 3118	5 Aug 98	0629	N23:27.63	W110:28.93	1	125	31	On
ZC		J 3124	5 Aug 98	1139	N23:04.45	W110:16.69	1	7	1	On
ZC		J 3169	9 Aug 98	0948	N26:33.87	W111:26.61	2	147	1	On
ZC		J 3170	9 Aug 98	0951	N26:32.99	W111:23.85	2	74	1	On
ZC		J 3200	10 Aug 98	0642	N27:42.14	W110:47.67	1	7	1	On
ZC		J 3201	10 Aug 98	0643	N27:42.02	W110:48.41	1	125	1	On
ZC		J 3202	10 Aug 98	0645	N27:42.50	W110:47.29	1	147	2	On
ZC		J 3203	10 Aug 98	0651	N27:41.03	W110:49.56	2	125	1	On
ZC	018	J 3986	7 Nov 98	1541	S00:55.47	W090:25.54	4	126	64	On
unid. fur seal										
UA		J 3015	1 Aug 98	1101	N30:20.20	W116:11.75	3	143	1	On
UA		J 3017	1 Aug 98	1114	N30:18.38	W116:10.45	3	143	1	On
UA		J 3019	1 Aug 98	1138	N30:13.88	W116:07.68	3	125	1	On
UA		J 3020	1 Aug 98	1142	N30:14.98	W116:08.24	3	183	1	On
UA		J 3024	1 Aug 98	1220	N30:08.09	W116:04.97	3	147	1	On

Table 2 (continued)

Code	Other Codes	Sighting Number	Date	Time	Latitude	Longitude	Obs. Bft	School No.	School Size	Effort
UA		J 3025	1 Aug 98	1234	N30:05.80	W116:05.79	3	74	1	On
UA		J 3050	2 Aug 98	1109	N28:17.78	W115:21.84	3	183	1	On
UA		J 3051	2 Aug 98	1127	N28:15.45	W115:23.62	3	143	1	On
UA		J 3056	2 Aug 98	1348	N28:12.25	W115:26.74	3	125	1	On
<i>Callorhinus ursinus</i>										
CU		J 3016	1 Aug 98	1106	N30:18.99	W116:11.70	3	143	1	On
CU		J 3079	3 Aug 98	1124	N26:18.29	W113:55.81	4	74	1	On
CU		J 3082	3 Aug 98	1235	N26:06.47	W113:47.33	4	143	2	On
<i>Otaria byronia</i>										
OB		E 479	21 Nov 98	1648	S11:42.27	W077:56.48	3	92	3	Off
OB		E 482	22 Nov 98	0618	S10:33.91	W078:05.47	2	152	1	On
OB	025 016	E 514	25 Nov 98	1246	S08:39.71	W079:18.71	3	186	2025	On
OB		E 534	27 Nov 98	1411	S07:06.88	W080:25.54	3	92	1	On
OB		E 544	28 Nov 98	1416	S05:21.10	W081:28.60	2	186	1	Off

Table 3. Summary of SPAM98 marine mammal sightings. Mixed schools are counted once for each sighting-category that occurs in them so that the total sightings column exceeds the actual number of schools sighted (2,260 sightings) by 250. School size is the mean of the best estimates of total school size for pure schools and subgroup size in the case of mixed schools.

Code	Sighting-category	Pure Schools	Mixed Schools	Total Sightings	School Size
077	unid. dolphin	342	21	363	14.3
018	<i>Tursiops truncatus</i>	234	87	321	24.2
002	<i>Stenella attenuata</i> (offshore)	135	127	262	73.3
013	<i>Stenella coeruleoalba</i>	201	13	214	46.1
017	<i>Delphinus delphis</i>	137	7	144	173.4
010	<i>Stenella longirostris orientalis</i>	34	81	115	128.2
021	<i>Grampus griseus</i>	67	24	91	18.8
072	<i>Balaenoptera edeni</i>	75	3	78	1.3
015	<i>Steno bredanensis</i>	46	13	59	9.1
006	<i>Stenella attenuata graffmani</i>	57	1	58	59.7
070	<i>Balaenoptera</i> sp.	49	0	49	2.1
061	<i>Ziphius cavirostris</i>	49	0	49	1.9
016	<i>Delphinus capensis</i>	38	10	48	337.8
046	<i>Physeter macrocephalus</i>	43	2	45	5.1
090	<i>Stenella attenuata</i> (unid. subsp.)	37	5	42	49.3
048	<i>Kogia sima</i>	41	0	41	1.6
034	<i>Globicephala</i> sp.	26	12	38	13.6
051	<i>Mesoplodon</i> sp.	37	0	37	1.9
036	<i>Globicephala macrorhynchus</i>	20	14	34	24.7
049	ziphiid whale	32	1	33	1.5
ZC	<i>Zalophus californianus</i>	26	7	33	2.0
099	<i>Balaenoptera borealis/edeni</i>	32	0	32	1.3
096	unid. cetacean	28	1	29	2.1
037	<i>Orcinus orca</i>	26	1	27	5.9
003	<i>Stenella longirostris</i> (unid. subsp.)	12	14	26	170.8
079	unid. large whale	23	1	24	1.2
075	<i>Balaenoptera musculus</i>	21	2	23	2.0
078	unid. small whale	20	0	20	10.7
PU	unid. pinniped	14	5	19	2.6
011	<i>Stenella longirostris hybrid</i>	2	15	17	87.0
032	<i>Feresa attenuata</i>	14	2	16	27.1
025	<i>Lagenorhynchus obscurus</i>	8	7	15	85.8
005	<i>Delphinus</i> sp.	15	0	15	65.6
098	unid. whale	13	0	13	1.3
022	<i>Lagenorhynchus obliquidens</i>	8	2	10	20.9
101	<i>Stenella longirostris</i> (southwestern)	3	6	9	235.0
076	<i>Megaptera novaeangliae</i>	8	1	9	1.6
UA	unid. fur seal	9	0	9	1.0
033	<i>Pseudorca crassidens</i>	3	3	6	11.6
001	<i>Mesoplodon peruvianus</i>	5	0	5	3.0
OB	<i>Otaria byronia</i>	4	1	5	5.3
080	<i>Kogia</i> sp.	4	0	4	1.0
059	<i>Mesoplodon densirostris</i>	4	0	4	2.4
088	<i>Stenella longirostris centroamericana</i>	3	0	3	159.1
063	<i>Berardius bairdii</i>	3	0	3	10.9
026	<i>Lagenodelphis hosei</i>	1	2	3	116.6
CU	<i>Callorhinus ursinus</i>	3	0	3	1.3
100	<i>Stenella longirostris</i> (Tres Marias)	2	0	2	1526.7
083	<i>Mesoplodon</i> sp. A	2	0	2	3.6
074	<i>Balaenoptera physalus</i>	1	0	1	1.0
047	<i>Kogia breviceps</i>	1	0	1	1.0
031	<i>Peponocephala electra</i>	0	1	1	286.2
UO	unid. sea lion	1	0	1	1.0

Table 4. Marine mammal schools of mixed species composition.

Species 1		Species 2		Species 3		Species 4		Number of schools
code	name	code	name	code	name	code	name	
002	OFFSH_SPOT	010	EAST_SPINR					72
021	GRAMPUS	018	TURSIOPS					17
002	OFFSH_SPOT	018	TURSIOPS					15
036	SHRT_PILOT	018	TURSIOPS					14
002	OFFSH_SPOT	011	WBEL_SPINR					13
018	TURSIOPS	015	STENO					12
002	OFFSH_SPOT	003	UNID_SPINR					10
034	GLOBI_SPP	018	TURSIOPS					7
002	OFFSH_SPOT	101	SW_SPINNER					6
013	STRIPED	017	SHRTB_COMM					5
025	DUSKY	016	LONGB_COMM					5
002	OFFSH_SPOT	077	UNID_DOLPH					3
010	EAST_SPINR	002	OFFSH_SPOT	077	UNID_DOLPH			3
018	TURSIOPS	PU	UNID_PINNI					3
077	UNID_DOLPH	018	TURSIOPS					3
090	UNID_SPOT	018	TURSIOPS					3
002	OFFSH_SPOT	013	STRIPED					2
003	UNID_SPINR	077	UNID_DOLPH					2
013	STRIPED	010	EAST_SPINR					2
016	LONGB_COMM	ZC	CA_SEALION					2
018	TURSIOPS	ZC	CA_SEALION					2
021	GRAMPUS	034	GLOBI_SPP					2
021	GRAMPUS	077	UNID_DOLPH					2
022	P_WHT_SIDE	ZC	CA_SEALION					2
032	PYGMY_KLLR	018	TURSIOPS					2
034	GLOBI_SPP	077	UNID_DOLPH					2
075	BLUE_WHALE	072	BRYDES_WHL					2
090	UNID_SPOT	010	EAST_SPINR					2
002	OFFSH_SPOT	003	UNID_SPINR	018	TURSIOPS			1
002	OFFSH_SPOT	010	EAST_SPINR	013	STRIPED			1
002	OFFSH_SPOT	013	STRIPED	077	UNID_DOLPH			1
003	UNID_SPINR	018	TURSIOPS					1
006	COAST_SPOT	018	TURSIOPS					1
010	EAST_SPINR	077	UNID_DOLPH					1
011	WBEL_SPINR	077	UNID_DOLPH					1
013	STRIPED	018	TURSIOPS					1
013	STRIPED	021	GRAMPUS					1
015	STENO	011	WBEL_SPINR					1
016	LONGB_COMM	025	DUSKY	PU	UNID_PINNI			1
016	LONGB_COMM	PU	UNID_PINNI					1
017	SHRTB_COMM	018	TURSIOPS					1
017	SHRTB_COMM	ZC	CA_SEALION					1
021	GRAMPUS	034	GLOBI_SPP	033	FALSE_KLLR	018	TURSIOPS	1
025	DUSKY	016	LONGB_COMM	OB	SA_SEALION			1
026	FRASERS	077	UNID_DOLPH					1
031	MELON_HEAD	026	FRASERS					1
033	FALSE_KLLR	018	TURSIOPS					1
037	KILLER_WHA	021	GRAMPUS					1
046	SPERM_WHAL	018	TURSIOPS					1
046	SPERM_WHAL	077	UNID_DOLPH					1
049	ZIPHIID_WH	077	UNID_DOLPH					1
072	BRYDES_WHL	079	UNID_LG_WH					1
076	HUMPBACK_W	018	TURSIOPS					1
096	UNID_CETAC	033	FALSE_KLLR					1

Table 5. Search effort and cetacean sighting rates by sea state and swell height.

	Kilometers of effort	No. of sightings	Sightings per 1000 km
Total	43305.2	1915	44.22
By sea state (Beaufort)			
0	361.7	47	129.95
1	1169.7	196	167.56
2	4145.7	418	100.83
3	9436.4	511	54.15
4	17284.8	543	31.41
5	10107.6	189	18.70
6	799.2	11	13.76
By swell height (ft)			
0	504.5	35	69.38
1	376.8	60	159.24
2	2061.9	144	69.84
3	9392.4	573	61.01
4	12309.5	487	39.56
5	8669.4	285	32.87
6	5997.8	194	32.35
7	1650.0	50	30.30
8	1612.7	49	30.38
9	187.6	2	10.66
10	77.2	0	.00
11	15.2	0	.00
12	97.4	1	10.27
No swell height recorded		35	



Table 6. Summary of tracker sightings on the *Endeavor*. "Matched" column indicates the number of sightings from the "Total schools" column that were subsequently sighted by the flying bridge observers.

Code	Sighting-category	Pure schools	Mixed schools	Total schools	School size	Matched schools
002	<i>Stenella attenuata</i> (offshore)	4	6	10	36.3	10
003	<i>Stenella longirostris</i> (unid. subsp.)	1	0	1		1
010	<i>Stenella longirostris orientalis</i>	1	2	3	40.3	3
011	<i>Stenella longirostris</i> hybrid	0	5	5	30.7	5
013	<i>Stenella coeruleoalba</i>	18	1	18	13	13
015	<i>Steno bredanensis</i>	2	1	3	1	1
016	<i>Delphinus capensis</i>	3	0	3	1	3
017	<i>Delphinus delphis</i>	4	2	6	28	5
018	<i>Tursiops truncatus</i>	1	2	3	0.7	3
021	<i>Grampus griseus</i>	2	2	4	6.5	3
025	<i>Lagenorhynchus obscurus</i>	1	1	2	13	1
034	<i>Globicephala</i> sp.	2	1	3	3	2
037	<i>Orcinus orca</i>	3	0	3	1	2
046	<i>Physeter macrocephalus</i>	5	0	5	1	4
048	<i>Kogia sima</i>	1	0	1	1	0
049	ziphiid whale	6	0	6	2	0
051	<i>Mesoplodon</i> sp.	1	0	1	1	1
070	<i>Balaenoptera</i> sp.	5	0	5	1	0
072	<i>Balaenoptera edeni</i>	2	0	2	1	2
075	<i>Balaenoptera musculus</i>	1	0	1	1	1
077	unid. dolphin	42	0	42	13.6	13
078	unid. small whale	4	0	4	1.8	1
079	unid. large whale	8	0	8	1.1	3
083	<i>Mesoplodon</i> sp. A	1	0	1	4	0
090	<i>Stenella attenuata</i> (unid. subsp.)	1	0	1	12	0
098	unid. whale	2	0	2	2	2
099	<i>Balaenoptera borealis/edeni</i>	3	0	1	1	0

Table 7. 35-mm photographs of cetacean sightings.

Code	Sighting-category	schools photographed	total frames taken
072	<i>Balaenoptera edeni</i>	4	14
075	<i>Balaenoptera musculus</i>	12	231
063	<i>Berardius bairdii</i>	1	24
016	<i>Delphinus capensis</i>	7	88
017	<i>Delphinus delphis</i>	7	28
005	<i>Delphinus</i> sp.	1	5
032	<i>Feresa attenuata</i>	3	12
034	<i>Globicephala</i> sp.	10	244
025	<i>Lagenorhynchus obscurus</i>	1	3
076	<i>Megaptera novaeangliae</i>	7	52
	Mixed <i>S.attenuata</i> / <i>S.longirostris</i>	2	9
037	<i>Orcinus orca</i>	13	360
046	<i>Physeter macrocephalus</i>	5	55
033	<i>Pseudorca crassidens</i>	1	21
002	<i>Stenella attenuata</i> (NE offshore)	10	63
090	<i>Stenella attenuata</i> (unid. subsp.)	6	60
006	<i>Stenella attenuata graffmani</i>	13	73
003	<i>Stenella longirostris</i> (unid. subsp.)	3	55
011	<i>Stenella longirostris</i> (whitebelly)	1	14
010	<i>Stenella longirostris orientalis</i>	13	129
101	<i>Stenella longirostris</i> (southwestern)	2	112
015	<i>Steno bredanensis</i>	1	17
018	<i>Tursiops truncatus</i>	1	22
	Total	124	1691

Table 8. Whale photos potentially identifiable as unique individuals.

SIGHT	DATE	POSITION	LOCATION	SPECIES	BIOPSY	SUBJECT	ROLL	FRAMES	PHOTOGR.
2369	11/03/98	22:28N/114:54W	W of Cabo San Lucas	<i>Balaenoptera musculus</i>		R side	JMC98-205	1-9	147
2382	11/05/98	21:40N/111:03W	N of Revillagigedos	<i>Balaenoptera musculus</i>		R side	JMC98-206	17-23	147
3962	11/06/98	01:18S/92:19W	W of Galapagos	<i>Balaenoptera musculus</i>	x	L & R sides	KRH98-01	1-36	188
3970	11/06/98	01:13S/91:40W	W of Galapagos	<i>Balaenoptera musculus</i>	x	L side	KRH98-02	3-10	153
3998	11/09/98	01:47S/86:08W	E of Galapagos	<i>Balaenoptera musculus</i>	x	L side	KRH98-03	22-36	144
"	"	"	"	"	"	L side	KRH98-04	1-8	144
4095	11/26/98	10:05N/92:01W	N side of C.R. dome	<i>Balaenoptera musculus</i>	x	L & R sides	KRH98-05	1-24	153
532	11/27/98	07:13S/80:37W	coastal Peru	<i>Balaenoptera musculus</i>	x	L & R sides	LSB98-10	5-end	152
"	"	"	"	"	"	L & R sides	LSB98-11	1-16	152
592	12/04/98	01:58S/87:30W	E of Galapagos	<i>Balaenoptera musculus</i>		R side	LSB98-11	25-28	152
4155	12/04/98	21:57N/111:60W	N of Revillagigedos	<i>Balaenoptera musculus</i>	x	L & R sides	KRH98-05	25-35	153
4158	12/04/98	22:06N/112:02W	NE of Revillagigedos	<i>Balaenoptera musculus</i>	x	L & R sides	KRH98-06	1-15	099
4169	12/08/98	30:49N/116:26W	NW Baja	<i>Balaenoptera musculus</i>	x	R side	SAN98-B	14-28	153
3043	08/02/98	28:39N/115:07W	W coast Baja	<i>Globicephala</i> sp.	x	L side	JMC98-01	1-5	007
"	"	"	"	"		L & R sides	KR98-01	1-35	147
3044	08/02/98	28:35N/115:11W	W coast Baja	<i>Globicephala</i> sp.	x	L & R sides	KR98-02	1-23	147
3078	08/03/98	26:28N/114:00W	W coast Baja	<i>Globicephala</i> sp.	x	L sides	KR98-02	24-32	147
3178	08/09/98	27:14N/111:40W	Gulf of CA	<i>Globicephala</i> sp.		L sides	JMC98-03	18-36	074
"	"	"	"	"		L sides	KR98-04	9-27	004
3630	09/03/98	09:06N/84:40W	coastal Costa Rica	<i>Megaptera novaeangliae</i>	x	dorsal fin	KR98-07	19-26	147
3661	09/06/98	07:08N/80:35W	coastal Panama	<i>Megaptera novaeangliae</i>		dorsal fin	JMC98-02	1-16	147
3675	09/12/98	08:14N/79:49W	Gulf of Panama	<i>Megaptera novaeangliae</i>		dorsal fin	KR98-08	4-10	152
3981	11/07/98	01:05S/90:54W	Galapagos	<i>Megaptera novaeangliae</i>		dorsal fin	KRH98-02	26-30	153
4166	12/08/98	30:11N/116:18W	NW Baja	<i>Megaptera novaeangliae</i>	x	dorsal fin	SAN98-B	6-13	153
2209	09/17/98	07:21N/93:02W	Guatemala basin	<i>Orcinus orca</i>		L side	LSB98-04	17-28	147
"	"	"	"	"		L side	JMC98-201	1-6	007
3759	09/24/98	10:31N/111:05W	W of Clipperton	<i>Orcinus orca</i>	x	L & R sides	JMC98-06	30-36	168
"	"	"	"	"	"	L & R sides	KR98-08	25-36	152
2271	10/05/98	15:55N/100:53W	S of Acapulco, MX	<i>Orcinus orca</i>	"	L & R sides	LSB98-05	2-35	152
2320	10/22/98	01:20N/121:33W	offshore	<i>Orcinus orca</i>	"	L side	KR98-09	1-10	147
"	"	"	"	"		L side	JMC98-202	10-12	183
2370	11/03/98	21:46N/114:13W	NW of Revillagigedos	<i>Orcinus orca</i>		L side	KR98-09	29-31	147
2370	"	"	"	<i>Orcinus orca</i>		L sides	JMC98-205	11-33	147
2428	11/08/98	19:52N/106:23W	off Manzanillo, MX	<i>Orcinus orca</i>		L & R sides	JMC98-206	1-16	147
460	11/13/98	16:05S/83:28W	off Peru	<i>Orcinus orca</i>		L sides	JMC98-206	24-32	147
"	"	"	"	"		L sides	LSB98-07	2-10	152
2451	11/16/98	15:58N/109:07W	off W Mexico	<i>Orcinus orca</i>		L side	GKK98-04	2-16	168
"	"	"	"	"		L & R sides	KR98-13	14-end	147
"	"	"	"	"		L & R sides	MSL98-301	1-end	019
"	"	"	"	"		L & R sides	MSL98-302	1-end	019
499	11/23/98	10:58S/80:43W	coastal Peru	<i>Orcinus orca</i>		L & R sides	LSB98-08	1-36	152
"	"	"	"	"		L side	LSB98-09	1-8	152
"	"	"	"	"		L & R sides	GKK98-03	1-17	181
3176	08/06/98	27:06N/111.39W	Gulf of CA	<i>Physeter macrocephalus</i>	x	fluke	KR98-04	4-8	147
3277	08/11/98	24:32N/109:34W	Gulf of CA	<i>Physeter macrocephalus</i>	x	dorsal hump	KR98-04	28-33	147
3994	11/08/98	01:11S/88:28W	E of Galapagos	<i>Physeter macrocephalus</i>	x	flukes	KRH98-03	1-21	144

Table 9. Aerial photogrammetry effort, total number of schools, and number of calibration schools, obtained per leg by the helicopter on the *David Starr Jordan*.

	Leg #	1	2	3	4	5	6	Totals
Days Flown		3	4	11	10	4	9	41
Days Lost		14	17	8	9	14	8	70
% Days Flown		18%	19%	58%	53%	22%	53%	37%
Flight Hours		4.7	11.6	28	33.5	16.2	27.7	121.7
Average # Hours per Day Flown		1.57	2.9	2.55	3.35	4.05	3.08	2.92
# Schools Photographed		1	15	24	30	19	29	118
# Schools Used For Calibration		0	2	10	12	4	8	36
% Used Versus photographed		0%	13%	42%	40%	21%	28%	31%

Table 10. Numbers of aerially photographed cetacean schools per leg by the helicopter on the *David Starr Jordan*.

	Leg #	1	2	3	4	5	6	Totals
<i>Stenella attenuata</i>		0	4	4	6	0	3	17
<i>Stenella longirostris</i>		0	3	2	2	0	3	10
mixed <i>S. attenuata</i> / <i>S. longirostris</i>		0	0	3	2	0	3	8
<i>Stenella coeruleoalba</i>		0	0	5	2	2	2	11
<i>Delphinus delphis</i>		0	2	1	11	6	6	26
other identified small cetaceans		0	3	6	4	0	8	21
unidentified small cetaceans		0	0	1	0	1	0	2
<i>Balaenoptera edeni</i>		1	1	1	2	4	0	9
<i>Megaptera novaeangliae</i>		0	1	1	0	1	1	4
<i>Balaenoptera musculus</i>		0	0	0	0	3	3	6
Ziphid sp.		0	1	0	1	2	0	4

Table 11. Skin biopsy samples of cetaceans.

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Balaenoptera edeni</i>	02° 07' S	106° 46' W	DSJ981012-01
<i>Balaenoptera edeni</i>	01° 12' S	91° 45' W	DSJ981106-05
<i>Balaenoptera edeni</i>	00° 44' S	94° 50' W	DSJ981104-05
<i>Balaenoptera edeni</i>	00° 30' S	94° 40' W	DSJ981104-12
<i>Balaenoptera edeni</i>	11° 51' N	87° 43' W	DSJ980901-08
<i>Balaenoptera musculus</i>	07° 9' S	80° 35' W	END981127-01
<i>Balaenoptera musculus</i>	07° 9' S	80° 35' W	END981127-02
<i>Balaenoptera musculus</i>	07° 9' S	80° 35' W	END981127-03
<i>Balaenoptera musculus</i>	01° 50' S	86° 05' W	DSJ981109-01
<i>Balaenoptera musculus</i>	01° 18' S	92° 19' W	DSJ981106-01
<i>Balaenoptera musculus</i>	01° 18' S	92° 19' W	DSJ981106-02
<i>Balaenoptera musculus</i>	01° 18' S	92° 19' W	DSJ981106-03
<i>Balaenoptera musculus</i>	01° 18' S	92° 19' W	DSJ981106-04
<i>Balaenoptera musculus</i>	01° 13' S	91° 40' W	DSJ981106-06
<i>Balaenoptera musculus</i>	01° 13' S	91° 40' W	DSJ981106-07
<i>Balaenoptera musculus</i>	00° 44' S	94° 50' W	DSJ981104-04
<i>Balaenoptera musculus</i>	00° 44' S	94° 50' W	DSJ981104-06
<i>Balaenoptera musculus</i>	00° 44' S	94° 50' W	DSJ981104-07
<i>Balaenoptera musculus</i>	00° 44' S	94° 50' W	DSJ981104-08
<i>Balaenoptera musculus</i>	00° 44' S	94° 50' W	DSJ981104-09
<i>Balaenoptera musculus</i>	00° 44' S	94° 50' W	DSJ981104-10
<i>Balaenoptera musculus</i>	00° 44' S	94° 50' W	DSJ981104-11
<i>Balaenoptera musculus</i>	00° 20' S	94° 29' W	DSJ981104-01
<i>Balaenoptera musculus</i>	10° 02' N	92° 04' W	DSJ981126-01
<i>Balaenoptera musculus</i>	10° 02' N	92° 04' W	DSJ981126-02
<i>Balaenoptera musculus</i>	10° 02' N	92° 04' W	DSJ981126-03
<i>Balaenoptera musculus</i>	10° 02' N	92° 04' W	DSJ981126-04
<i>Balaenoptera musculus</i>	21° 56' N	111° 58' W	DSJ981204-01
<i>Balaenoptera musculus</i>	22° 08' N	112° 02' W	DSJ981204-02
<i>Balaenoptera musculus</i>	30° 49' N	116° 26' W	DSJ981208-16
<i>Delphinus capensis</i>	10° 46' S	77° 41' W	END981121-01
<i>Delphinus capensis</i>	10° 32' S	78° 27' W	END981122-01
<i>Delphinus capensis</i>	10° 32' S	78° 27' W	END981122-02
<i>Delphinus capensis</i>	10° 32' S	78° 27' W	END981122-03
<i>Delphinus capensis</i>	10° 32' S	78° 27' W	END981122-04
<i>Delphinus capensis</i>	08° 47' S	79° 25' W	END981125-01
<i>Delphinus capensis</i>	08° 47' S	79° 25' W	END981125-02
<i>Delphinus capensis</i>	08° 47' S	79° 25' W	END981125-03
<i>Delphinus capensis</i>	08° 47' S	79° 25' W	END981125-04
<i>Delphinus capensis</i>	08° 47' S	79° 25' W	END981125-05
<i>Delphinus capensis</i>	08° 23' S	79° 12' W	END981125-06
<i>Delphinus capensis</i>	08° 23' S	79° 12' W	END981125-07
<i>Delphinus capensis</i>	08° 23' S	79° 12' W	END981125-08
<i>Delphinus capensis</i>	08° 23' S	79° 12' W	END981125-09
<i>Delphinus capensis</i>	08° 23' S	79° 12' W	END981125-10
<i>Delphinus capensis</i>	24° 26' N	112° 05' W	DSJ980804-04
<i>Delphinus capensis</i>	24° 30' N	112° 09' W	DSJ980804-01
<i>Delphinus capensis</i>	24° 30' N	112° 09' W	DSJ980804-02
<i>Delphinus capensis</i>	24° 30' N	112° 09' W	DSJ980804-03
<i>Delphinus capensis</i>	26° 29' N	111° 25' W	DSJ980809-02
<i>Delphinus capensis</i>	26° 29' N	111° 25' W	DSJ980809-03
<i>Delphinus capensis</i>	26° 29' N	111° 25' W	DSJ980809-04
<i>Delphinus capensis</i>	27° 48' N	115° 13' W	DSJ980802-08
<i>Delphinus capensis</i>	27° 48' N	115° 13' W	DSJ980802-09
<i>Delphinus capensis</i>	27° 48' N	115° 13' W	DSJ980802-10
<i>Delphinus capensis</i>	27° 51' N	115° 15' W	DSJ980802-07
<i>Delphinus capensis</i>	27° 58' N	115° 21' W	DSJ980802-04
<i>Delphinus capensis</i>	27° 58' N	115° 21' W	DSJ980802-05
<i>Delphinus capensis</i>	27° 58' N	115° 21' W	DSJ980802-06
<i>Delphinus capensis</i>	30° 28' N	116° 16' W	DSJ980101-04

Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Delphinus capensis</i>	30° 28' N	116° 16' W	DSJ980101-05
<i>Delphinus capensis</i>	30° 28' N	116° 16' W	DSJ980801-01
<i>Delphinus capensis</i>	30° 28' N	116° 16' W	DSJ980801-02
<i>Delphinus capensis</i>	30° 28' N	116° 16' W	DSJ980801-03
<i>Delphinus capensis</i>	30° 40' N	116° 16' W	DSJ981208-09
<i>Delphinus capensis</i>	30° 40' N	116° 16' W	DSJ981208-10
<i>Delphinus capensis</i>	30° 40' N	116° 16' W	DSJ981208-11
<i>Delphinus capensis</i>	30° 40' N	116° 16' W	DSJ981208-12
<i>Delphinus capensis</i>	30° 40' N	116° 16' W	DSJ981208-13
<i>Delphinus capensis</i>	30° 40' N	116° 16' W	DSJ981208-14
<i>Delphinus capensis</i>	30° 40' N	116° 16' W	DSJ981208-15
<i>Delphinus delphis</i>	01° 51' S	94° 47' W	DSJ981105-03
<i>Delphinus delphis</i>	01° 50' S	94° 57' W	DSJ981105-01
<i>Delphinus delphis</i>	01° 50' S	94° 57' W	DSJ981105-02
<i>Delphinus delphis</i>	00° 25' S	94° 39' W	DSJ981104-03
<i>Delphinus delphis</i>	06° 58' N	81° 37' W	DSJ980913-06
<i>Delphinus delphis</i>	07° 02' N	81° 59' W	DSJ981123-17
<i>Delphinus delphis</i>	07° 02' N	81° 59' W	DSJ981123-18
<i>Delphinus delphis</i>	08° 07' N	85° 38' W	DSJ981124-01
<i>Delphinus delphis</i>	08° 07' N	85° 38' W	DSJ981124-02
<i>Delphinus delphis</i>	08° 37' N	84° 07' W	DSJ980904-02
<i>Delphinus delphis</i>	30° 09' N	116° 18' W	DSJ981208-01
<i>Delphinus delphis</i>	30° 09' N	116° 18' W	DSJ981208-02
<i>Delphinus delphis</i>	30° 09' N	116° 18' W	DSJ981208-03
<i>Delphinus delphis</i>	30° 09' N	116° 18' W	DSJ981208-04
<i>Delphinus delphis</i>	30° 09' N	116° 18' W	DSJ981208-05
<i>Delphinus delphis</i>	30° 09' N	116° 18' W	DSJ981208-06
<i>Delphinus delphis</i>	30° 09' N	116° 18' W	DSJ981208-07
<i>Delphinus delphis</i>	30° 11' N	116° 05' W	DSJ980801-06
<i>Delphinus delphis</i>	30° 11' N	116° 05' W	DSJ980801-07
<i>Feresa attenuata</i>	17° 21' N	103° 52' W	DSJ981130-01
<i>Feresa attenuata</i>	17° 21' N	103° 52' W	DSJ981130-02
<i>Feresa attenuata</i>	17° 21' N	103° 52' W	DSJ981130-03
<i>Feresa attenuata</i>	17° 21' N	103° 52' W	DSJ981130-04
<i>Feresa attenuata</i>	17° 22' N	103° 55' W	DSJ981130-05
<i>Globicephala macrorhynchus</i>	08° 36' S	107° 44' W	DSJ981014-01
<i>Globicephala macrorhynchus</i>	02° 19' S	106° 44' W	DSJ981012-02
<i>Globicephala macrorhynchus</i>	02° 00' S	81° 18' W	DSJ981111-01
<i>Globicephala macrorhynchus</i>	02° 00' S	81° 18' W	DSJ981111-02
<i>Globicephala macrorhynchus</i>	02° 00' S	81° 18' W	DSJ981111-03
<i>Globicephala macrorhynchus</i>	02° 00' S	81° 18' W	DSJ981111-04
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-01
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-02
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-03
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-04
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-05
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-06
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-07
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-08
<i>Globicephala macrorhynchus</i>	01° 08' S	91° 07' W	DSJ981107-09
<i>Globicephala macrorhynchus</i>	00° 25' S	94° 39' W	DSJ981104-02
<i>Globicephala macrorhynchus</i>	2° 2' N	113° 4' W	MAC981019-01
<i>Globicephala macrorhynchus</i>	2° 2' N	113° 4' W	MAC981019-02
<i>Globicephala macrorhynchus</i>	2° 2' N	113° 4' W	MAC981019-03
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-06
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-07
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-08
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-09
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-10
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-11
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-12
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-13
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-14

Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-15
<i>Globicephala macrorhynchus</i>	07° 00' N	81° 29' W	DSJ981123-16
<i>Globicephala macrorhynchus</i>	07° 12' N	82° 03' W	DSJ980905-08
<i>Globicephala macrorhynchus</i>	07° 12' N	82° 03' W	DSJ980905-09
<i>Globicephala macrorhynchus</i>	07° 12' N	82° 03' W	DSJ980905-10
<i>Globicephala macrorhynchus</i>	07° 12' N	82° 03' W	DSJ980905-11
<i>Globicephala macrorhynchus</i>	07° 12' N	82° 03' W	DSJ980905-12
<i>Globicephala macrorhynchus</i>	07° 17' N	78° 16' W	DSJ981115-12
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-12
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-13
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-14
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-15
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-16
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-17
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-18
<i>Globicephala macrorhynchus</i>	09° 05' N	84° 59' W	DSJ980903-19
<i>Globicephala macrorhynchus</i>	10° 8' N	90° 1' W	END981021-02
<i>Globicephala macrorhynchus</i>	10° 8' N	90° 1' W	END981021-03
<i>Globicephala macrorhynchus</i>	10° 8' N	90° 1' W	END981021-04
<i>Globicephala macrorhynchus</i>	10° 27' N	110° 53' W	DSJ980924-01
<i>Globicephala macrorhynchus</i>	10° 27' N	110° 53' W	DSJ980924-02
<i>Globicephala macrorhynchus</i>	12° 36' N	124° 5' W	END980917-01
<i>Globicephala macrorhynchus</i>	12° 36' N	124° 5' W	END980917-02
<i>Globicephala macrorhynchus</i>	19° 20' N	156° 5' W	END980826-01
<i>Globicephala macrorhynchus</i>	19° 20' N	156° 5' W	END980826-02
<i>Globicephala macrorhynchus</i>	19° 20' N	156° 5' W	END980826-03
<i>Globicephala macrorhynchus</i>	19° 20' N	156° 5' W	END980826-04
<i>Globicephala macrorhynchus</i>	19° 20' N	156° 5' W	END980826-05
<i>Globicephala macrorhynchus</i>	19° 20' N	156° 5' W	END980826-06
<i>Globicephala macrorhynchus</i>	19° 20' N	156° 5' W	END980826-07
<i>Globicephala macrorhynchus</i>	26° 27' N	114° 00' W	DSJ980802-03
<i>Globicephala macrorhynchus</i>	26° 27' N	114° 00' W	DSJ980802-04
<i>Globicephala macrorhynchus</i>	26° 27' N	114° 00' W	DSJ980803-05
<i>Globicephala macrorhynchus</i>	26° 27' N	114° 00' W	DSJ980803-06
<i>Globicephala macrorhynchus</i>	28° 34' N	115° 10' W	DSJ980802-03
<i>Globicephala macrorhynchus</i>	28° 38' N	115° 06' W	DSJ980802-01
<i>Globicephala macrorhynchus</i>	28° 38' N	115° 06' W	DSJ980802-02
<i>Grampus griseus</i>	16° 39' N	100° 34' W	DSJ981129-06
<i>Grampus griseus</i>	16° 39' N	100° 34' W	DSJ981129-07
<i>Grampus griseus</i>	16° 39' N	100° 34' W	DSJ981129-08
<i>Lagenorhynchus obliquidens</i>	25° 50' N	115° 52' W	DSJ980801-10
<i>Lagenorhynchus obliquidens</i>	30° 13' N	115° 56' W	DSJ980801-08
<i>Lagenorhynchus obliquidens</i>	30° 13' N	115° 56' W	DSJ980801-09
<i>Megaptera novaeangliae</i>	09° 08' N	84° 36' W	DSJ980903-20
<i>Megaptera novaeangliae</i>	30° 08' N	116° 15' W	DSJ981208-08
<i>Orcinus orca</i>	10° 31' N	111° 05' W	DSJ980924-03
<i>Orcinus orca</i>	10° 31' N	111° 05' W	DSJ980924-04
<i>Orcinus orca</i>	10° 31' N	111° 05' W	DSJ980924-05
<i>Orcinus orca</i>	10° 31' N	111° 05' W	DSJ980924-06
<i>Physeter macrocephalus</i>	01° 47' S	81° 14' W	DSJ981111-06
<i>Physeter macrocephalus</i>	01° 47' S	81° 14' W	DSJ981111-07
<i>Physeter macrocephalus</i>	01° 47' S	81° 14' W	DSJ981111-08
<i>Physeter macrocephalus</i>	01° 11' S	88° 28' W	DSJ981108-01
<i>Physeter macrocephalus</i>	01° 11' S	88° 28' W	DSJ981108-02
<i>Physeter macrocephalus</i>	01° 11' S	88° 28' W	DSJ981108-03
<i>Physeter macrocephalus</i>	01° 11' S	88° 28' W	DSJ981108-04
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-01
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-02
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-03
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-04
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-05
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-06
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-07

Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-08
<i>Physeter macrocephalus</i>	04° 05' N	77° 48' W	DSJ981114-09
<i>Physeter macrocephalus</i>	13° 54' N	138° 44' W	END980910-01
<i>Physeter macrocephalus</i>	14° 13' N	111° 28' W	MAC981117-01
<i>Physeter macrocephalus</i>	24° 09' N	112° 12' W	DSJ980804-07
<i>Physeter macrocephalus</i>	24° 09' N	112° 12' W	DSJ980804-08
<i>Physeter macrocephalus</i>	24° 09' N	112° 12' W	DSJ980804-09
<i>Physeter macrocephalus</i>	24° 09' N	112° 12' W	DSJ980804-10
<i>Physeter macrocephalus</i>	24° 32' N	109° 34' W	DSJ980811-05
<i>Physeter macrocephalus</i>	24° 32' N	109° 34' W	DSJ980811-06
<i>Physeter macrocephalus</i>	24° 32' N	109° 34' W	DSJ980811-07
<i>Physeter macrocephalus</i>	24° 32' N	109° 34' W	DSJ980811-08
<i>Physeter macrocephalus</i>	24° 32' N	109° 34' W	DSJ980811-09
<i>Physeter macrocephalus</i>	24° 32' N	109° 34' W	DSJ980811-10
<i>Physeter macrocephalus</i>	24° 32' N	109° 34' W	DSJ980811-11
<i>Physeter macrocephalus</i>	27° 10' N	111° 37' W	DSJ980809-06
<i>Physeter macrocephalus</i>	27° 10' N	111° 37' W	DSJ980809-07
<i>Pseudorca crassidens</i>	16° 27' N	100° 17' W	DSJ980824-01
<i>Pseudorca crassidens</i>	16° 27' N	100° 17' W	DSJ980824-02
<i>Pseudorca crassidens</i>	16° 27' N	100° 17' W	DSJ980824-03
<i>Pseudorca crassidens</i>	16° 27' N	100° 17' W	DSJ980824-04
<i>Pseudorca crassidens</i>	16° 27' N	100° 17' W	DSJ980824-05
<i>Stenella attenuata</i>	16° 38' N	100° 38' W	DSJ981129-14
<i>Stenella attenuata</i>	17° 28' N	104° 03' W	DSJ981130-06
<i>Stenella attenuata</i> (offshore) (northeast stock)	6° 31' N	83° 36' W	MAC980904-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	6° 31' N	83° 36' W	MAC980904-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	6° 31' N	83° 36' W	MAC980913-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	6° 31' N	83° 36' W	MAC980913-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	08° 55' N	88° 41' W	DSJ981125-04
<i>Stenella attenuata</i> (offshore) (northeast stock)	08° 55' N	88° 41' W	DSJ981125-05
<i>Stenella attenuata</i> (offshore) (northeast stock)	9° 11' N	85° 7' W	END981023-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	10° 34' N	95° 4' W	END981019-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	10° 34' N	95° 4' W	END981019-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	10° 36' N	94° 51' W	END981019-03
<i>Stenella attenuata</i> (offshore) (northeast stock)	12° 11' N	104° 48' W	DSJ981007-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	12° 16' N	93° 19' W	MAC980823-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	14° 33' N	100° 42' W	MAC981004-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	15° 48' N	97° 45' W	DSJ980825-07
<i>Stenella attenuata</i> (offshore) (northeast stock)	15° 48' N	104° 16' W	DSJ981006-09
<i>Stenella attenuata</i> (offshore) (northeast stock)	15° 48' N	104° 16' W	DSJ981006-10
<i>Stenella attenuata</i> (offshore) (northeast stock)	15° 57' N	106° 44' W	MAC981013-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	16° 26' N	104° 09' W	DSJ981006-08
<i>Stenella attenuata</i> (offshore) (northeast stock)	17° 50' N	102° 58' W	DSJ980823-05
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 19' N	105° 01' W	DSJ980930-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 19' N	105° 01' W	DSJ980930-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 19' N	105° 01' W	DSJ980930-03
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 28' N	105° 4' W	MAC981012-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 28' N	105° 4' W	MAC981012-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 28' N	105° 4' W	MAC981012-03
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 47' N	104° 37' W	DSJ980822-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 49' N	105° 2' W	MAC981114-06
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 49' N	105° 2' W	MAC981114-07
<i>Stenella attenuata</i> (offshore) (northeast stock)	18° 49' N	105° 2' W	MAC981114-08
<i>Stenella attenuata</i> (offshore) (northeast stock)	20° 12' N	106° 58' W	MAC981108-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	20° 12' N	106° 58' W	MAC981108-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 20' N	107° 14' W	DSJ980820-05
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 20' N	107° 14' W	DSJ980820-06
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 22' N	107° 09' W	DSJ980820-04
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 24' N	107° 00' W	DSJ980820-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 24' N	107° 00' W	DSJ980820-02
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 24' N	107° 00' W	DSJ980820-03
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 26' N	109° 40' W	MAC981106-01
<i>Stenella attenuata</i> (offshore) (northeast stock)	21° 26' N	109° 40' W	MAC981106-02





Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Stenella attenuata graffmani</i>	11° 28' N	86° 34' W	DSJ980902-01
<i>Stenella attenuata graffmani</i>	12° 07' N	87° 47' W	DSJ980901-01
<i>Stenella attenuata graffmani</i>	14° 50' N	93° 11' W	DSJ980827-01
<i>Stenella attenuata graffmani</i>	14° 51' N	93° 03' W	DSJ980827-02
<i>Stenella attenuata graffmani</i>	14° 51' N	93° 03' W	DSJ980827-03
<i>Stenella attenuata graffmani</i>	14° 51' N	93° 03' W	DSJ980827-04
<i>Stenella attenuata graffmani</i>	14° 51' N	93° 03' W	DSJ980827-05
<i>Stenella attenuata graffmani</i>	14° 51' N	93° 03' W	DSJ980827-06
<i>Stenella attenuata graffmani</i>	15° 44' N	94° 15' W	DSJ980826-10
<i>Stenella attenuata graffmani</i>	15° 44' N	94° 15' W	DSJ980826-11
<i>Stenella attenuata graffmani</i>	15° 44' N	94° 15' W	DSJ980826-12
<i>Stenella attenuata graffmani</i>	15° 44' N	94° 15' W	DSJ980826-13
<i>Stenella attenuata graffmani</i>	15° 44' N	94° 15' W	DSJ980826-14
<i>Stenella attenuata graffmani</i>	15° 53' N	97° 53' W	DSJ980825-06
<i>Stenella attenuata graffmani</i>	15° 57' N	94° 27' W	DSJ980826-06
<i>Stenella attenuata graffmani</i>	15° 57' N	94° 27' W	DSJ980826-07
<i>Stenella attenuata graffmani</i>	15° 57' N	94° 27' W	DSJ980826-08
<i>Stenella attenuata graffmani</i>	15° 57' N	94° 27' W	DSJ980826-09
<i>Stenella attenuata graffmani</i>	16° 27' N	99° 18' W	DSJ980824-09
<i>Stenella attenuata graffmani</i>	16° 27' N	99° 18' W	DSJ980824-10
<i>Stenella attenuata graffmani</i>	16° 42' N	99° 54' W	DSJ980824-06
<i>Stenella attenuata graffmani</i>	16° 42' N	99° 54' W	DSJ980824-07
<i>Stenella attenuata graffmani</i>	16° 42' N	99° 54' W	DSJ980824-08
<i>Stenella attenuata graffmani</i>	19° 2' N	104° 44' W	MAC981114-01
<i>Stenella attenuata graffmani</i>	19° 2' N	104° 44' W	MAC981114-02
<i>Stenella attenuata graffmani</i>	19° 2' N	104° 44' W	MAC981114-03
<i>Stenella attenuata graffmani</i>	19° 2' N	104° 44' W	MAC981114-04
<i>Stenella attenuata graffmani</i>	19° 2' N	104° 44' W	MAC981114-05
<i>Stenella attenuata graffmani</i>	21° 28' N	105° 44' W	DSJ980819-03
<i>Stenella attenuata graffmani</i>	21° 34' N	105° 43' W	DSJ980819-01
<i>Stenella attenuata graffmani</i>	21° 34' N	105° 43' W	DSJ980819-02
<i>Stenella attenuata graffmani</i>	22° 40' N	106° 30' W	DSJ980818-09
<i>Stenella attenuata graffmani</i>	22° 40' N	106° 30' W	DSJ980818-10
<i>Stenella attenuata graffmani</i>	22° 40' N	106° 30' W	DSJ980818-11
<i>Stenella attenuata graffmani</i>	22° 40' N	106° 30' W	DSJ980818-12
<i>Stenella attenuata graffmani</i>	22° 40' N	106° 30' W	DSJ980818-13
<i>Stenella attenuata graffmani</i>	23° 06' N	106° 26' W	DSJ980818-01
<i>Stenella attenuata graffmani</i>	23° 06' N	106° 26' W	DSJ980818-02
<i>Stenella attenuata graffmani</i>	23° 06' N	106° 26' W	DSJ980818-03
<i>Stenella attenuata graffmani</i>	23° 06' N	106° 26' W	DSJ980818-04
<i>Stenella attenuata graffmani</i>	23° 06' N	106° 26' W	DSJ980818-05
<i>Stenella attenuata graffmani</i>	23° 06' N	106° 26' W	DSJ980818-06
<i>Stenella attenuata graffmani</i>	23° 06' N	106° 26' W	DSJ980818-07
<i>Stenella attenuata graffmani</i>	23° 13' N	110° 29' W	DSJ980805-01
<i>Stenella attenuata graffmani</i>	23° 13' N	110° 29' W	DSJ980805-02
<i>Stenella coeruleoalba</i>	01° 50' S	94° 07' W	DSJ981105-04
<i>Stenella coeruleoalba</i>	01° 50' S	94° 07' W	DSJ981105-05
<i>Stenella coeruleoalba</i>	21° 22' N	107° 19' W	DSJ980820-07
<i>Stenella coeruleoalba</i>	21° 22' N	107° 19' W	DSJ980820-08
<i>Stenella longirostris</i>	04° 02' N	77° 52' W	DSJ981114-10
<i>Stenella longirostris</i>	04° 02' N	77° 52' W	DSJ981114-11
<i>Stenella longirostris</i>	04° 02' N	77° 52' W	DSJ981114-12
<i>Stenella longirostris</i>	07° 08' N	80° 29' W	DSJ980913-01
<i>Stenella longirostris</i>	07° 08' N	80° 29' W	DSJ980913-02
<i>Stenella longirostris</i>	07° 08' N	80° 29' W	DSJ980913-03
<i>Stenella longirostris</i>	07° 08' N	80° 29' W	DSJ980913-04
<i>Stenella longirostris</i>	07° 08' N	80° 29' W	DSJ980913-05
<i>Stenella longirostris</i>	09° 39' N	85° 34' W	DSJ980903-01
<i>Stenella longirostris</i>	09° 39' N	85° 34' W	DSJ980903-02
<i>Stenella longirostris</i>	09° 39' N	85° 34' W	DSJ980903-03
<i>Stenella longirostris</i>	09° 39' N	85° 34' W	DSJ980903-04
<i>Stenella longirostris</i>	09° 39' N	85° 34' W	DSJ980903-05
<i>Stenella longirostris</i>	09° 39' N	85° 34' W	DSJ980903-06

Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Stenella longirostris</i>	12° 27' N	88° 55' W	DSJ980831-02
<i>Stenella longirostris</i>	21° 00' N	105° 44' W	DSJ980819-04
<i>Stenella longirostris</i>	21° 00' N	105° 44' W	DSJ980819-05
<i>Stenella longirostris</i>	21° 00' N	105° 44' W	DSJ980819-06
<i>Stenella longirostris</i>	21° 00' N	105° 44' W	DSJ980819-07
<i>Stenella longirostris</i>	21° 00' N	105° 44' W	DSJ980819-08
<i>Stenella longirostris</i>	22° 30' N	106° 29' W	DSJ980818-14
<i>Stenella longirostris</i>	22° 30' N	106° 29' W	DSJ980818-15
<i>Stenella longirostris</i>	22° 30' N	106° 29' W	DSJ980818-16
<i>Stenella longirostris</i>	22° 30' N	106° 29' W	DSJ980818-17
<i>Stenella longirostris</i>	22° 30' N	106° 29' W	DSJ980818-18
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-01
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-02
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-03
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-04
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-05
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-06
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-07
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-08
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-09
<i>Stenella longirostris centroamericana</i>	06° 23' N	77° 36' W	DSJ981115-10
<i>Stenella longirostris centroamericana</i>	07° 17' N	78° 16' W	DSJ981115-11
<i>Stenella longirostris centroamericana</i>	15° 52' N	94° 50' W	DSJ980826-01
<i>Stenella longirostris centroamericana</i>	15° 52' N	94° 50' W	DSJ980826-02
<i>Stenella longirostris centroamericana</i>	15° 52' N	94° 50' W	DSJ980826-03
<i>Stenella longirostris centroamericana</i>	15° 52' N	94° 50' W	DSJ980826-04
<i>Stenella longirostris centroamericana</i>	15° 52' N	94° 50' W	DSJ980826-05
<i>Stenella longirostris orientalis</i>	11° 38' N	91° 11' W	MAC980822-01
<i>Stenella longirostris orientalis</i>	11° 38' N	91° 11' W	MAC980822-02
<i>Stenella longirostris orientalis</i>	11° 58' N	87° 46' W	DSJ980901-02
<i>Stenella longirostris orientalis</i>	11° 58' N	87° 46' W	DSJ980901-03
<i>Stenella longirostris orientalis</i>	11° 58' N	87° 46' W	DSJ980901-04
<i>Stenella longirostris orientalis</i>	11° 58' N	87° 46' W	DSJ980901-05
<i>Stenella longirostris orientalis</i>	11° 58' N	87° 46' W	DSJ980901-06
<i>Stenella longirostris orientalis</i>	11° 58' N	87° 46' W	DSJ980901-07
<i>Stenella longirostris orientalis</i>	12° 17' N	91° 25' W	DSJ980828-03
<i>Stenella longirostris orientalis</i>	12° 17' N	91° 25' W	DSJ980828-04
<i>Stenella longirostris orientalis</i>	12° 17' N	91° 25' W	DSJ980828-05
<i>Stenella longirostris orientalis</i>	12° 17' N	91° 25' W	DSJ980828-06
<i>Stenella longirostris orientalis</i>	12° 17' N	91° 25' W	DSJ980828-07
<i>Stenella longirostris orientalis</i>	12° 17' N	91° 25' W	DSJ980828-08
<i>Stenella longirostris orientalis</i>	12° 22' N	93° 29' W	MAC980823-02
<i>Stenella longirostris orientalis</i>	12° 33' N	93° 53' W	MAC980823-03
<i>Stenella longirostris orientalis</i>	14° 34' N	98° 19' W	MAC980812-01
<i>Stenella longirostris orientalis</i>	15° 58' N	98° 04' W	DSJ980825-01
<i>Stenella longirostris orientalis</i>	15° 58' N	98° 04' W	DSJ980825-02
<i>Stenella longirostris orientalis</i>	15° 58' N	98° 04' W	DSJ980825-03
<i>Stenella longirostris orientalis</i>	15° 58' N	98° 04' W	DSJ980825-04
<i>Stenella longirostris orientalis</i>	15° 58' N	98° 04' W	DSJ980825-05
<i>Stenella longirostris orientalis</i>	16° 3' N	101° 57' W	MAC981005-01
<i>Stenella longirostris orientalis</i>	16° 3' N	101° 57' W	MAC981005-02
<i>Stenella longirostris orientalis</i>	16° 26' N	104° 09' W	DSJ981006-01
<i>Stenella longirostris orientalis</i>	16° 26' N	104° 09' W	DSJ981006-02
<i>Stenella longirostris orientalis</i>	16° 26' N	104° 09' W	DSJ981006-03
<i>Stenella longirostris orientalis</i>	16° 26' N	104° 09' W	DSJ981006-04
<i>Stenella longirostris orientalis</i>	16° 26' N	104° 09' W	DSJ981006-05
<i>Stenella longirostris orientalis</i>	16° 26' N	104° 09' W	DSJ981006-06
<i>Stenella longirostris orientalis</i>	16° 26' N	104° 09' W	DSJ981006-07
<i>Stenella longirostris orientalis</i>	16° 38' N	100° 38' W	DSJ981129-09
<i>Stenella longirostris orientalis</i>	16° 38' N	100° 38' W	DSJ981129-10
<i>Stenella longirostris orientalis</i>	16° 38' N	100° 38' W	DSJ981129-11
<i>Stenella longirostris orientalis</i>	16° 38' N	100° 38' W	DSJ981129-12
<i>Stenella longirostris orientalis</i>	16° 38' N	100° 38' W	DSJ981129-13

Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Stenella longirostris orientalis</i>	16° 42' N	100° 29' W	DSJ981129-04
<i>Stenella longirostris orientalis</i>	16° 42' N	100° 29' W	DSJ981129-05
<i>Stenella longirostris orientalis</i>	16° 45' N	100° 29' W	DSJ981129-01
<i>Stenella longirostris orientalis</i>	16° 45' N	100° 29' W	DSJ981129-02
<i>Stenella longirostris orientalis</i>	16° 45' N	100° 29' W	DSJ981129-03
<i>Stenella longirostris orientalis</i>	17° 29' N	102° 16' W	DSJ980823-09
<i>Stenella longirostris orientalis</i>	17° 36' N	102° 32' W	DSJ980823-06
<i>Stenella longirostris orientalis</i>	17° 36' N	102° 32' W	DSJ980823-07
<i>Stenella longirostris orientalis</i>	17° 36' N	102° 32' W	DSJ980823-08
<i>Stenella longirostris orientalis</i>	20° 45' N	106° 33' W	DSJ980821-01
<i>Stenella longirostris orientalis</i>	20° 45' N	106° 33' W	DSJ980821-02
<i>Stenella longirostris orientalis</i>	20° 45' N	106° 33' W	DSJ980821-03
<i>Stenella longirostris orientalis</i>	21° 22' N	107° 44' W	DSJ980820-09
<i>Stenella longirostris orientalis</i>	21° 22' N	107° 44' W	DSJ980820-10
<i>Stenella longirostris orientalis</i>	23° 16' N	107° 38' W	DSJ980813-11
<i>Stenella longirostris orientalis</i>	23° 16' N	107° 38' W	DSJ980813-12
<i>Stenella longirostris orientalis</i>	23° 16' N	107° 38' W	DSJ980813-13
<i>Stenella longirostris orientalis</i>	24° 07' N	108° 09' W	DSJ980806-02
<i>Stenella longirostris orientalis</i>	24° 07' N	108° 09' W	DSJ980806-03
<i>Stenella longirostris orientalis</i>	24° 07' N	108° 09' W	DSJ980806-04
<i>Stenella longirostris orientalis</i>	24° 07' N	108° 09' W	DSJ980806-05
<i>Stenella longirostris orientalis</i>	24° 07' N	108° 09' W	DSJ980806-06
<i>Steno bredanensis</i>	10° 30' N	86° 39' W	DSJ980902-04
<i>Steno bredanensis</i>	15° 32' N	97° 03' W	DSJ980825-13
<i>Steno bredanensis</i>	17° 55' N	103° 09' W	DSJ980823-04
<i>Steno or Tursiops</i>	14° 59' N	98° 20' W	DSJ981128-03
<i>Steno or Tursiops</i>	14° 59' N	98° 20' W	DSJ981128-04
<i>Tursiops truncatus</i>	10° 28' S	78° 47' W	END981122-05
<i>Tursiops truncatus</i>	02° 00' S	81° 18' W	DSJ981111-05
<i>Tursiops truncatus</i>	01° 00' S	90° 44' W	DSJ981107-10
<i>Tursiops truncatus</i>	01° 00' S	90° 44' W	DSJ981107-11
<i>Tursiops truncatus</i>	01° 00' S	90° 44' W	DSJ981107-12
<i>Tursiops truncatus</i>	01° 00' S	90° 44' W	DSJ981107-13
<i>Tursiops truncatus</i>	01° 00' S	90° 44' W	DSJ981107-14
<i>Tursiops truncatus</i>	00° 13' N	80° 30' W	DSJ981112-08
<i>Tursiops truncatus</i>	00° 13' N	80° 30' W	DSJ981112-09
<i>Tursiops truncatus</i>	00° 13' N	80° 30' W	DSJ981112-10
<i>Tursiops truncatus</i>	00° 13' N	80° 30' W	DSJ981112-11
<i>Tursiops truncatus</i>	00° 41' N	106° 29' W	DSJ981011-01
<i>Tursiops truncatus</i>	00° 41' N	106° 29' W	DSJ981011-02
<i>Tursiops truncatus</i>	00° 41' N	106° 29' W	DSJ981011-03
<i>Tursiops truncatus</i>	07° 00' N	81° 29' W	DSJ981123-01
<i>Tursiops truncatus</i>	07° 00' N	81° 29' W	DSJ981123-02
<i>Tursiops truncatus</i>	07° 00' N	81° 29' W	DSJ981123-03
<i>Tursiops truncatus</i>	07° 00' N	81° 29' W	DSJ981123-04
<i>Tursiops truncatus</i>	07° 00' N	81° 29' W	DSJ981123-05
<i>Tursiops truncatus</i>	07° 10' N	81° 04' W	DSJ980906-01
<i>Tursiops truncatus</i>	07° 10' N	81° 04' W	DSJ980906-02
<i>Tursiops truncatus</i>	07° 10' N	81° 04' W	DSJ980906-03
<i>Tursiops truncatus</i>	07° 12' N	82° 03' W	DSJ980905-07
<i>Tursiops truncatus</i>	07° 16' N	84° 45' W	DSJ980914-01
<i>Tursiops truncatus</i>	07° 16' N	84° 45' W	DSJ980914-02
<i>Tursiops truncatus</i>	07° 16' N	84° 45' W	DSJ980914-03
<i>Tursiops truncatus</i>	08° 16' N	86° 09' W	DSJ981124-03
<i>Tursiops truncatus</i>	08° 40' N	84° 05' W	DSJ980904-01
<i>Tursiops truncatus</i>	08° 52' N	88° 28' W	DSJ981125-02
<i>Tursiops truncatus</i>	08° 52' N	88° 28' W	DSJ981125-03
<i>Tursiops truncatus</i>	08° 55' N	88° 41' W	DSJ981125-06
<i>Tursiops truncatus</i>	08° 56' N	88° 21' W	DSJ981125-01
<i>Tursiops truncatus</i>	10° 12' N	90° 29' W	END981021-01
<i>Tursiops truncatus</i>	10° 16' N	89° 17' W	END981022-01
<i>Tursiops truncatus</i>	10° 16' N	89° 17' W	END981022-02
<i>Tursiops truncatus</i>	10° 16' N	89° 17' W	END981022-03

Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Tursiops truncatus</i>	10° 17' N	109° 12' W	DSJ980923-01
<i>Tursiops truncatus</i>	10° 17' N	109° 12' W	DSJ980923-02
<i>Tursiops truncatus</i>	10° 19' N	109° 11' W	MAC980930-01
<i>Tursiops truncatus</i>	10° 19' N	109° 11' W	MAC980930-02
<i>Tursiops truncatus</i>	10° 19' N	109° 11' W	MAC980930-03
<i>Tursiops truncatus</i>	10° 19' N	109° 11' W	MAC980930-04
<i>Tursiops truncatus</i>	10° 19' N	109° 11' W	MAC980930-05
<i>Tursiops truncatus</i>	10° 19' N	109° 11' W	MAC980930-06
<i>Tursiops truncatus</i>	10° 19' N	109° 11' W	MAC980930-07
<i>Tursiops truncatus</i>	11° 22' N	90° 14' W	DSJ980829-01
<i>Tursiops truncatus</i>	11° 22' N	90° 14' W	DSJ980829-02
<i>Tursiops truncatus</i>	11° 22' N	90° 14' W	DSJ980829-03
<i>Tursiops truncatus</i>	11° 58' N	118° 23' W	MAC981119-03
<i>Tursiops truncatus</i>	11° 58' N	118° 23' W	MAC981119-04
<i>Tursiops truncatus</i>	11° 58' N	118° 23' W	MAC981119-05
<i>Tursiops truncatus</i>	12° 14' N	117° 19' W	MAC981119-01
<i>Tursiops truncatus</i>	12° 14' N	117° 19' W	MAC981119-02
<i>Tursiops truncatus</i>	12° 20' N	91° 23' W	DSJ980828-02
<i>Tursiops truncatus</i>	12° 24' N	91° 28' W	DSJ980828-01
<i>Tursiops truncatus</i>	12° 25' N	102° 15' W	MAC980810-01
<i>Tursiops truncatus</i>	12° 27' N	88° 55' W	DSJ980831-01
<i>Tursiops truncatus</i>	13° 15' N	90° 39' W	MAC980821-01
<i>Tursiops truncatus</i>	13° 15' N	90° 39' W	MAC980821-02
<i>Tursiops truncatus</i>	13° 36' N	90° 37' W	DSJ980830-01
<i>Tursiops truncatus</i>	14° 59' N	98° 20' W	DSJ981128-01
<i>Tursiops truncatus</i>	14° 59' N	98° 20' W	DSJ981128-02
<i>Tursiops truncatus</i>	15° 48' N	97° 32' W	DSJ980825-08
<i>Tursiops truncatus</i>	15° 48' N	97° 32' W	DSJ980825-09
<i>Tursiops truncatus</i>	15° 48' N	97° 32' W	DSJ980825-10
<i>Tursiops truncatus</i>	15° 48' N	97° 32' W	DSJ980825-11
<i>Tursiops truncatus</i>	15° 48' N	97° 32' W	DSJ980825-12
<i>Tursiops truncatus</i>	15° 57' N	106° 44' W	MAC981013-01
<i>Tursiops truncatus</i>	16° 33' N	100° 55' W	DSJ981129-15
<i>Tursiops truncatus</i>	16° 33' N	100° 55' W	DSJ981129-16
<i>Tursiops truncatus</i>	16° 33' N	100° 55' W	DSJ981129-17
<i>Tursiops truncatus</i>	16° 33' N	100° 55' W	DSJ981129-18
<i>Tursiops truncatus</i>	16° 33' N	100° 55' W	DSJ981129-19
<i>Tursiops truncatus</i>	16° 33' N	100° 55' W	DSJ981129-20
<i>Tursiops truncatus</i>	17° 26' N	101° 59' W	DSJ980823-10
<i>Tursiops truncatus</i>	17° 26' N	101° 59' W	DSJ980823-11
<i>Tursiops truncatus</i>	17° 26' N	101° 59' W	DSJ980823-12
<i>Tursiops truncatus</i>	17° 57' N	103° 21' W	DSJ980823-01
<i>Tursiops truncatus</i>	17° 57' N	103° 21' W	DSJ980823-02
<i>Tursiops truncatus</i>	17° 57' N	103° 21' W	DSJ980823-03
<i>Tursiops truncatus</i>	18° 19' N	105° 01' W	DSJ980930-04
<i>Tursiops truncatus</i>	19° 24' N	110° 55' W	DSJ981203-01
<i>Tursiops truncatus</i>	19° 24' N	110° 55' W	DSJ981203-02
<i>Tursiops truncatus</i>	19° 24' N	110° 55' W	DSJ981203-03
<i>Tursiops truncatus</i>	19° 24' N	110° 55' W	DSJ981203-04
<i>Tursiops truncatus</i>	19° 24' N	110° 55' W	DSJ981203-05
<i>Tursiops truncatus</i>	20° 13' N	106° 01' W	DSJ980821-04
<i>Tursiops truncatus</i>	20° 13' N	106° 01' W	DSJ980821-05
<i>Tursiops truncatus</i>	20° 13' N	106° 01' W	DSJ980821-06
<i>Tursiops truncatus</i>	20° 13' N	106° 01' W	DSJ980821-07
<i>Tursiops truncatus</i>	20° 13' N	106° 01' W	DSJ980821-08
<i>Tursiops truncatus</i>	20° 18' N	112° 11' W	MAC981104-01
<i>Tursiops truncatus</i>	20° 18' N	112° 11' W	MAC981104-02
<i>Tursiops truncatus</i>	20° 18' N	112° 11' W	MAC981104-03
<i>Tursiops truncatus</i>	20° 18' N	112° 11' W	MAC981104-04
<i>Tursiops truncatus</i>	20° 18' N	112° 11' W	MAC981104-05
<i>Tursiops truncatus</i>	20° 18' N	112° 11' W	MAC981104-06
<i>Tursiops truncatus</i>	22° 27' N	106° 29' W	DSJ980818-19
<i>Tursiops truncatus</i>	22° 27' N	106° 29' W	DSJ980818-20

Table 11. (continued)

SPECIES / STOCK	LAT	LONG	FIELD ID
<i>Tursiops truncatus</i>	22° 42' N	109° 30' W	DSJ980805-03
<i>Tursiops truncatus</i>	22° 42' N	109° 30' W	DSJ980805-04
<i>Tursiops truncatus</i>	22° 42' N	109° 30' W	DSJ980805-05
<i>Tursiops truncatus</i>	22° 42' N	109° 30' W	DSJ980805-06
<i>Tursiops truncatus</i>	22° 53' N	106° 27' W	DSJ980818-08
<i>Tursiops truncatus</i>	23° 44' N	107° 43' W	DSJ980813-01
<i>Tursiops truncatus</i>	23° 44' N	107° 43' W	DSJ980813-02
<i>Tursiops truncatus</i>	23° 44' N	107° 43' W	DSJ980813-03
<i>Tursiops truncatus</i>	23° 44' N	107° 43' W	DSJ980813-04
<i>Tursiops truncatus</i>	23° 44' N	107° 43' W	DSJ980813-05
<i>Tursiops truncatus</i>	23° 59' N	112° 03' W	DSJ980804-11
<i>Tursiops truncatus</i>	24° 03' N	111° 36' W	DSJ980804-12
<i>Tursiops truncatus</i>	24° 16' N	112° 13' W	DSJ980804-05
<i>Tursiops truncatus</i>	24° 16' N	112° 13' W	DSJ980804-06
<i>Tursiops truncatus</i>	24° 17' N	107° 56' W	DSJ980806-08
<i>Tursiops truncatus</i>	24° 17' N	107° 56' W	DSJ980806-09
<i>Tursiops truncatus</i>	24° 30' N	108° 39' W	DSJ980806-10
<i>Tursiops truncatus</i>	26° 20' N	111° 15' W	DSJ980809-01
<i>Tursiops truncatus</i>	26° 27' N	114° 00' W	DSJ980802-01
<i>Tursiops truncatus</i>	26° 27' N	114° 00' W	DSJ980802-02
<i>Tursiops truncatus</i>	26° 34' N	111° 26' W	DSJ980809-05
<i>Tursiops truncatus</i>	26° 59' N	110° 51' W	DSJ980810-03
<i>Tursiops truncatus</i>	26° 59' N	110° 51' W	DSJ980810-04
<i>Tursiops truncatus</i>	26° 59' N	110° 51' W	DSJ980810-05
<i>Tursiops truncatus</i>	27° 08' N	110° 49' W	DSJ980810-01
<i>Tursiops truncatus</i>	27° 08' N	110° 49' W	DSJ980810-02

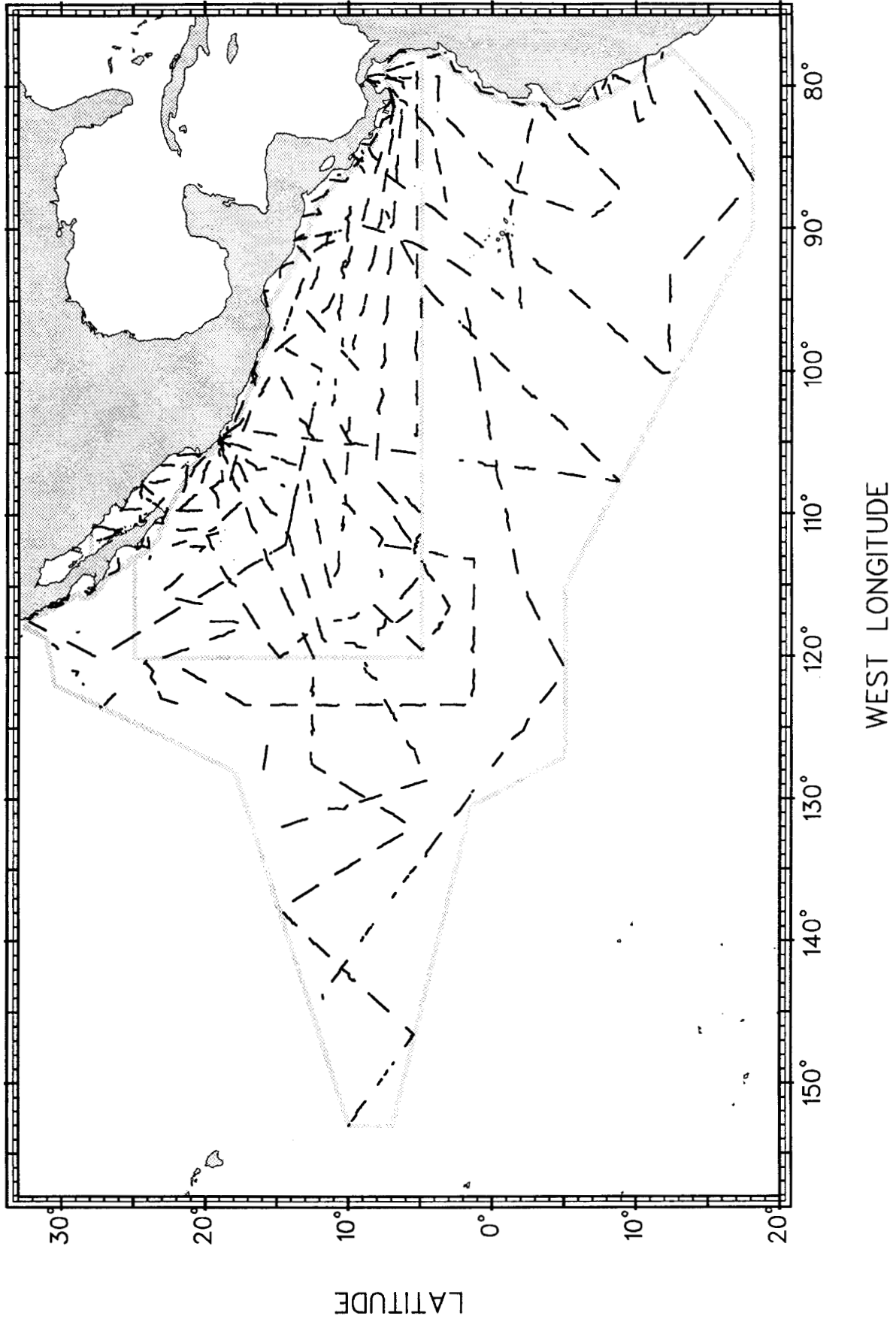


Figure 1. SPAM98 survey tracklines and sampling strata boundaries, all ships combined.

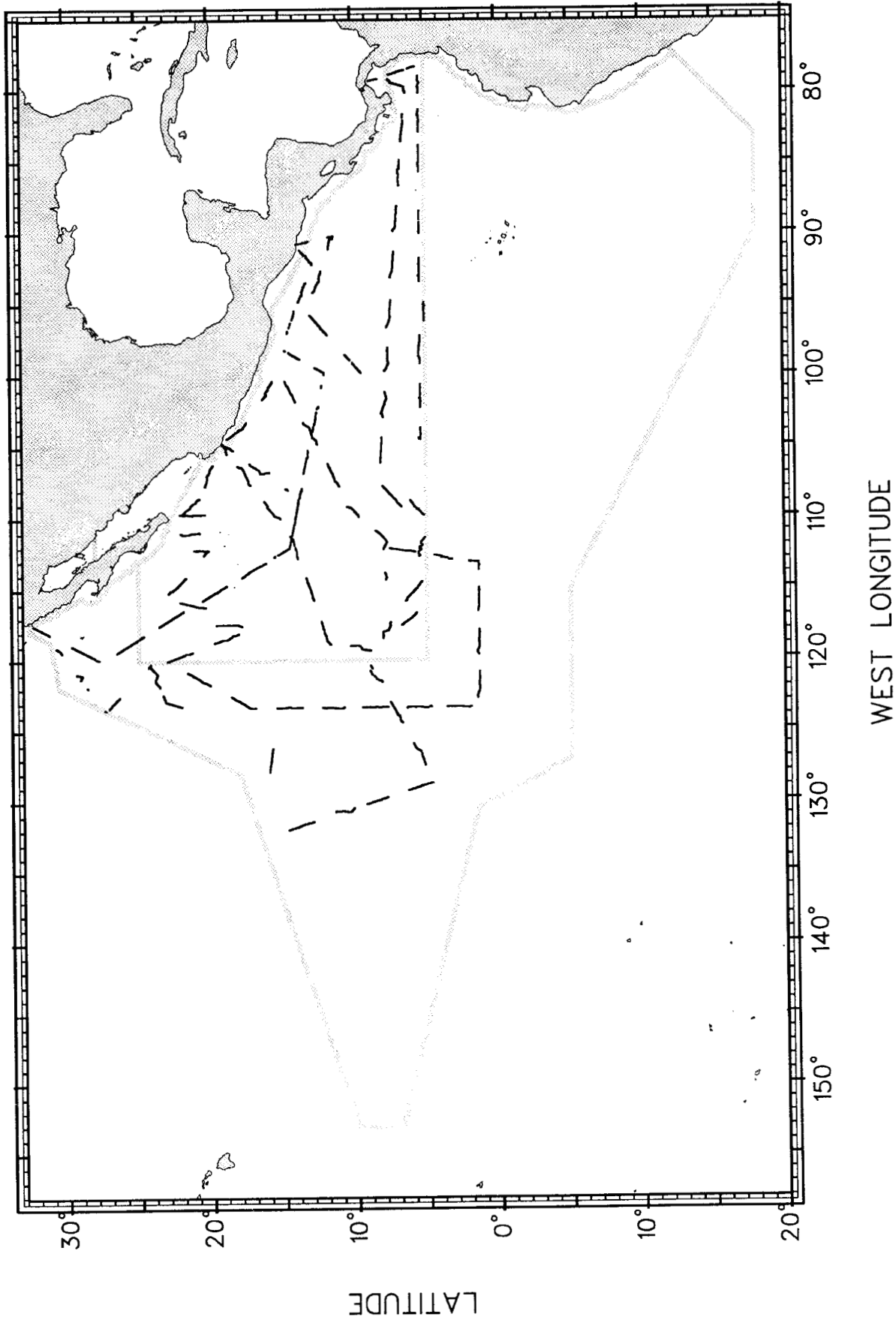


Figure 2. SPAM98 tracklines for *McArthur*.



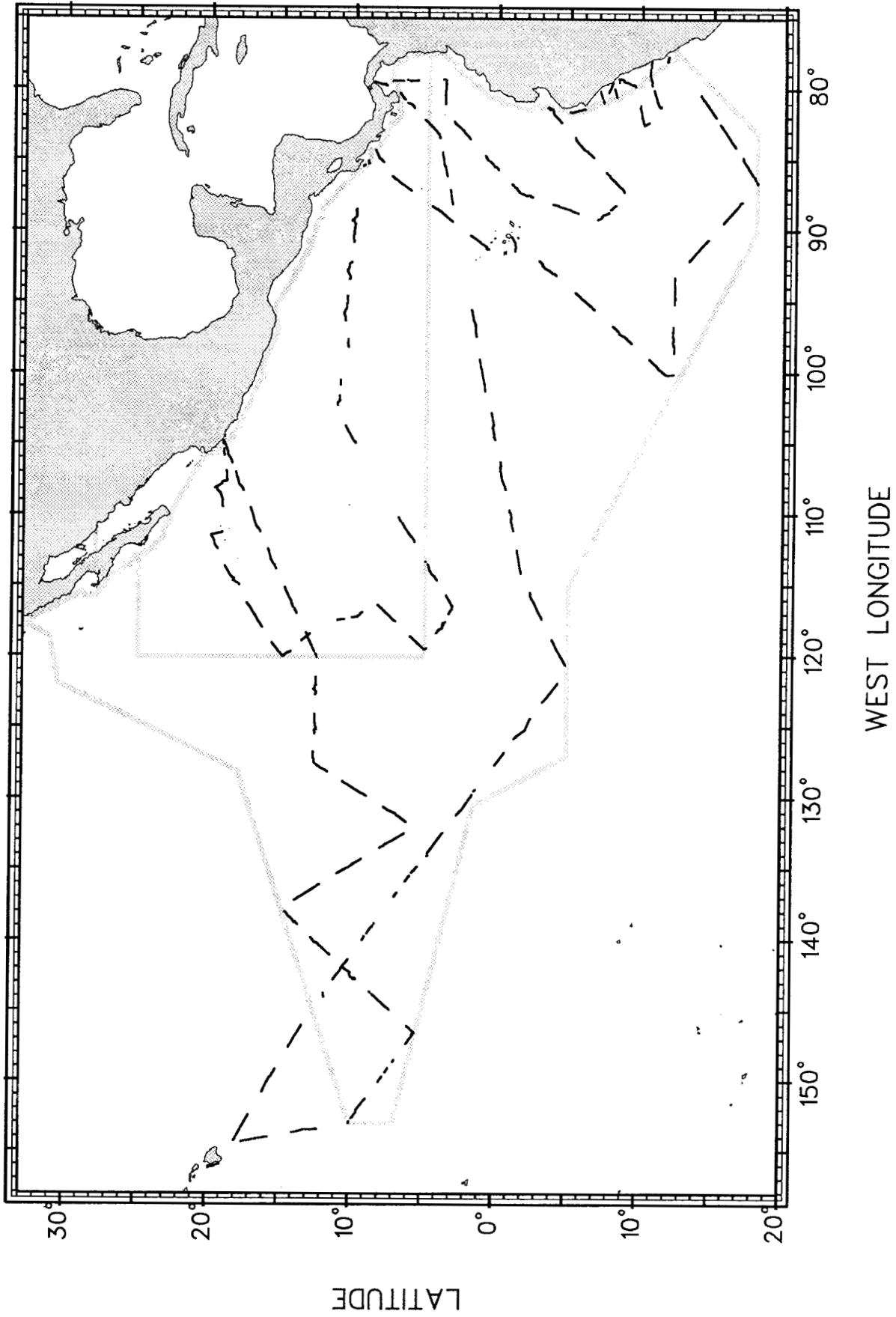


Figure 3. SPAM98 tracklines for *Endeavor*.

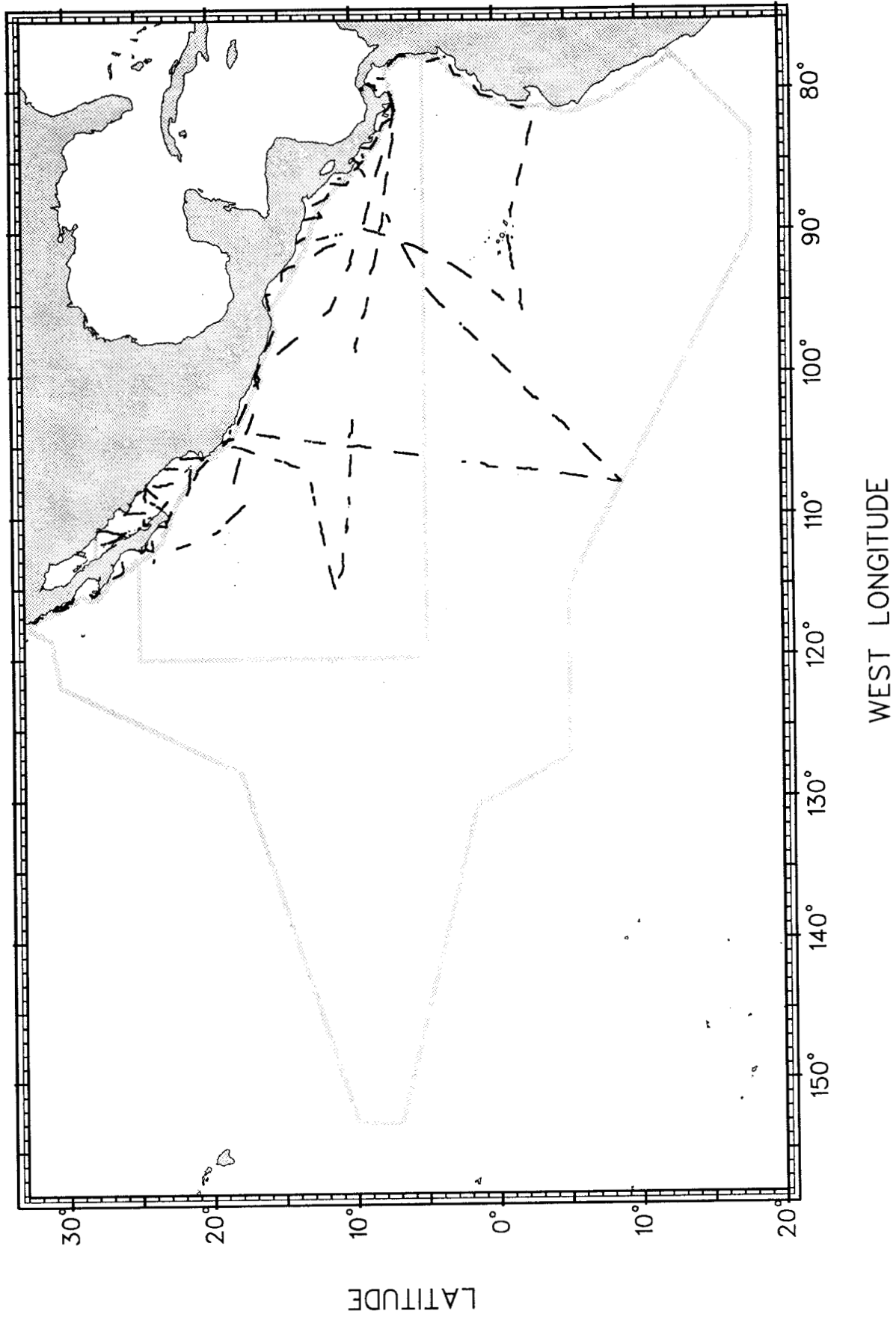


Figure 4. SPAM98 tracklines for *David Starr Jordan*.

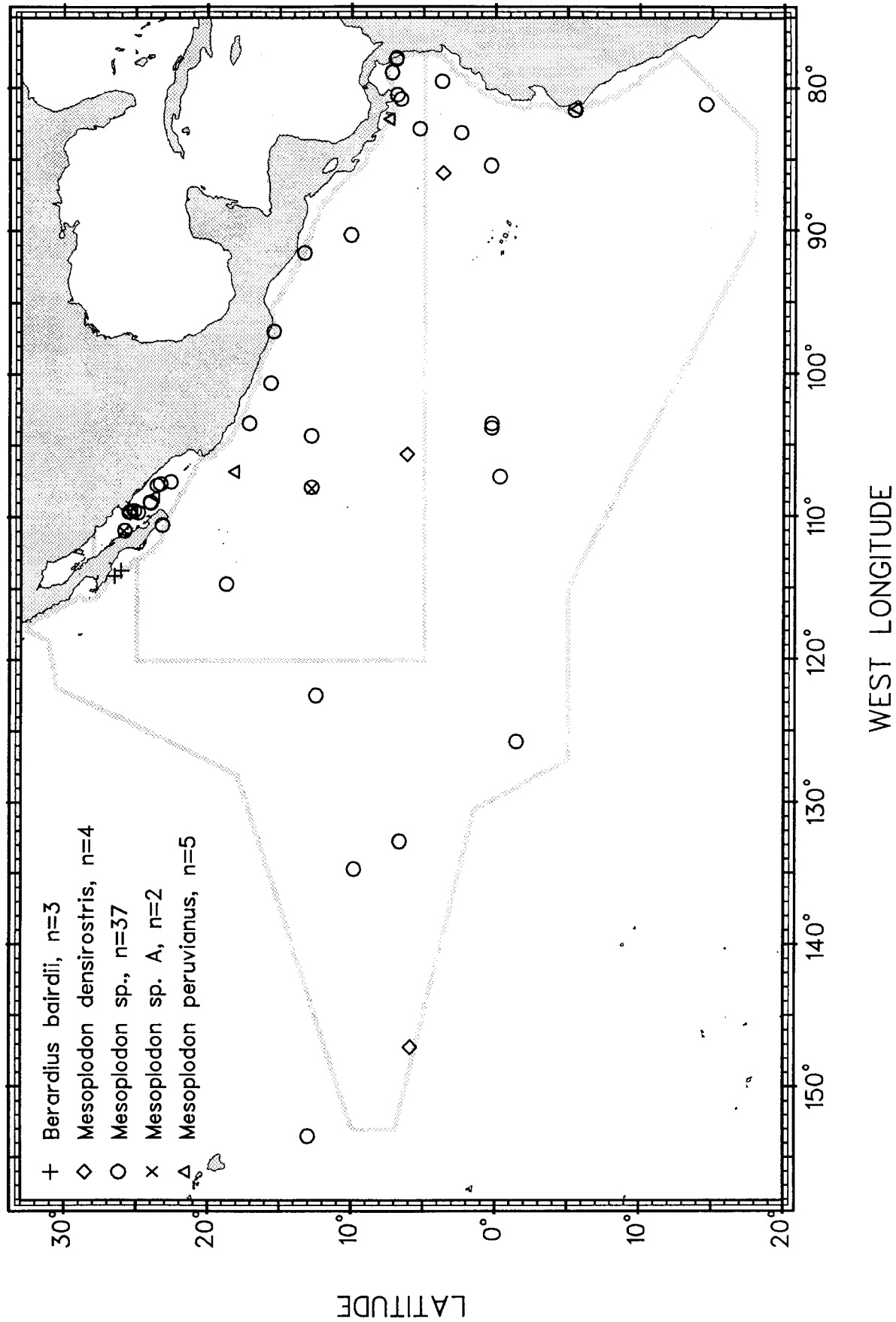


Figure 5. SPAM98 Baird's and *Mesoplodon* spp. beaked whale sightings.

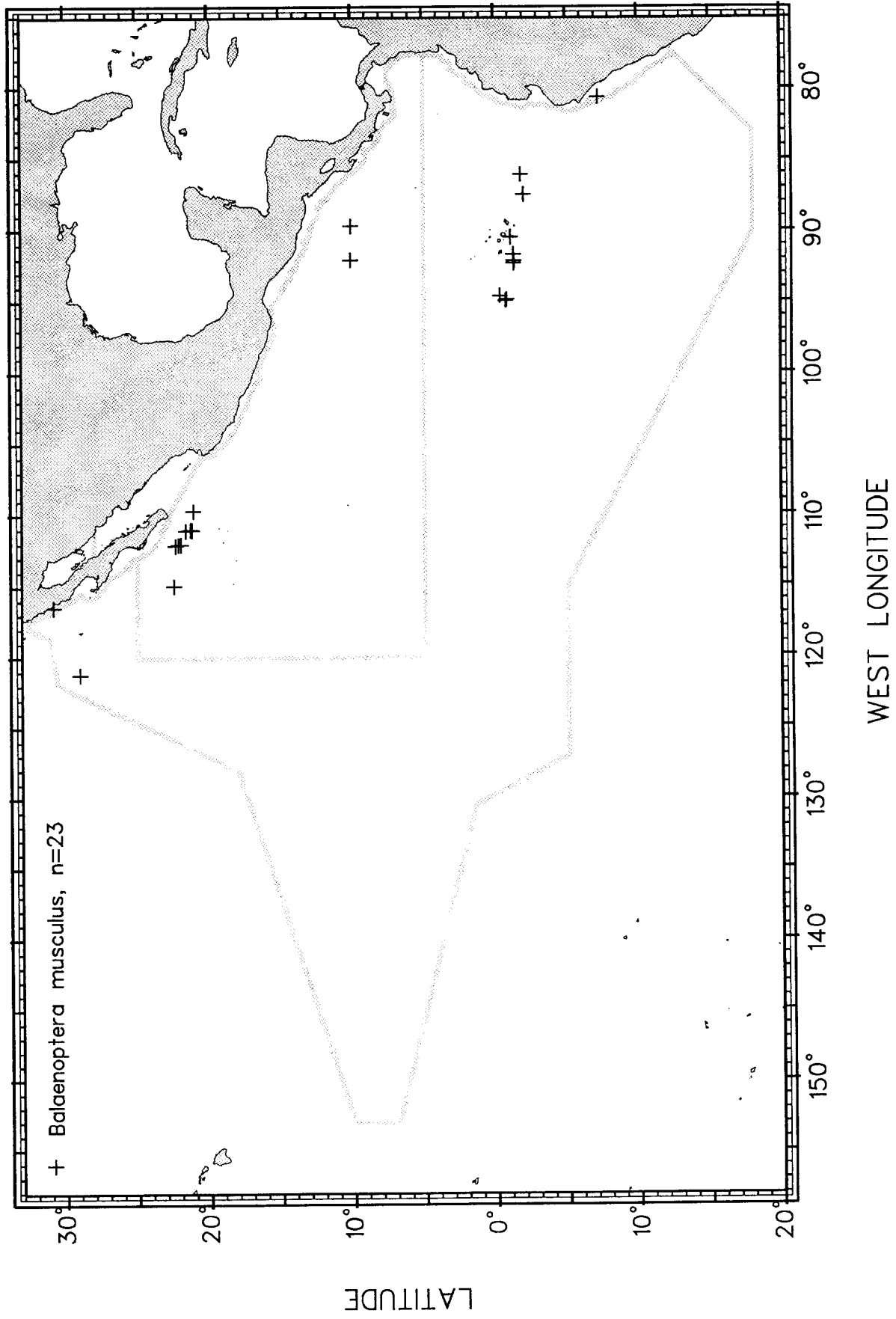


Figure 6. SPAM98 blue whale sightings.

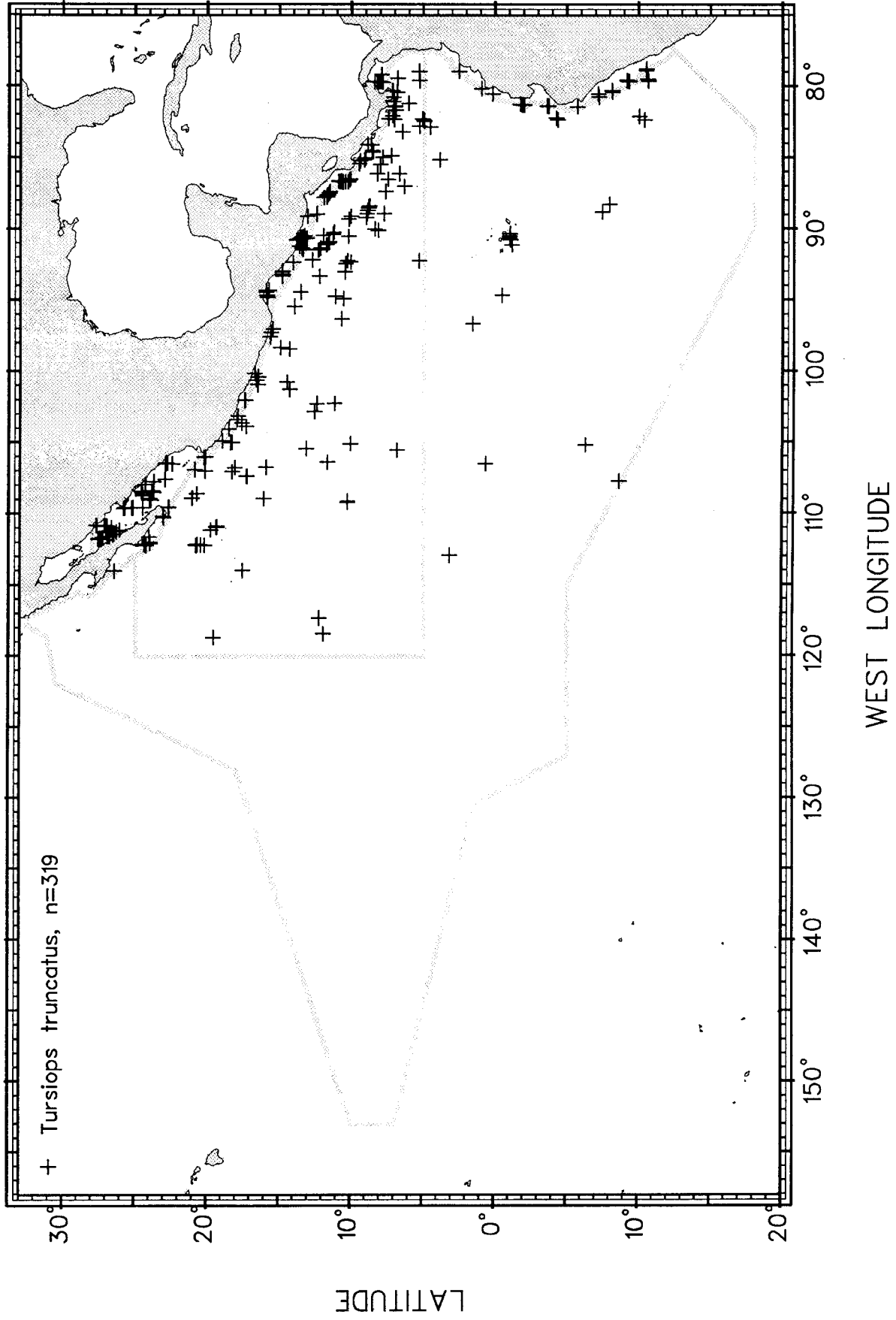


Figure 7. SPAM98 bottlenose sightings

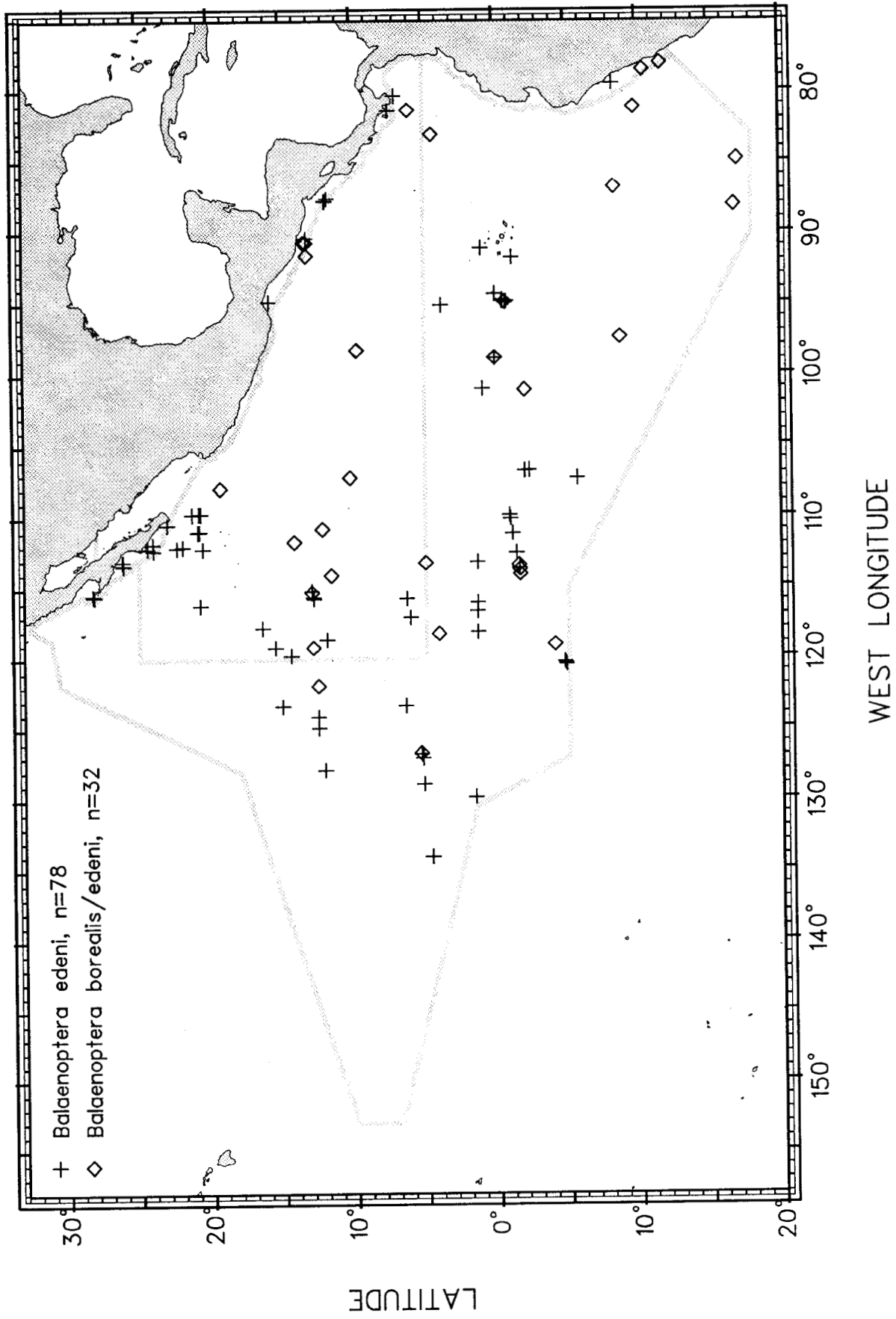


Figure 8. SPAM98 bryde's/sei whale sightings.

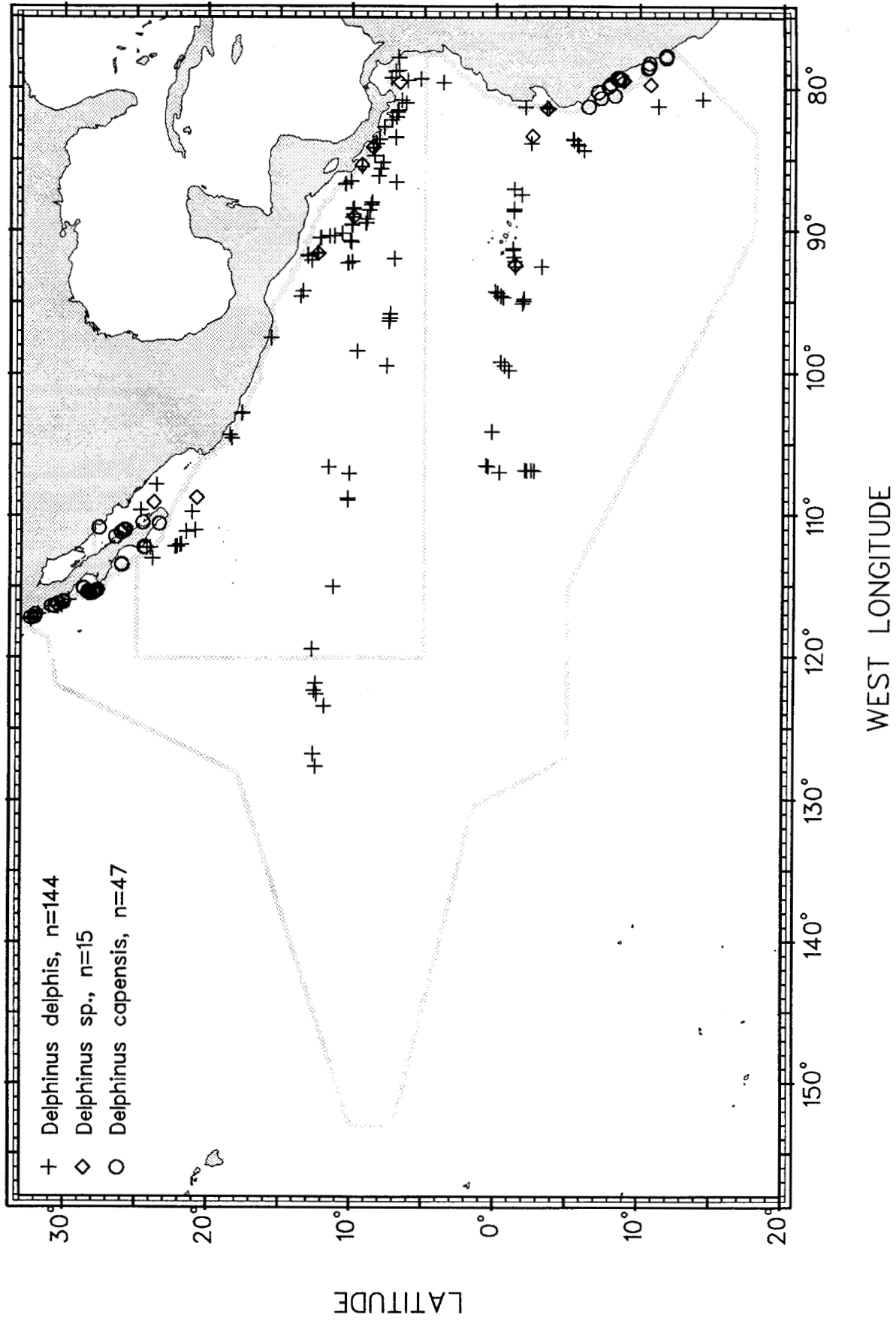


Figure 9. SPAM98 common (short- and long-beaked) dolphin sightings.

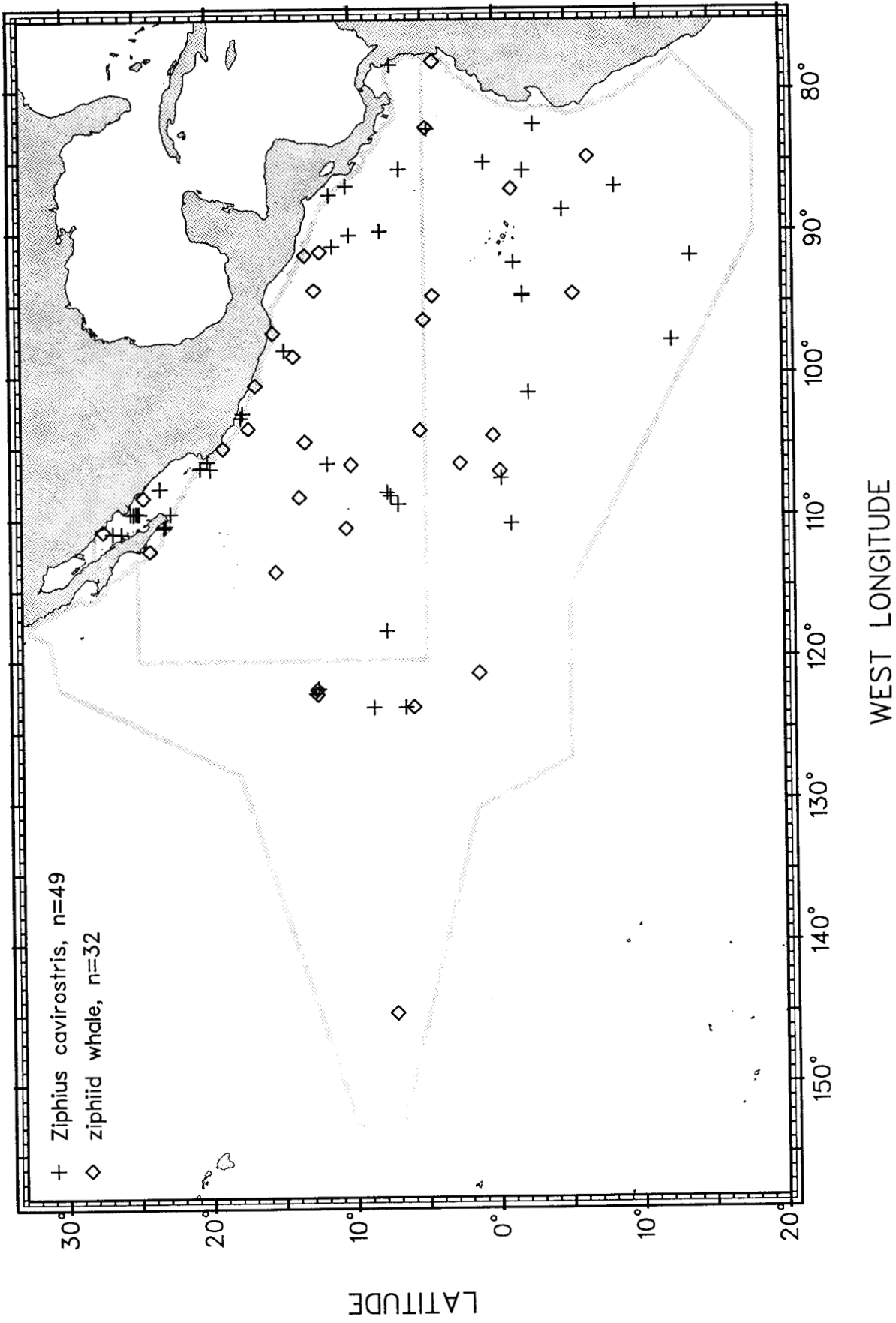


Figure 10. SPAM98 Cuvier's and unidentified beaked whale sightings.



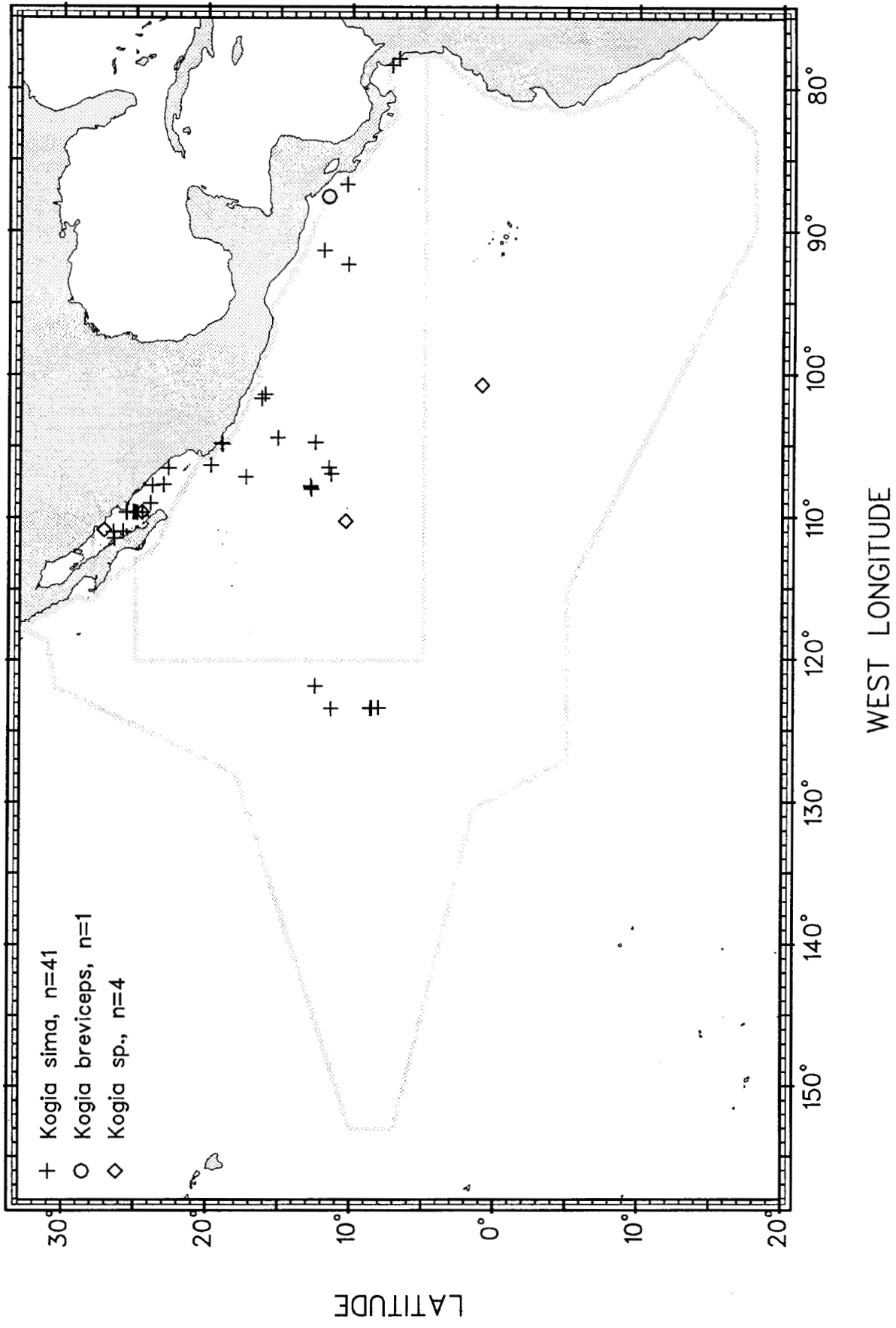


Figure 11. SPAM98 dwarf and pygmy sperm whale sightings.

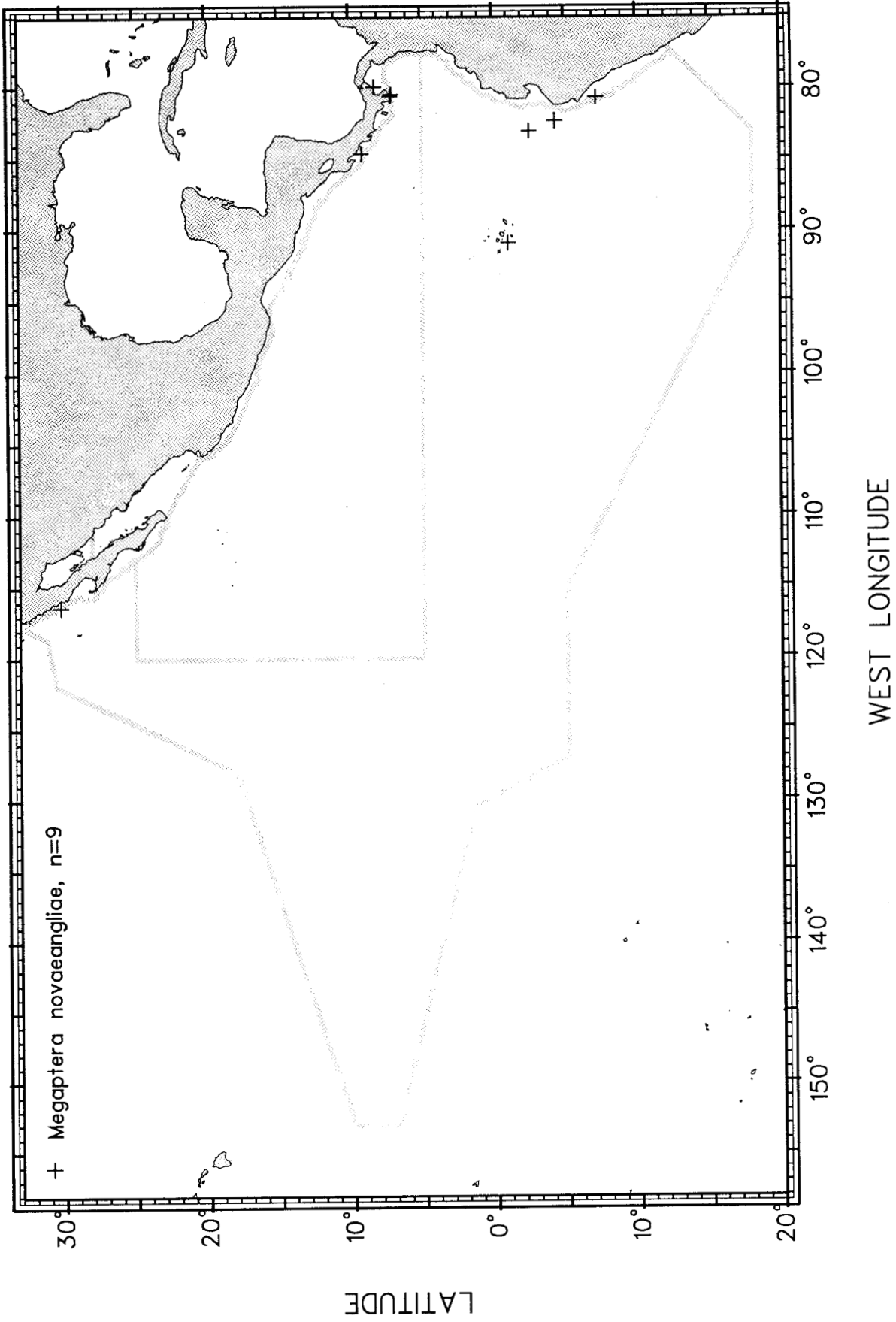


Figure 12. SPAM98 humpback whale sightings.

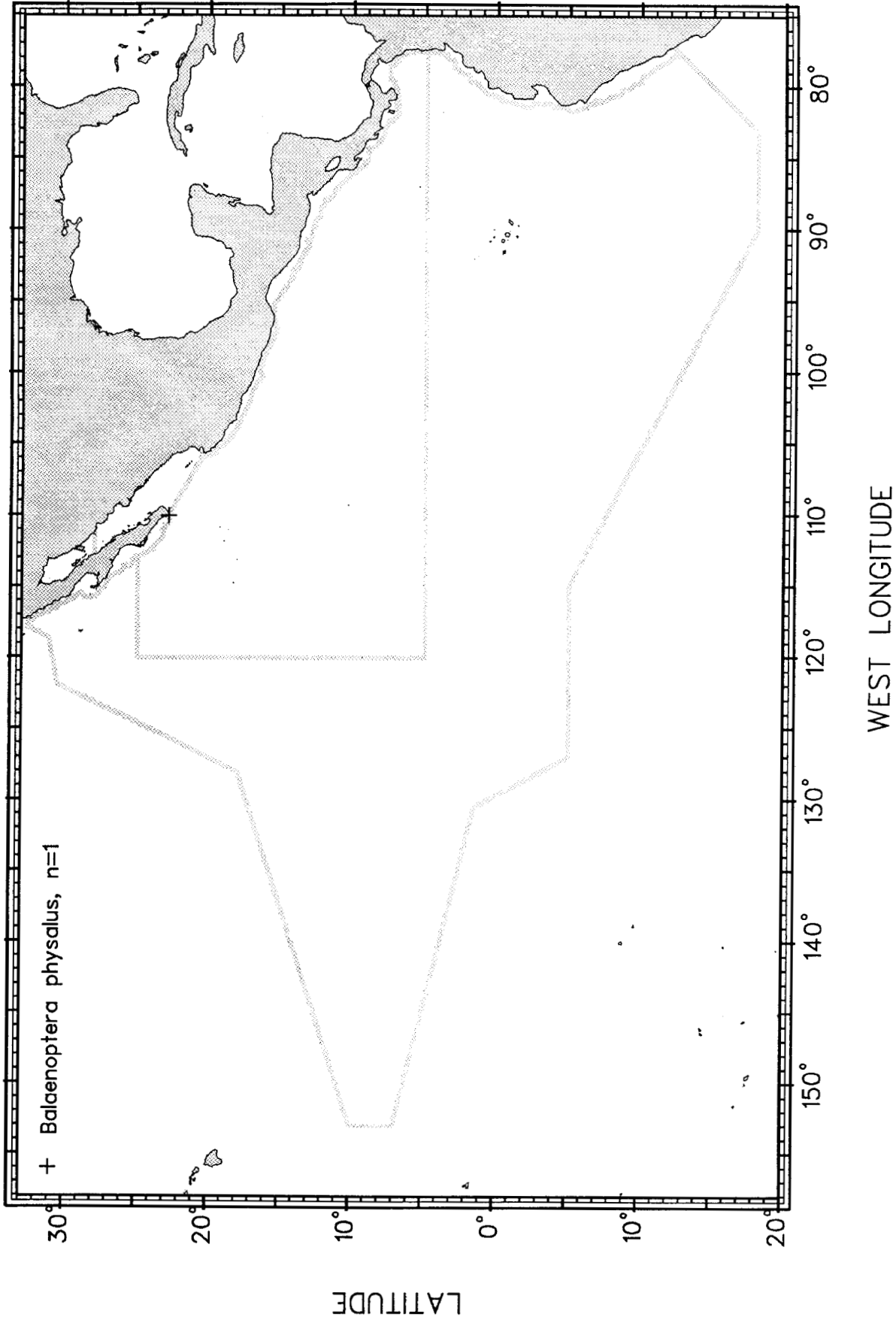


Figure 13. SPAM98 fin whale sightings.

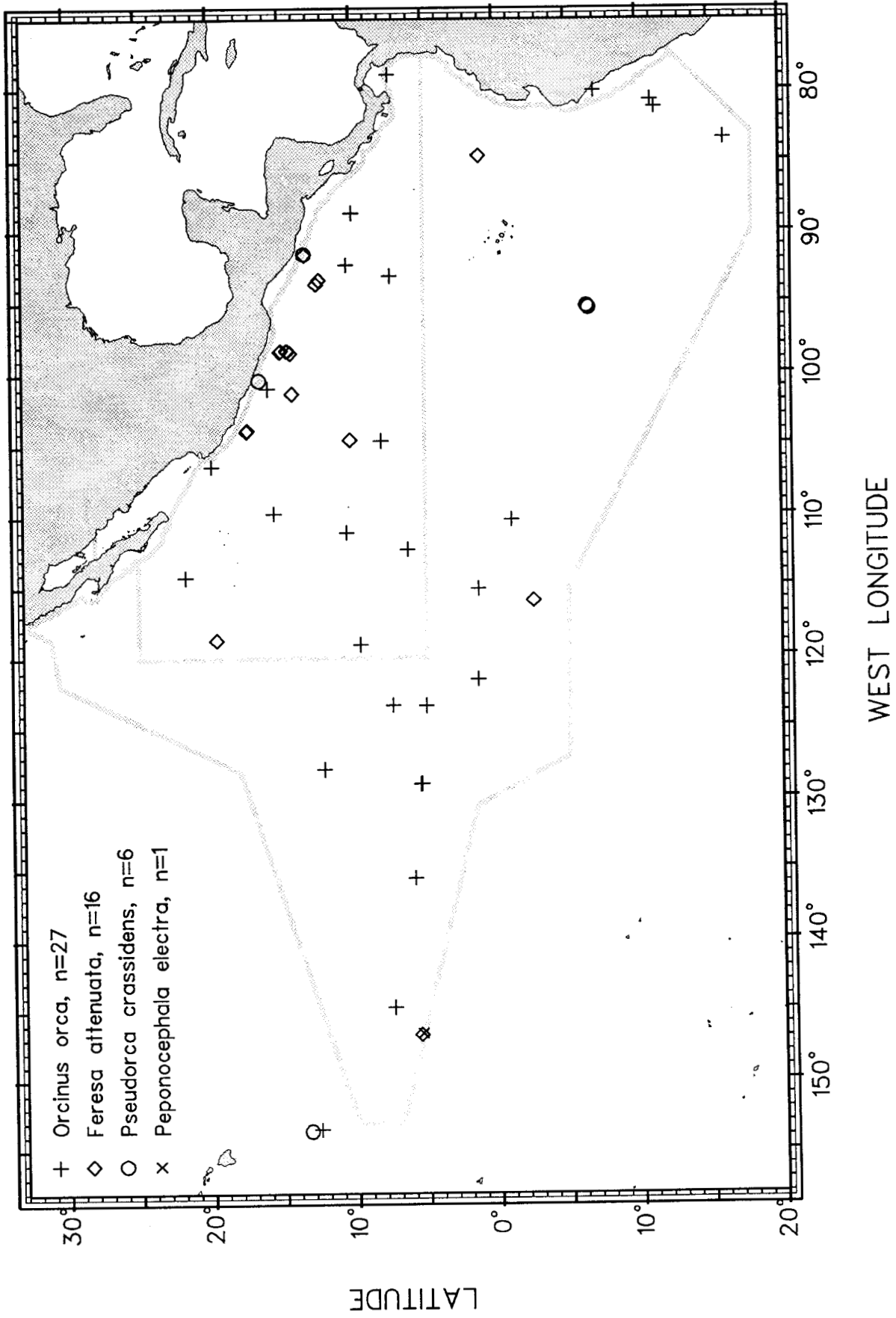


Figure 14. SPAM98 killer, pygmy killer, false killer and melon-headed whale sightings.

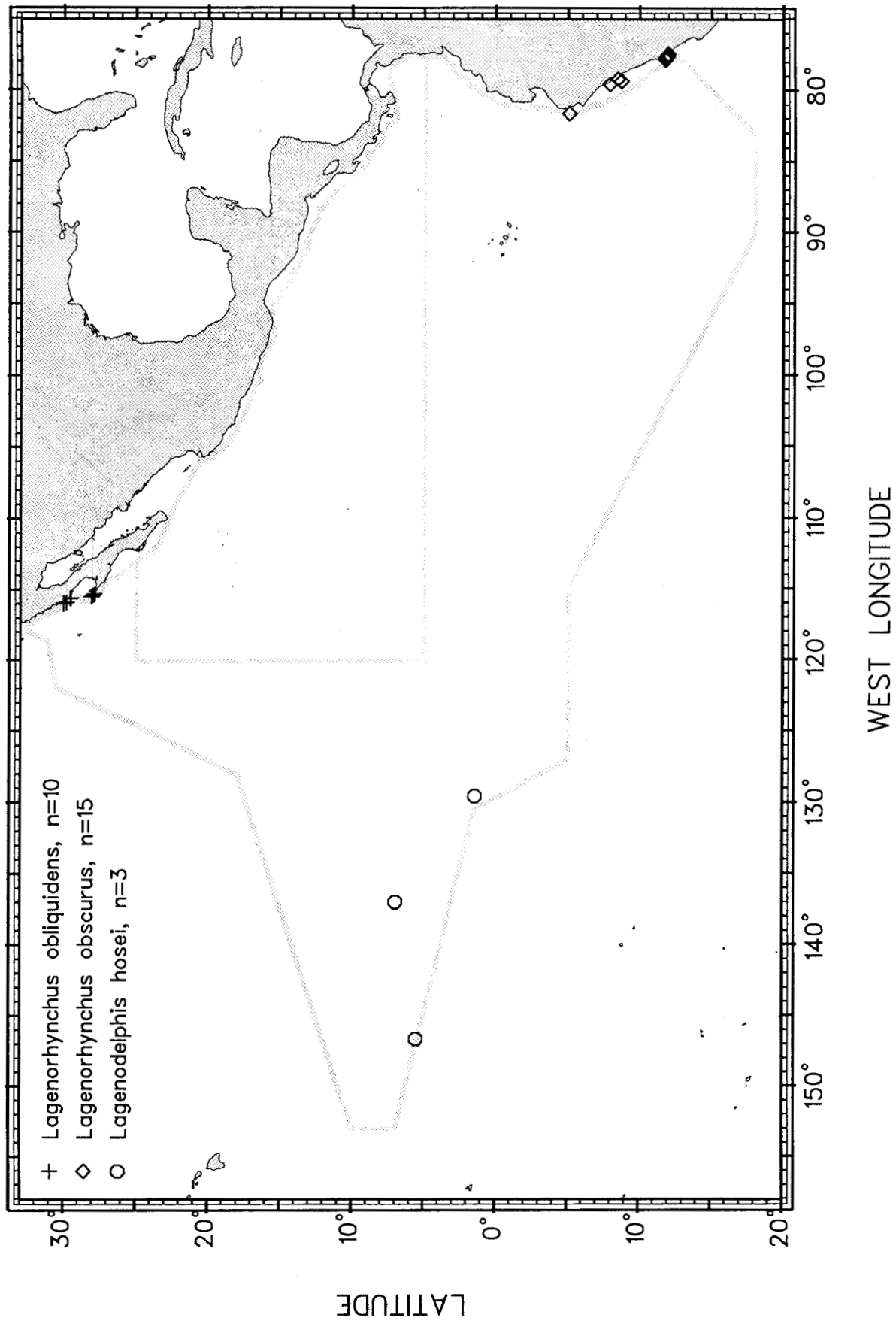


Figure 15. SPAM98 Pacific white-sided, dusky, and Fraser's dolphin sightings.

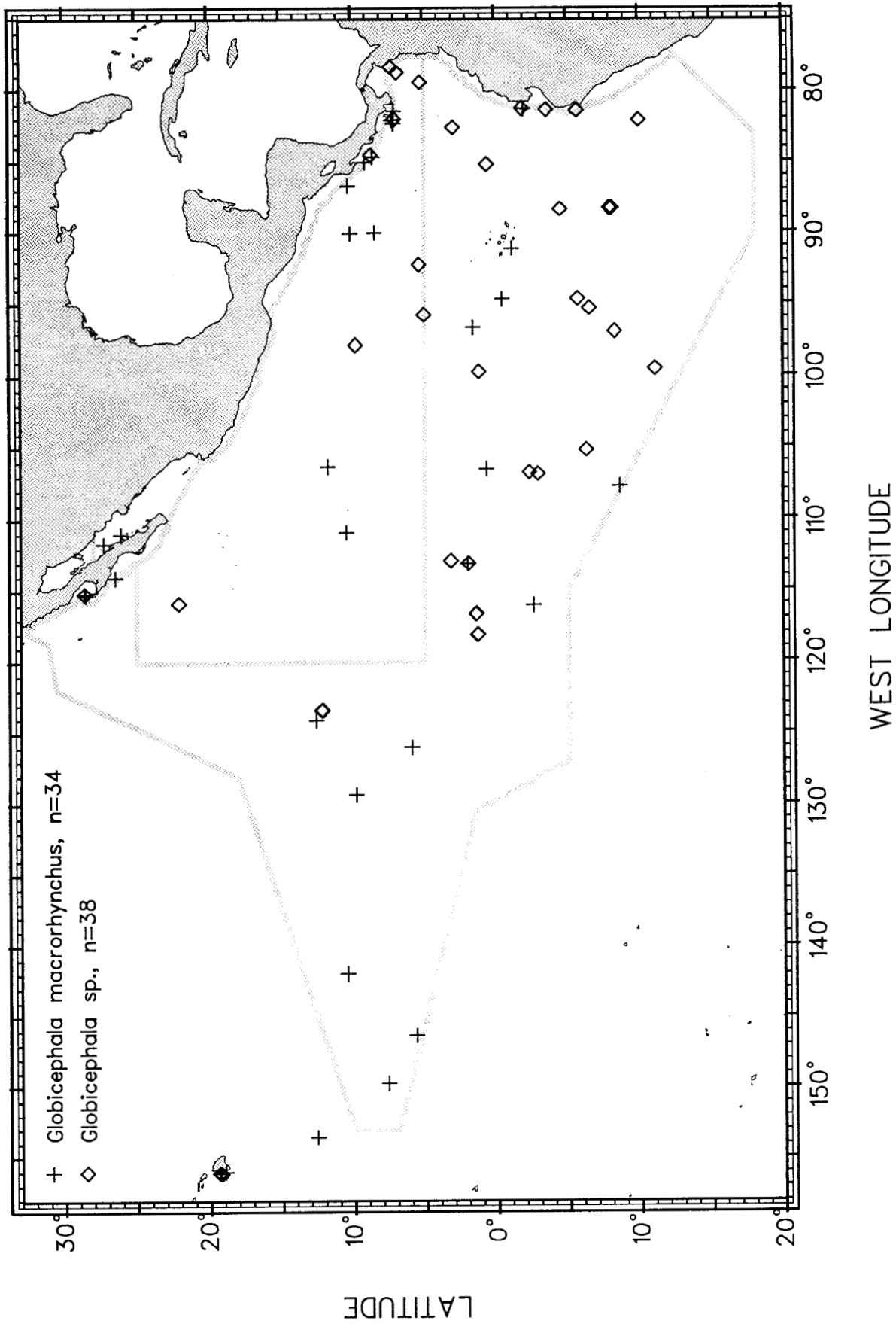


Figure 16. SPAM98 pilot whale sightings.

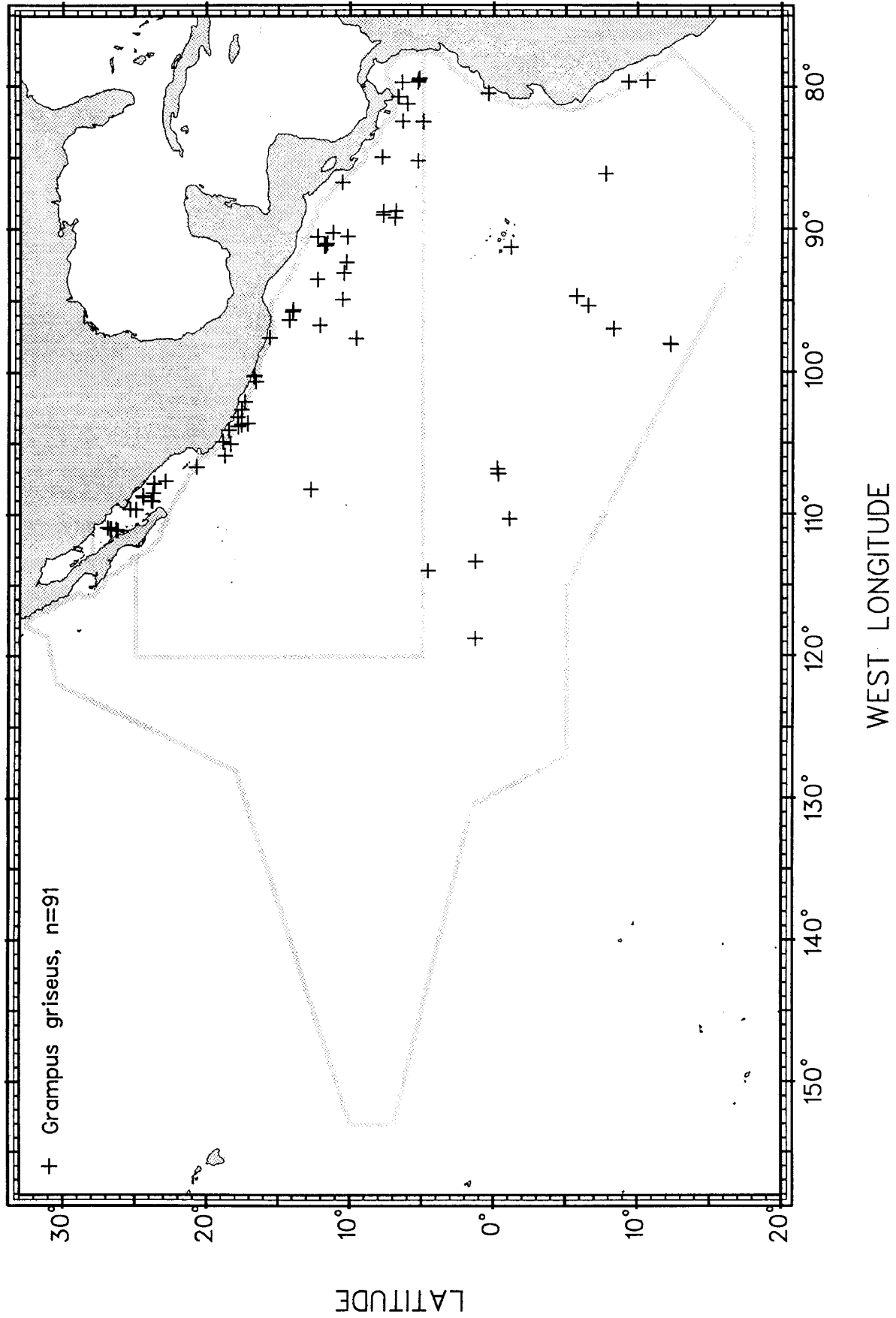


Figure 17. SPAM98 Risso's dolphin sightings.

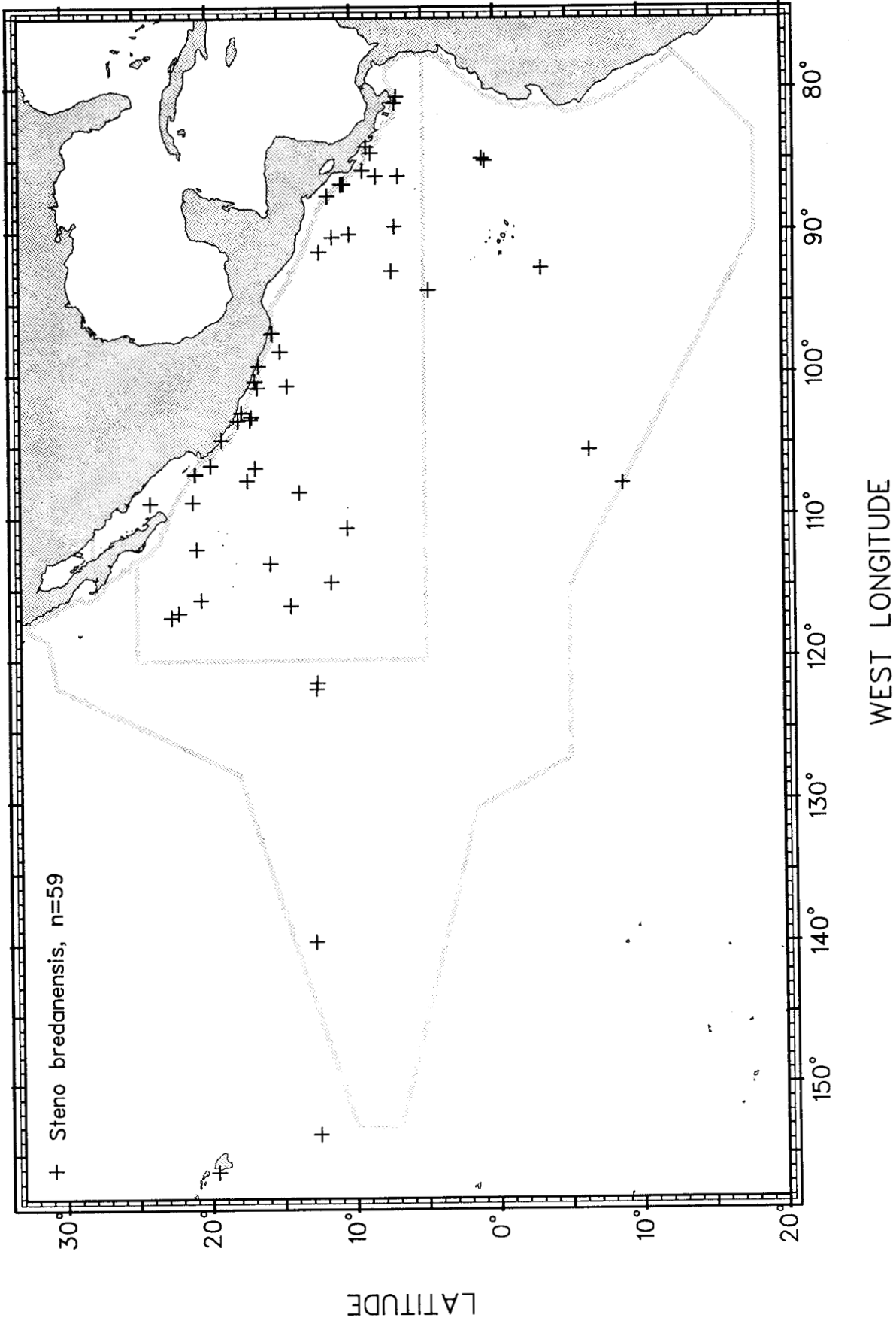


Figure 18. SPAM98 rough-toothed dolphin sightings.



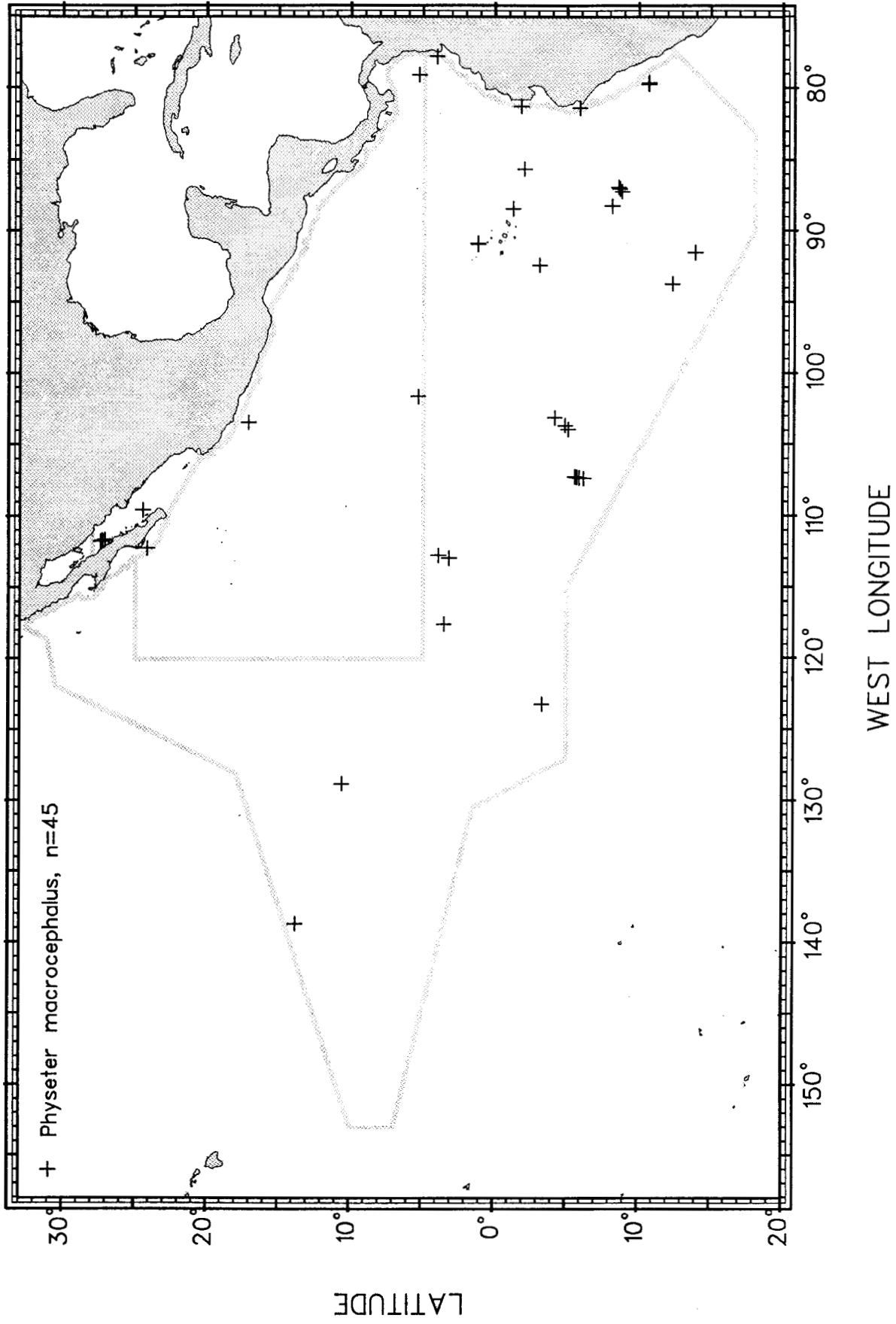


Figure 19. SPAM98 sperm whale sightings.

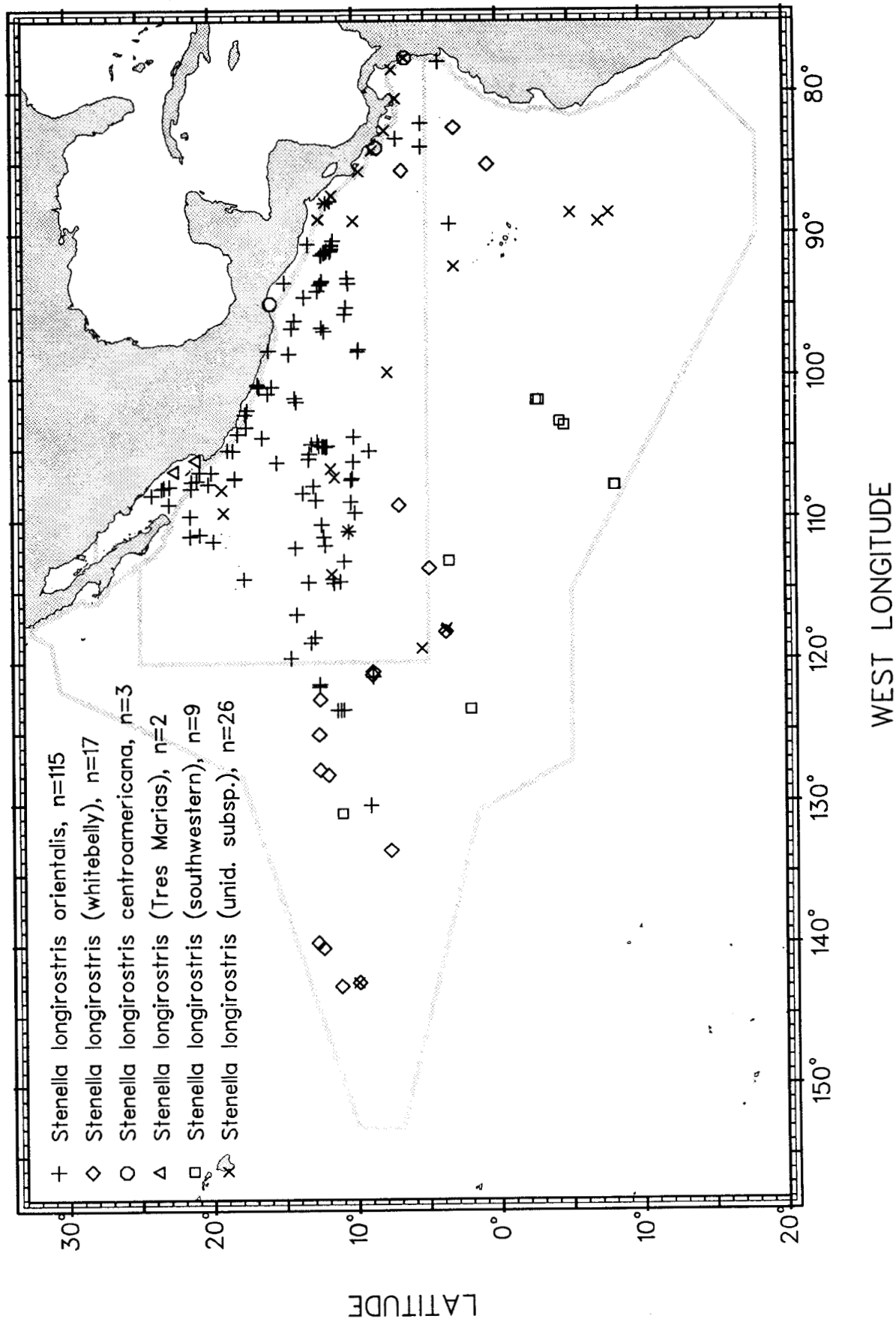


Figure 20. SPAM98 spinner dolphin sightings.

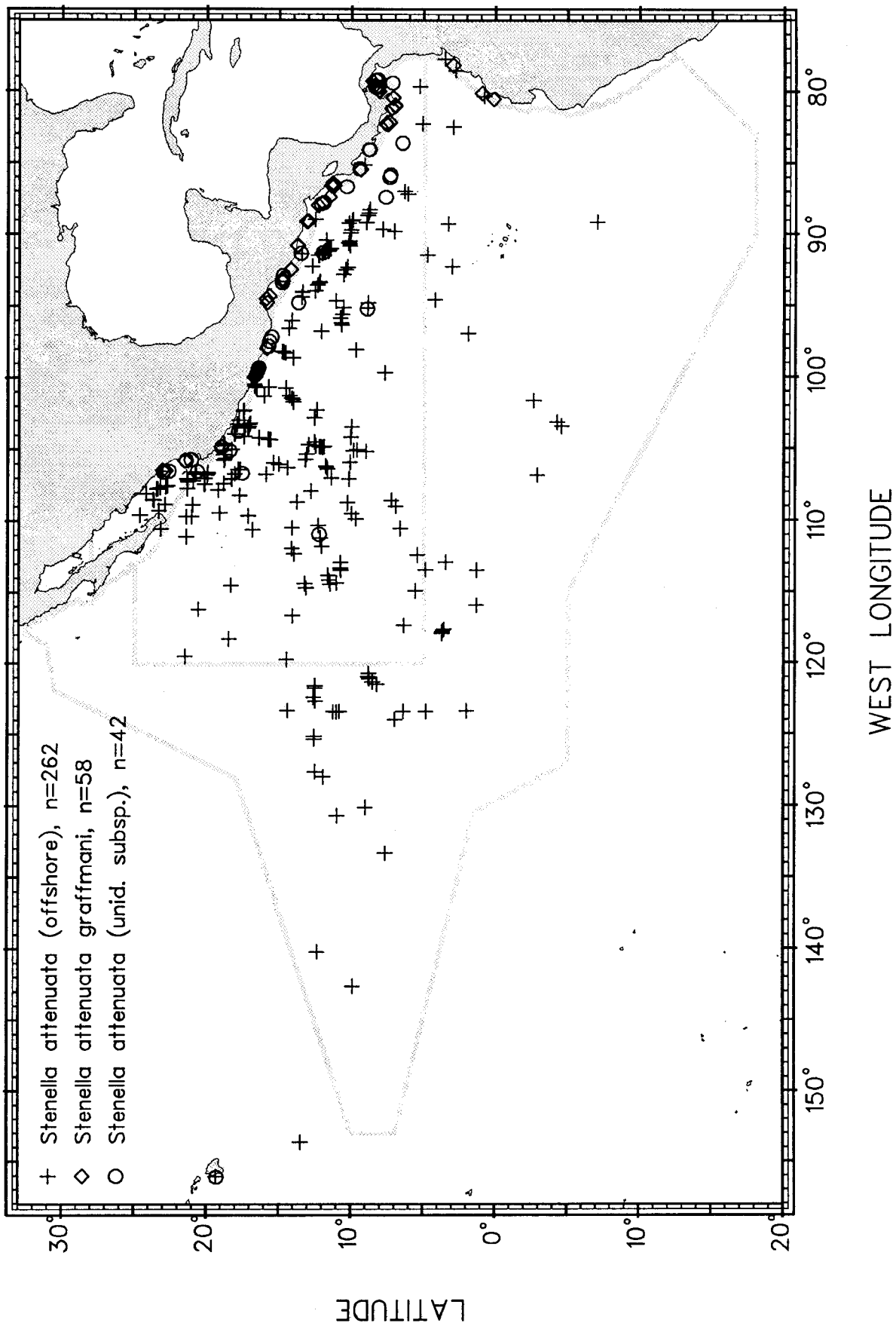


Figure 21. SPAM98 spotted dolphin sightings.

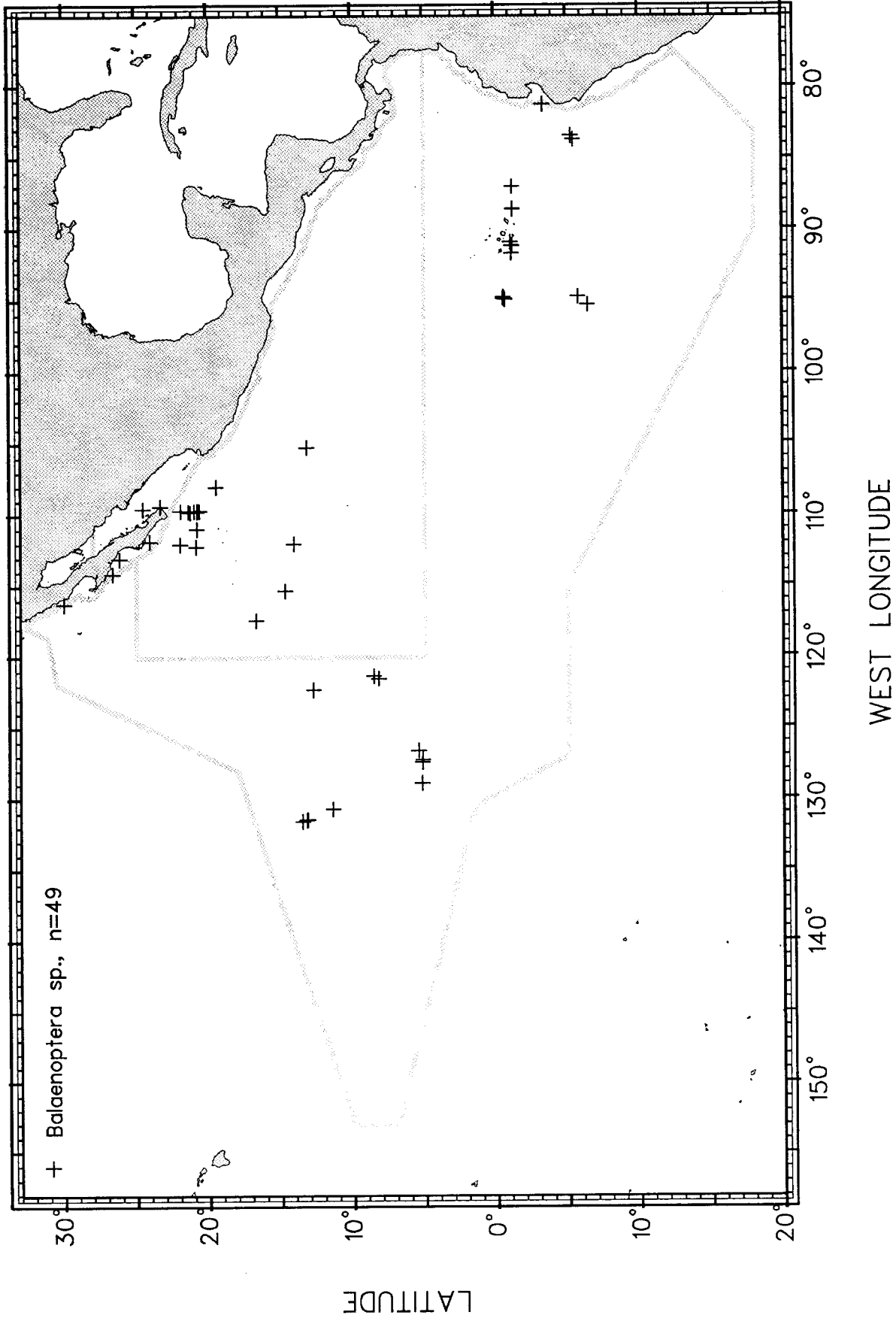


Figure 22. SPAM98 unidentified baleen whale sightings.

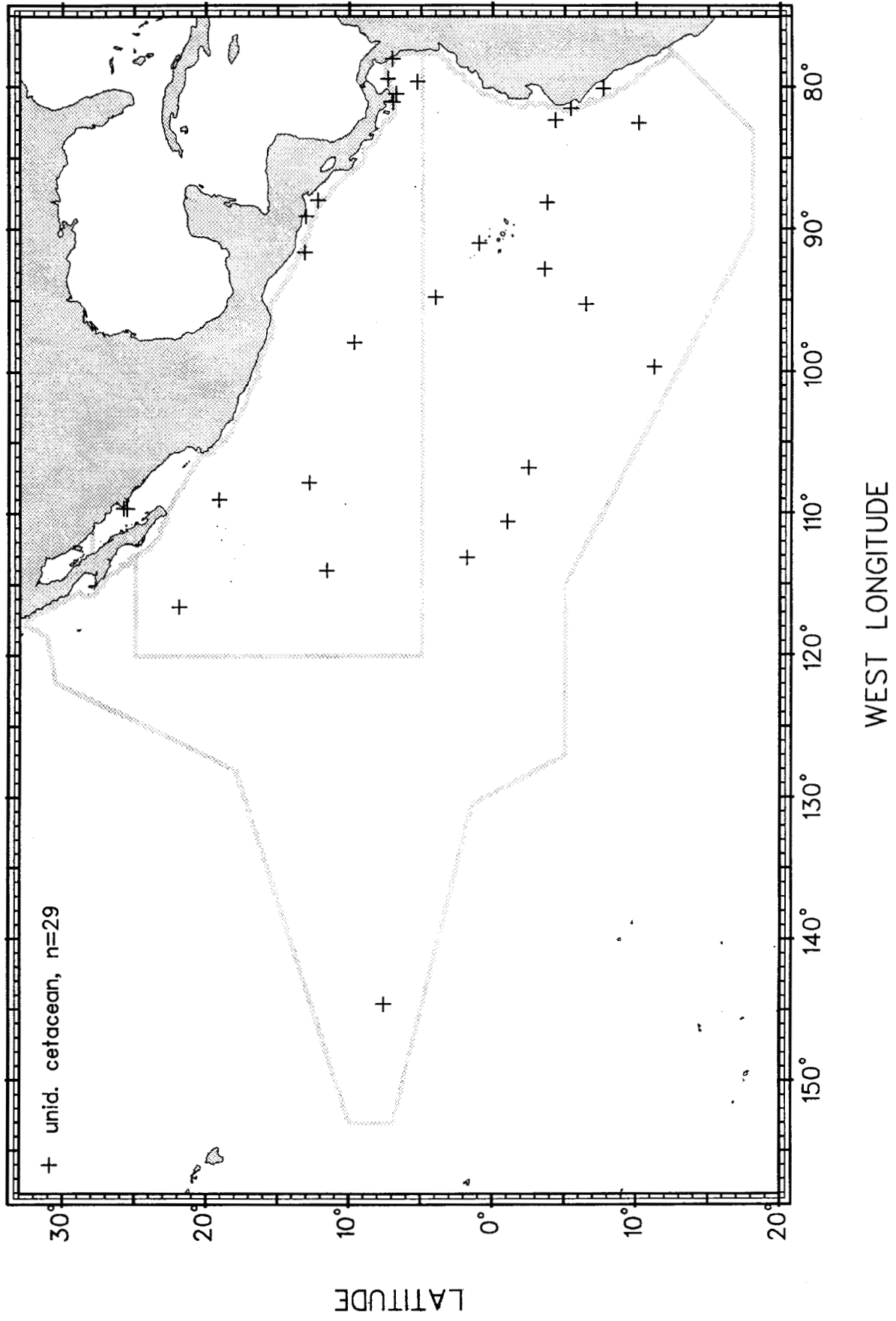


Figure 23. SPAM98 unidentified cetacean sightings.

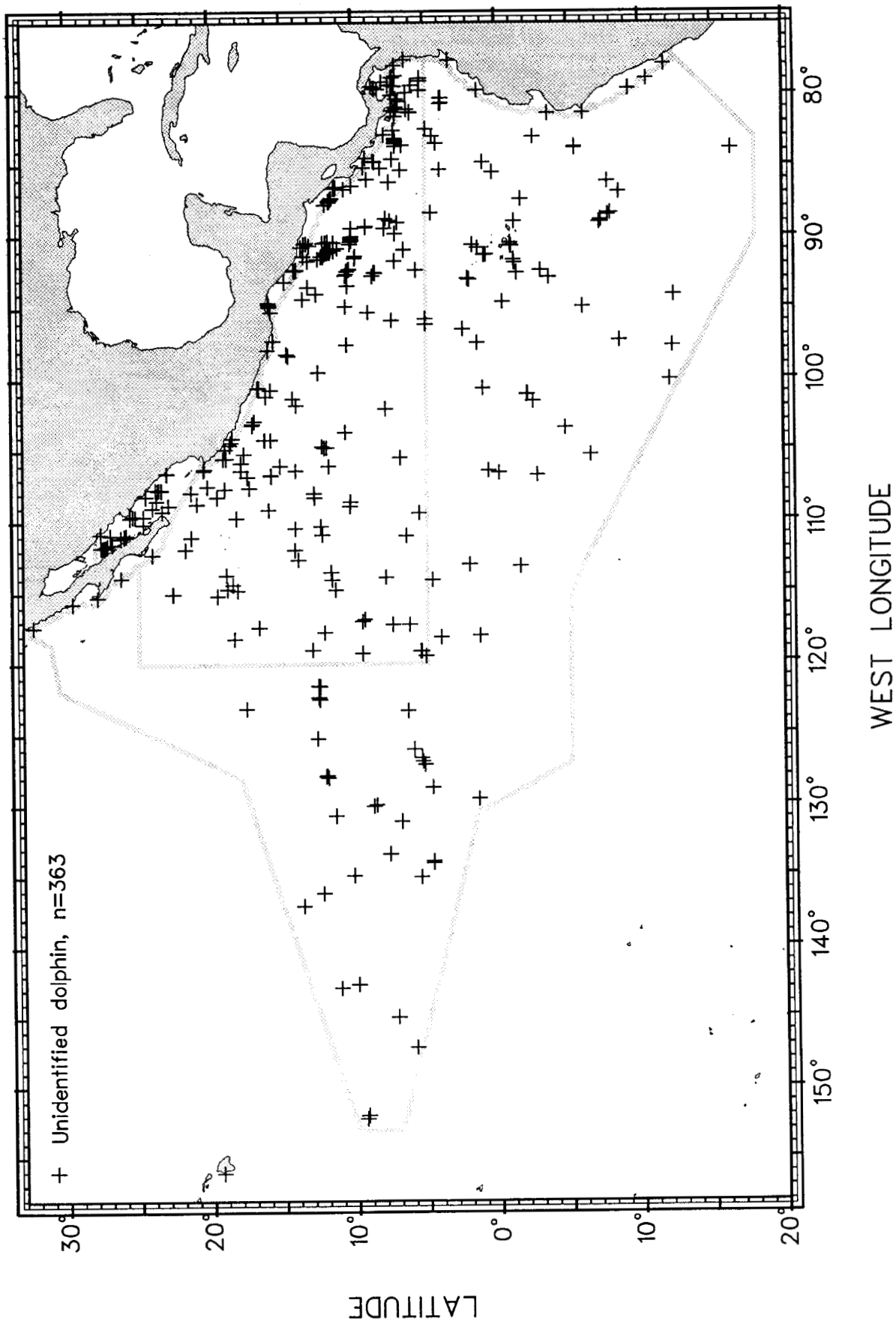


Figure 24. SPAM98 unidentified dolphin sightings.

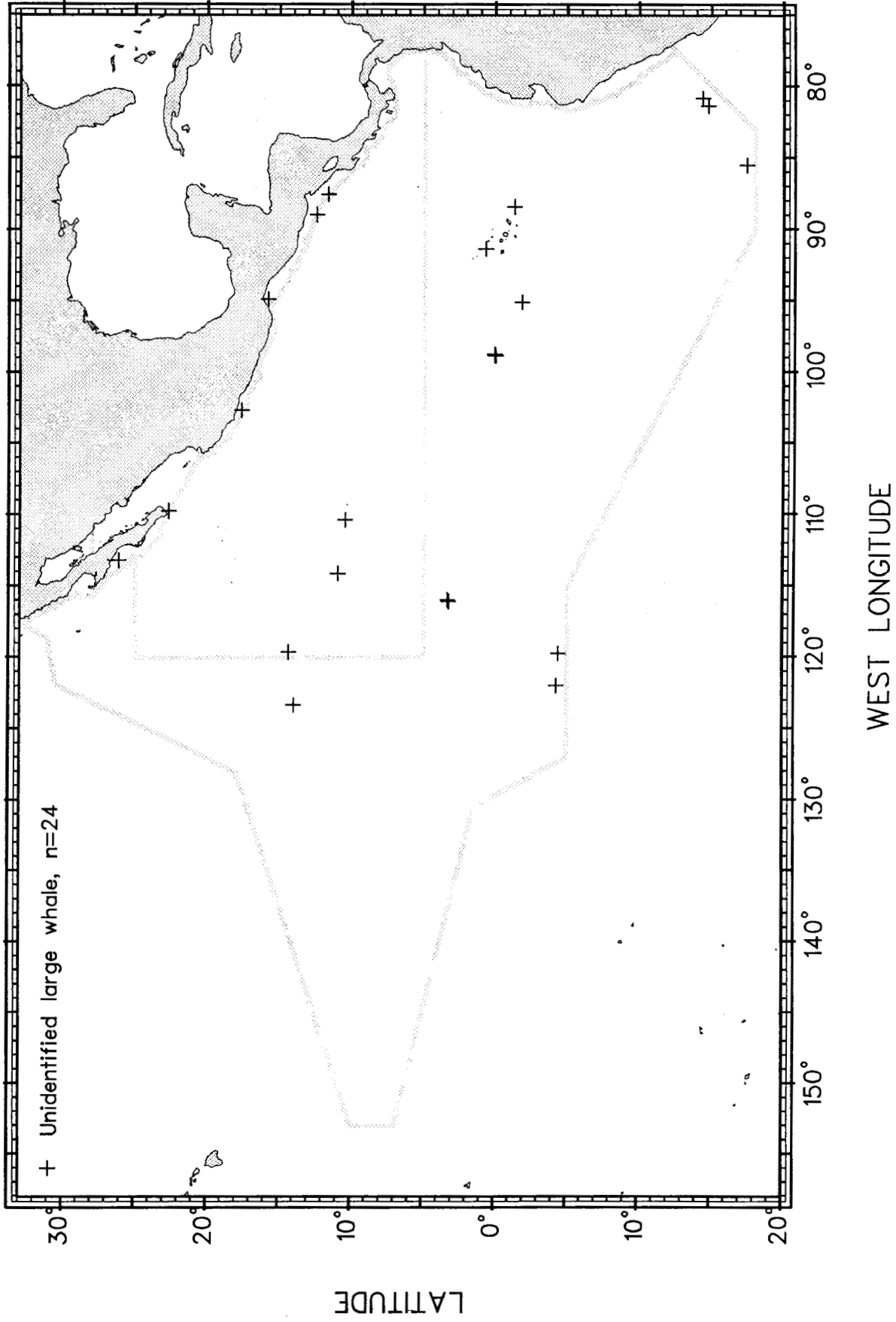


Figure 25. SPAM98 unidentified large whale sightings.

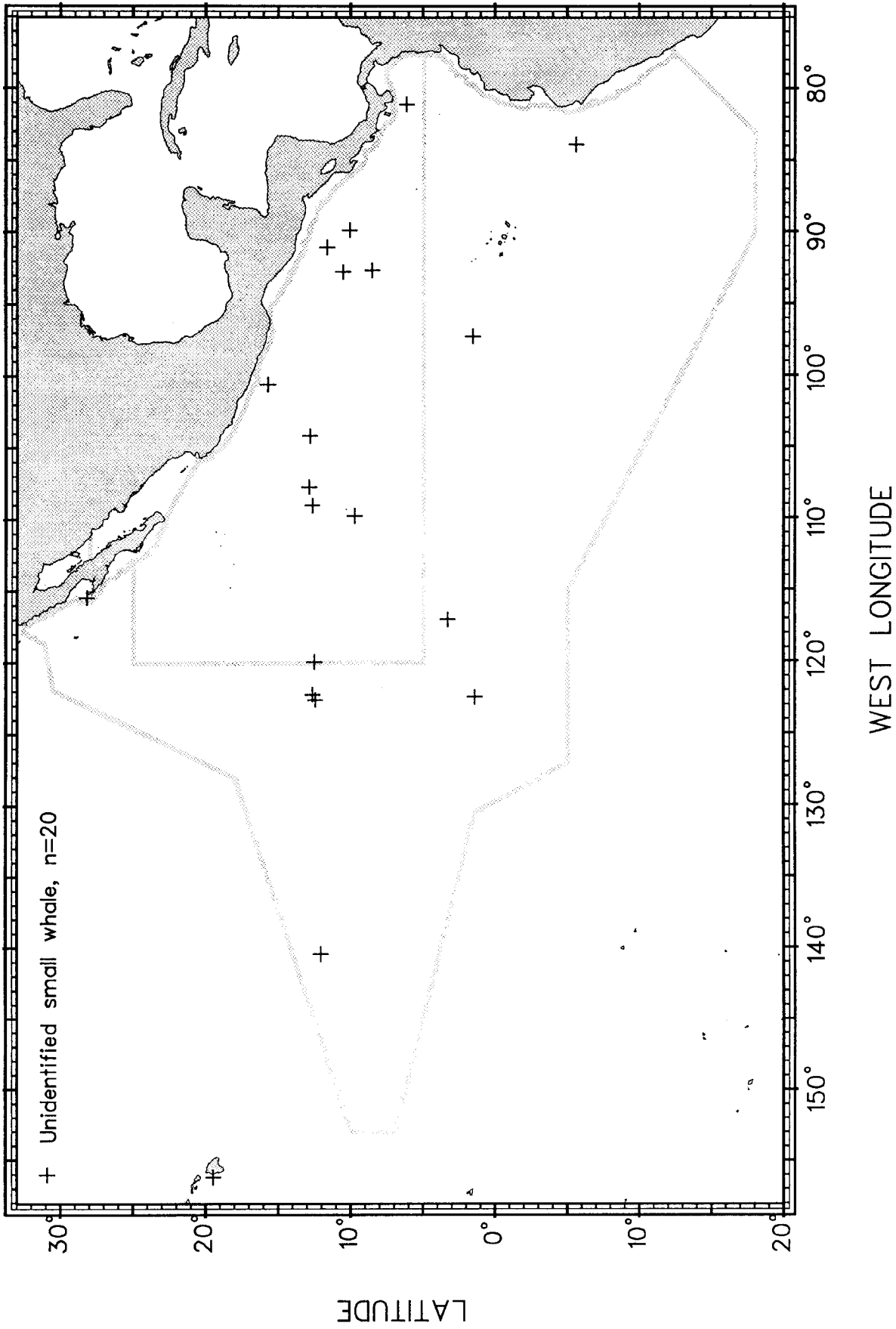


Figure 26. SPAM98 unidentified small whale sightings.



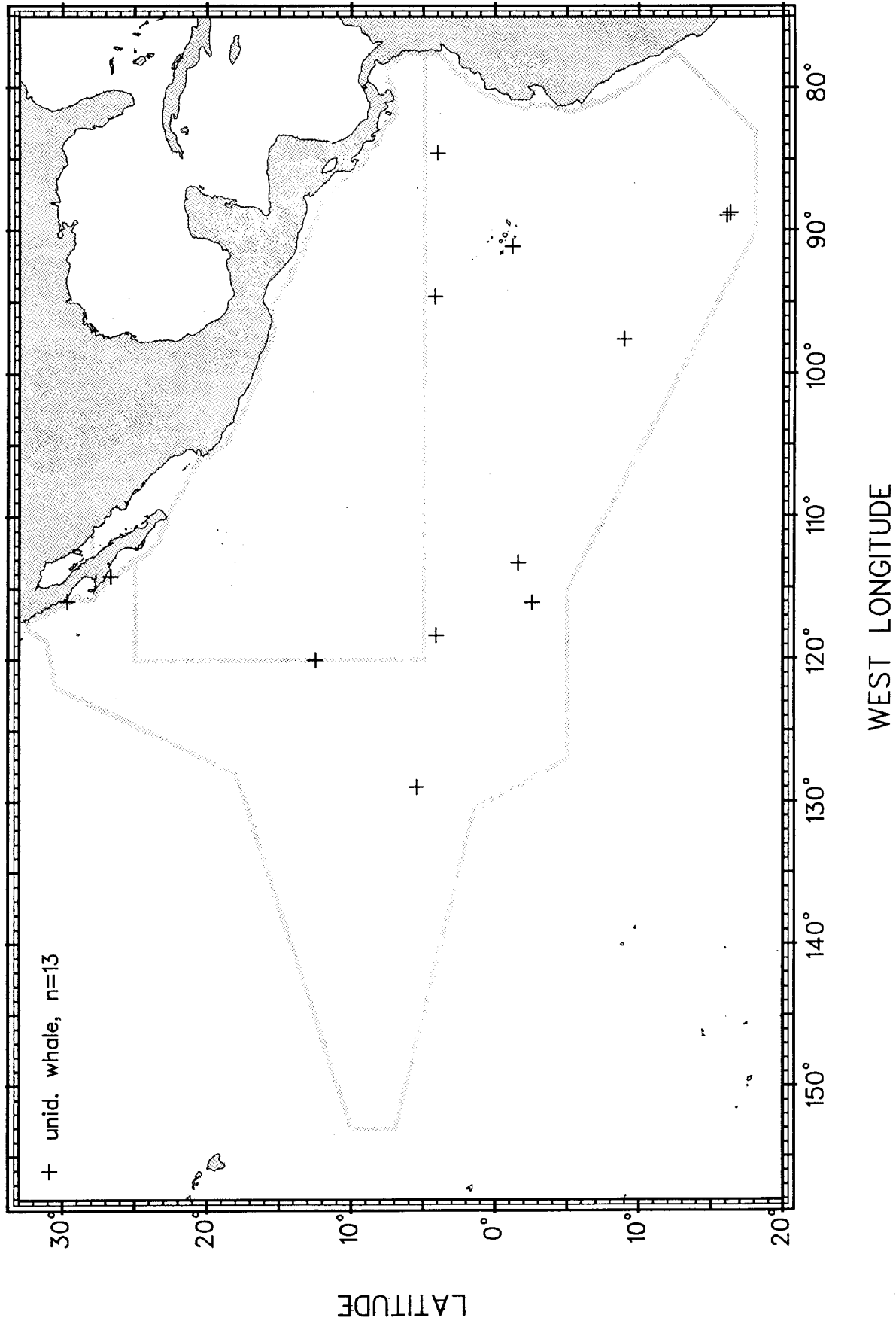


Figure 27. SPAM98 unidentified whale sightings.

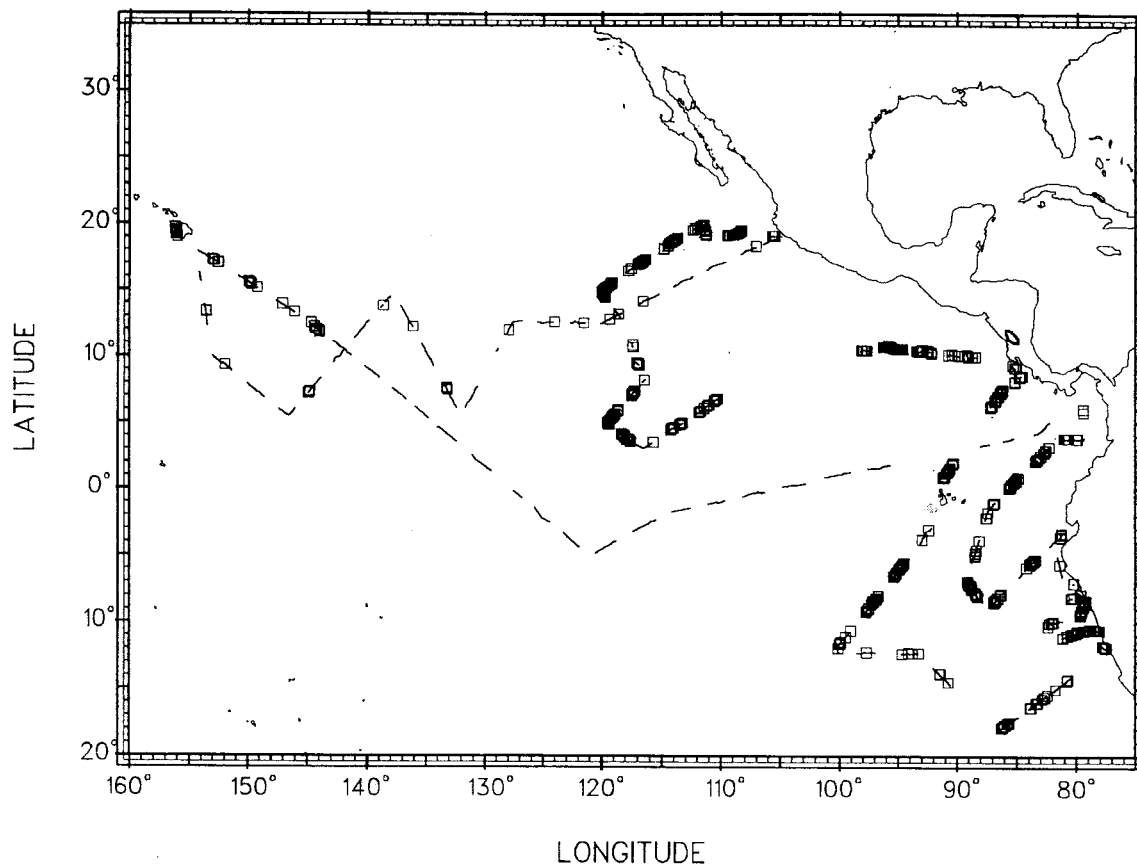


Figure 28. Acoustic survey effort using a towed hydrophone array (line segments) and locations where clear delphinid whistles were noted (open squares). Delphinid whistles were not consistently coded until late in Leg 1 (from Panama to Hawaii), so the lack of locations on that segment is not meaningful. The paucity of whistle detections on Leg 2 (from Hawaii to Mexico) coincided with a change to a less sensitive array.

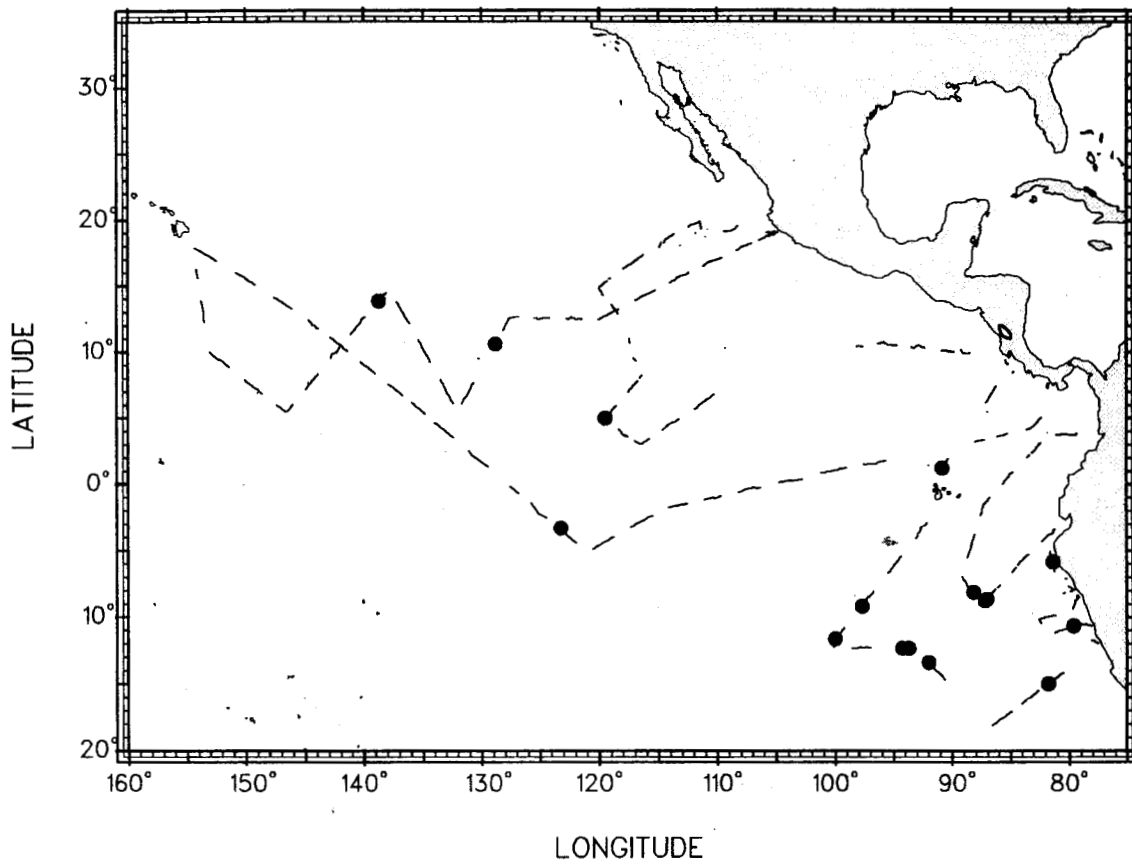


Figure 29. Acoustic survey effort using a towed hydrophone array (line segments) and locations where sperm whale clicks were noted (closed circles). Sperm whale clicks were consistently recorded throughout the cruise.

**Appendix A.** Study area boundary points for SPAM98 survey. The eastern boundary is defined by the coastline of the Americas.

117° 7.34' W, 32° 32.12' N  
117° 27.82' W, 32° 35.37' N  
117° 49.52' W, 32° 37.61' N  
118° 36.30', 31° 7.97' N  
121° 52.00' W, 30° 32.52' N  
128° 0.00' W, 18° 0.00' N  
153° 0.00' W, 10° 0.00' N  
153° 0.00' W, 7° 0.00' N  
130° 30.00' W, 1° 30.00' N  
127° 0.00' W, 5° 0.00' S  
115° 0.00' W, 5° 0.00' S  
90° 0.00' W, 18° 0.00' S  
83° 0.00' W, 18° 0.00' S  
77° 0.00' W, 12° 0.00' S

**Strata Boundaries:** The north and south coastal strata roughly follow the 1,000 meter line on either side of the equator. The core stratum is defined by the following points:

5° N, 77°38.04'W  
5°N, 120° W  
25°N, 120°W  
25°N, 112°51.6'W

**Appendix B.** Names, observer numbers, positions, affiliations and participation by leg of the scientific party in the SPAM98 survey.

Name (observer number)	Position	Affil <sup>2</sup> .	D. S. Jordan						McArthur					Endeavor													
			1	2	3	4	5	6	1	2	3	4	5	1	2	3	4	5									
Tim Gerrodette (084)	Chief Scientist	SWFSC	x																								
David Au (187)	Cruise Leader	SWFSC																									x
Lisa Ballance (120)	Cruise Leader/Seabird Observer	SWFSC		x	x	x	x																				
Jay Barlow (015)	Cruise Leader	SWFSC														x											
James Carretta (071)	Cruise Leader	SWFSC								x																	
Susan Chivers (029)	Cruise Leader	SWFSC												x													
Andy Dizon (060)	Cruise Leader	SWFSC										x															
Meghan Donahue (136)	Cruise Leader	SWFSC																									x
Paul Fiedler (081)	Cruise Leader	SWFSC								x																	
Karin Forney (086)	Cruise Leader	SWFSC																									x
Mark Lowry (019)	Cruise Leader	SWFSC																									
Robert Pitman (004)	Cruise Leader (Leg 2) / Seabird Observer	SWFSC	x	x	x	x	x	x																			
Barb Taylor (034)	Cruise Leader	SWFSC																									
James Cotton (007)	ID Specialist	SWFSC	x	x								x	x	x													
Gary Friedrichsen (001)	ID Specialist	SWFSC																									
Tom Jefferson (111)	ID Specialist	SWFSC																									
Doug Kinzey (091)	ID Specialist	SWFSC											x	x													x
Rick LeDuc (056)	ID Specialist	SWFSC																									
Paula Olson (092)	ID Specialist	SWFSC																									x
Richard Rowlett (073)	ID Specialist	SWFSC																									x
Brian Smith (074)	ID Specialist	SWFSC	x	x																							x
Lisa Baraff (152)	Marine Mammal Observer	SWFSC											x	x													x

<sup>2</sup> SWFSC- Southwest Fisheries Science Center; OSU- Oregon State University; AOC- NOAA Aircraft Operations Center; NOAA- National Oceanic and Atmospheric Administration; URI- University of Rhode Island; UCLA- University of California Los Angeles; UT- University of Tennessee; INP- Instituto Nacional de la Pesca, Mexico; INMARPE- Instituto del Mar de Perú; AG-Armada de Guatemala; UB- Universidad de Barcelona, Spain

Name (observer number)	Position	Affil.	D. S. Jordan					McArthur					Endeavor							
			1	2	3	4	5	6	1	2	3	4	5	1	2	3	4	5		
Jorge Del Angel (168)	Marine Mammal Observer	SWFSC				x	x					x	x						x	x
Kathy Hough (188)	Marine Mammal (Leg6) / Scientific Observer	SWFSC						x												
Greg Krutzikowsky (181)	Marine Mammal Observer	SWFSC				x	x													x
John Mason (182)	Marine Mammal Observer	SWFSC					x												x	x
Laura Morse (149)	Marine Mammal Observer	SWFSC				x	x												x	x
Elizabeth Moses (183)	Marine Mammal Observer	SWFSC	x	x																
Stephanie Norman (153)	Marine Mammal Observer	SWFSC				x													x	x
Todd Pusser (143)	Marine Mammal Observer	SWFSC	x	x																
Joe Raffetto (069)	Marine Mammal Observer	SWFSC																		
Shannon Rankin (184)	Marine Mammal Observer	SWFSC																		
Kristin Rasmussen (147)	Marine Mammal Observer	SWFSC	x	x															x	x
Cheryl Ryder (185)	Marine Mammal Observer	SWFSC				x	x												x	x
Juan Carlos Salinas (126)	Marine Mammal Observer	SWFSC					x													
Koen Van Waerebeek (186)	Marine Mammal Observer	SWFSC					x													
Ernesto Vazquez (125)	Marine Mammal Observer	SWFSC	x	x																
Karen Fear (174)	Acoustic Tech	SWFSC																		
Mark MacDonald	Acoustic Tech	SWFSC																		
Tom Norris (161)	Acoustic Tech	SWFSC																		
Julie Oswald	Acoustic Tech	SWFSC																		
Aaron Thode	Acoustic Tech	SWFSC																		
Christine Vitulli	Acoustic Tech	SWFSC																		
Jim Gilpatrick (080)	Photogrammetrist	SWFSC					x													
Morgan Lynn (057)	Photogrammetrist	SWFSC	x	x			x	x												
Daniel Palacios (144)	Photogrammetrist	OSU					x													
Wayne Perryman (110)	Photogrammetrist	SWFSC					x													
LT Tom Martin (158)	Photogrammetrist	SWFSC																		
LTjg Alexandra Von Saunder (119)	Photogrammetrist	SWFSC	x																	
Jimmy De La Cruz	Helicopter Mechanic	AOC																		
Ron Hegelsen	Helicopter Mechanic	AOC	x																	
Pete Yates	Helicopter Mechanic	AOC					x													
LT Debra Barr	Helicopter Pilot	NOAA	x	x																

Appendix B. (continued).

Name (observer number)	Position	Affil.	D. S. Jordan						McArthur					Endeavor																
			1	2	3	4	5	6	1	2	3	4	5	1	2	3	4	5												
LT Steve Pape	Helicopter Pilot	NOAA			x	x																								
Lynn Butler	Oceanographer	SWFSC																												
Kerri Danil	Oceanographer	SWFSC																												
Kerry Kopitsky	Oceanographer	SWFSC	x	x	x	x																								
Kathryn Noyes	Oceanographer	SWFSC	x	x	x	x																								
Valerie Philbrick (089)	Oceanographer	SWFSC	x	x	x	x																								
William Fanning	Marine Tech	URI																												
Bill Fanning	Marine Tech	URI																												
David Nelson	Marine Tech	URI																												
Tom Orvosh	Marine Tech	URI																												
Elyse Bixby	Scientific Observer	SWFSC																												
Katie Cramer	Scientific Observer	SWFSC																												
Luana Galver	Scientific Observer	SWFSC																												
Nick Kellar (173)	Scientific Observer	SWFSC																												
Dawn Breesse	Seabird Observer	SWFSC																												
Michael Force (098)	Seabird Observer	SWFSC																												
Fritz Hertel	Seabird Observer	UCLA																												
Brett Jarrett	Seabird Observer	SWFSC																												
Cornelia Oedekoven	Seabird Observer	SWFSC	x	x																										
Stuart Pimm	Seabird Observer	UT																												
Larry Spear	Seabird Observer	SWFSC																												
Alonso Aguilar	Visiting Scientist	INDP																												
Ruth Bello Calvo	Visiting Scientist	INMARPE																												
ENS Williams Casasola	Visiting Naval Officer	AG																												
Jaume Forcada	Visiting Scientist	UB																												
Guillermo Jimenez	Visiting Scientist	INDP																												

Appendix C. Marine mammal sighting-categories and codes used on the SPAM98 survey.

Cetacean codes

code	genus/taxon	species	common name
001	<i>Mesoplodon</i>	<i>peruvianus</i>	Pygmy beaked whale
002	<i>Stenella</i>	<i>attenuata</i> (offshore)	Offshore pantropical spotted dolphin, offshore spotter
003	<i>Stenella</i>	<i>longirostris</i> (unid. subsp.)	Unidentified spinner dolphin, spinner porpoise
004	<i>Stenella</i>	<i>clymene</i>	Clymene dolphin, short-snouted spinner dolphin
005	<i>Delphinus</i>	sp.	Unidentified common dolphin, saddleback dolphin, whitebelly porpoise
006	<i>Stenella</i>	<i>attenuata graffmani</i>	Coastal spotted dolphin, spotter, silverbacks
007	<i>Sotalia</i>	<i>fluviatilis</i>	Tucuxi, Guiana dolphin
008	<i>Orcaella</i>	<i>brevirostris</i>	Irrawaddy dolphin, Lumbalumba
009	<i>Australophocaena</i>	<i>dioptrica</i>	Spectacled porpoise
010	<i>Stenella</i>	<i>longirostris orientalis</i>	Eastern spinner dolphin
011	<i>Stenella</i>	<i>longirostris</i> (whitebelly)	Whitebelly spinner dolphin
012	<i>Lagenorhynchus</i>	<i>albirostris</i>	White-beaked dolphin
013	<i>Stenella</i>	<i>coeruleoalba</i>	Striped dolphin, streaker porpoise, euphrosyne dolphin
014	<i>Lagenorhynchus</i>	<i>acutus</i>	Atlantic white-sided dolphin
015	<i>Steno</i>	<i>bredanensis</i>	Rough-toothed dolphin, Steno
016	<i>Delphinus</i>	<i>capensis</i>	Baja neritic common dolphin, longbeaked common dolphin
017	<i>Delphinus</i>	<i>delphis</i>	Offshore common dolphin, shortbeaked common dolphin
018	<i>Tursiops</i>	<i>truncatus</i>	Bottlenose dolphin, black porpoise, common porpoise
019	<i>Cephalorhynchus</i>	<i>heavisidii</i>	Heaviside's dolphin
020	<i>Cephalorhynchus</i>	<i>hectori</i>	Hector's dolphin, pied dolphin, white front dolphin
021	<i>Grampus</i>	<i>griseus</i>	Risso's dolphin, gray grampus
022	<i>Lagenorhynchus</i>	<i>obliquidens</i>	Pacific white-sided dolphin, lag, hookfin porpoise
023	<i>Lagenorhynchus</i>	<i>australis</i>	Peale's dolphin, blackchin dolphin
024	<i>Lagenorhynchus</i>	<i>cruciger</i>	Hourglass dolphin
025	<i>Lagenorhynchus</i>	<i>obscurus</i>	Dusky dolphin
026	<i>Lagenodelphis</i>	<i>hosei</i>	Fraser's dolphin, Sarawak dolphin



## Appendix C (continued)

code	genus/taxon	species	common name
027	<i>Lissodelphis</i>	<i>borealis</i>	Northern right whale dolphin
028	<i>Lissodelphis</i>	<i>peronii</i>	Southern right-whale dolphin
029	<i>Cephalorhynchus</i>	<i>eutropia</i>	Black dolphin, Chilean dolphin
030	<i>Cephalorhynchus</i>	<i>commersonii</i>	Commerson's dolphin, piebald dolphin
031	<i>Peponocephala</i>	<i>electra</i>	Melon-headed whale, Hawaiian/many-toothed blackfish, electra dolphin
032	<i>Feresa</i>	<i>attenuata</i>	Pygmy killer whale, slender blackfish
033	<i>Pseudorca</i>	<i>crassidens</i>	False killer whale
034	<i>Globicephala</i>	sp.	Unidentified pilot whale
035	<i>Globicephala</i>	<i>melas</i>	Long-finned pilot whale, Atlantic pilot whale, blackfish, pothead
036	<i>Globicephala</i>	<i>macrorhynchus</i>	Short-finned pilot whale, blackfish, pothead
037	<i>Orcinus</i>	<i>orca</i>	Killer whale
038	<i>Sousa</i>	<i>chinensis</i>	Indo-Pacific hump-backed dolphin, white dolphin
039	<i>Sousa</i>	<i>teuszii</i>	Atlantic hump-backed dolphin
040	<i>Phocoena</i>	<i>phocoena</i>	Harbor porpoise, herring hog
041	<i>Phocoena</i>	<i>sinus</i>	Vaquita, Gulf of California harbor porpoise
042	<i>Phocoena</i>	<i>spinipinnis</i>	Burmeister's porpoise, black porpoise
043	<i>Neophocaena</i>	<i>phocaenoides</i>	Black finless porpoise
044	<i>Phocoenoides</i>	<i>dalli</i>	Dall's porpoise
045	<i>Delphinapterus</i>	<i>leucas</i>	White whale, beluga, belukha, sea canary
046	<i>Physeter</i>	<i>macrocephalus</i>	Sperm whale
047	<i>Kogia</i>	<i>breviceps</i>	Pygmy sperm whale
048	<i>Kogia</i>	<i>sima</i>	Dwarf sperm whale
049	ziphiid whale		Unidentified beaked whale
050	<i>Hyperoodon</i>	<i>planifrons</i>	Southern bottlenose whale, flathead bottlenose whale
051	<i>Mesoplodon</i>	sp.	Unidentified Mesoplodon
052	<i>Mesoplodon</i>	<i>carlhubbsi</i>	Hubb's beaked whale, archbeak whale
053	<i>Mesoplodon</i>	<i>hectori</i>	Hector's beaked whale
054	<i>Mesoplodon</i>	<i>bowdoini</i>	Andrew's beaked whale, deepcrest whale
055	<i>Mesoplodon</i>	<i>europaeus</i>	Gervais' beaked whale, Antillean beaked whale
056	<i>Mesoplodon</i>	<i>bidens</i>	Sowerby's beaked whale
057	<i>Mesoplodon</i>	<i>ginkgodens</i>	Ginkgo-toothed beaked whale
058	<i>Mesoplodon</i>	<i>grayi</i>	Gray's beaked whale

## Appendix C (continued)

code	genus/taxon	species	common name
059	<i>Mesoplodon</i>	<i>densirostris</i>	Blaineville's beaked whale, dense-beaked, tropical beaked whale
060	<i>Mesoplodon</i>	<i>layardii</i>	Strap-toothed whale
061	<i>Ziphius</i>	<i>cavirostris</i>	Cuvier's beaked whale, goose-beaked whale
062	<i>Berardius</i>	<i>arnuxii</i>	Arnoux's beaked whale, southern giant bottlenose whale
063	<i>Berardius</i>	<i>bairdii</i>	Baird's beaked whale, northern giant bottlenose whale
064	<i>Tasmacetus</i>	<i>shepherdi</i>	Shepherd's beaked whale
065	<i>Mesoplodon</i>	<i>pacificus</i>	Longman's beaked whale, Indo-Pacific beaked whale
066	<i>Eubalaena</i>	<i>glacialis</i>	Northern right whale
067	<i>Balaena</i>	<i>mysticetus</i>	Bowhead whale
068	<i>Caperea</i>	<i>marginata</i>	Pygmy right whale
069	<i>Eschrichtius</i>	<i>robustus</i>	Gray whale
070	<i>Balaenoptera</i>	sp.	Unidentified Rorqual
071	<i>Balaenoptera</i>	<i>acutorostrata</i>	Minke whale
072	<i>Balaenoptera</i>	<i>edeni</i>	Bryde's whale
073	<i>Balaenoptera</i>	<i>borealis</i>	Sei whale
074	<i>Balaenoptera</i>	<i>physalus</i>	Fin whale
075	<i>Balaenoptera</i>	<i>musculus</i>	Blue whale
076	<i>Megaptera</i>	<i>novaeangliae</i>	Humpback whale
077	unid. dolphin		Unidentified dolphin or porpoise
078	unid. small whale		Unidentified small whale
079	unid. large whale		Unidentified large whale
080	<i>Kogia</i>	sp.	Unidentified dwarf or pygmy sperm whale
081	<i>Mesoplodon</i>	<i>stejnegeri</i>	Steinger's beaked whale, sabertooth, Bering Sea beaked whale
082	<i>Mesoplodon</i>	<i>mirus</i>	True's Beaked Whale
083	<i>Mesoplodon</i>	sp. A	Unnamed beaked whale
084	<i>Hyperoodon</i>	<i>ampullatus</i>	Northern bottlenose, North Atlantic bottlenose whale
085	<i>Monodon</i>	<i>monoceros</i>	Narwhal, sea unicorn
086	<i>Eubalaena</i>	<i>australis</i>	Southern right whale
087	<i>Pontoporia</i>	<i>blainvillei</i>	Franciscana, La Plata dolphin
088	<i>Stenella</i>	<i>longirostris centroamericana</i>	Central American spinner dolphin, Costa Rican spinner dolphin
089	<i>Stenella</i>	<i>attenuata/plagidon</i>	Unidentified spotted dolphin in Atlantic
090	<i>Stenella</i>	<i>attenuata</i> (unid. subsp.)	Unidentified pantropical spotted dolphin, spotter porpoise

Appendix C (continued)

code	genus/taxon	species	common name
091	<i>Stenella</i>	<i>frontalis</i>	Atlantic spotted dolphin, spotter porpoise
092	<i>Platanista</i>	<i>gangetica</i>	Ganges susu, Ganges dolphin
093	<i>Platanista</i>	<i>minor</i>	Indus susu, Indus dolphin
094	<i>Inia</i>	<i>geoffrensis</i>	Boto, Amazon river dolphin
095	<i>Lipotes</i>	<i>vexillifer</i>	Baiji, Chinese river dolphin, whitefin dolphin
096	unid cetacean		Unidentified cetacean
097	unid object		Unidentified object, possible marine mammal
098	unid. whale		Unidentified whale
099	<i>Balaenoptera</i>	<i>borealis / edeni</i>	Rorqual identified as a Sei or Bryde's whale
100	<i>Stenella</i>	<i>longirostris</i> (Tres Marias)	Tres Marias spinner dolphin
101	<i>Stenella</i>	<i>longirostris</i> (southwestern)	Southwestern spinner dolphin, Marquesan spinner
102	<i>Stenella</i>	<i>longirostris longirostris</i>	Pantropical spinner dolphin, Gray's spinner dolphin

Pinniped codes

code	genus/taxon	species	common name
AA	<i>Arctocephalus</i>	<i>australis</i>	South American fur seal
AG	<i>Arctocephalus</i>	<i>galapagoensis</i>	Galapagos fur seal
AT	<i>Arctocephalus</i>	<i>townsendi</i>	Guadalupe fur seal
CU	<i>Callorhinus</i>	<i>ursinus</i>	Northern fur seal
EJ	<i>Eumetopias</i>	<i>jubatus</i>	Stellar sea lion
MA	<i>Mirounga</i>	<i>angustirostris</i>	Northern elephant seal
OB	<i>Otaria</i>	<i>byronia</i>	South American sea lion
PU	unid. pinniped		Unidentified pinniped
PV	<i>Phoca</i>	<i>vitulina</i>	Harbor seal
UA	unid. fur seal		Unidentified fur seal
UO	unid. sea lion		Unidentified sea lion
US	unid. seal		Unidentified seal
ZC	<i>Zalophus</i>	<i>californianus</i>	California sea lion

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