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**DATA REPORT ON THE VERTICAL
DISTRIBUTION OF THE EGGS AND LARVAE OF
NORTHERN ANCHOVY, *Engraulis mordax*, AT TWO
STATIONS IN THE SOUTHERN CALIFORNIA BIGHT
MARCH-APRIL 1980**

Tilman Pommeranz
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NOAA-TM-NMFS-SWFC-75

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Center

NOAA Technical Memorandum NMFS

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U.S. DEPARTMENT OF COMMERCE
Malcolm Baldrige, Secretary
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INTRODUCTION

Knowledge of the vertical distribution of eggs and larvae of the northern anchovy, Engraulis mordax, is needed for conducting research cruises designed to estimate the spawning biomass of that species. Oblique and vertical plankton net tows employed in various estimation methods (Smith and Richardson, 1977; Lasker, 1985) must encompass the entire vertical extent of anchovy eggs and larvae. Ahlstrom's (1959) study of the vertical distribution of ichthyoplankton species off southern California and Baja California provided information on eggs and larvae of anchovy but was based on only 22 Leavitt net series taken from 1941 to 1955. Despite this limitation, more recent studies (Richardson, 1973; Brewer et al., 1981; Schlotterbeck and Connally, 1982; Boehlert et al., 1985) have generally confirmed the results of Ahlstrom (1959). None of these studies has used the more advanced multiple opening and closing net systems (Wiebe et al., 1976; Pommeranz et al., 1979¹; Sameoto et al., 1980) that serially sample discrete depth strata and associated environmental parameters. In view of this we conducted a cruise during March-April 1980 aboard the Scripps Institution of Oceanography research vessel Ellen B. Scripps, using the MESSHAI system (Pommeranz et al., 1979) as the primary sampler. This report presents a detailed listing of data collected on that cruise. A separate paper providing an analysis of these data is in preparation.

METHODS

The cruise, designated 8003-EB, took place at two sampling sites in the Southern California Bight (Figure 1). The first site, occupied March 19-27, was at 33° 11.1'N, 118° 16.5'W and corresponds to California Cooperative Oceanic Fisheries Investigations (CalCOFI) station 90.2 35.8, hereafter referred to as station 90.36. The position of the second station, occupied March 29-April 6, was 33° 28.5'N, 117° 47.0'W and corresponds to CalCOFI station 90.0 28.2, hereafter referred to as station 90.28.

Four types of plankton nets were used--the Manta net (Brown and Cheng, 1981) for sampling the sea surface layer, the MESSHAI system for sampling discrete strata of the upper 50 m and the upper 200 m, the CalCOFI Bongo (CalBOBL) net (Smith and Richardson, 1977) for oblique integrated samples of the upper 200 m, and the Opening/Closing Bongo (O/C BOBL) net (McGowan and Brown, 1966) for oblique integrated samples of the upper 200 m and of the 200-400 m stratum. A complete net sampling sequence for a day or night station (Table 1, Figure 2) consisted of: (1)

¹Pommeranz, T., H. Fischer, C. Herrmann, A. Kühn, and K. Ohm. The multiple high-speed zooplankton sampler "MESSHAI." ICES C. M., Poster No. 4.

a Manta tow, (2) an oblique MESSHAI sample of 10 m strata from 50 m to the surface, (3) an oblique MESSHAI sample of 40 m strata from 200 m to the surface, (4) a second 50 m MESSHAI sample, (5) a second Manta tow, (6) an oblique bongo tow sampling the upper 200 m using either the CalBOBL (station 90.28) or the O/C BOBL (station 90.36), and (7) an oblique O/C BOBL tow sampling the 200-400 m depth stratum. Before each net tow series two other types of samples were taken (Table 1). A free fall particle sampler (Lasker and Brown, 1980) was deployed to measure concentration of 20-100 μ m particles to a depth of 88 m and a pump and fluorometry system (Lasker, 1978) was used to obtain a chlorophyll profile down to 40 m. A description of the four ichthyoplankton samples and their deployment is given below.

Manta

The Manta net had a mouth opening of 15.5 cm by 86 cm, a digital flowmeter mounted in the center of the mouth, and mesh size of 333 μ m. The net was towed off a starboard davit for 5 minutes. A total of 17 tows (10 day, 7 night) were taken on 90.36 and 24 tows (13 day/11 night) were taken on 90.28 (Table 1, Figure 2).

MESSHAI

The Messhai system (Figure 3) consists of a sampler towed by a conductor cable, a deck unit with an XY recorder and a microcomputer with its peripherals (terminal, dual diskette drive, printer, and plotter). The sampler has serial Tucker-type opening-closing mouths (Davies and Barham, 1969) of 25 x 25 cm for 6 nets made of monofilament nylon with a mesh size of 300 μ m. It carries a hydrosonde, i.e., the underwater electronics package, and a net release system connected to the hydrosonde. The net mouths are sequentially opened and closed by operating the release gear from the deck unit via the conductor cable and the hydrosonde. The net release system consists of a motor-actuated cam that trips net bars which are under tension supplied by elastic cords. The net cod ends are PVC cylinders fitted with 300 μ m nylon mesh screens and attached to a magazine at the end of the sampler frame. Sensors for depth and temperature are mounted on the hydrosonde. One flowmeter is installed in the mouth opening for measuring water volume strained and another one below the mouth for measuring distance traveled (Figure 3). Both flowmeters are connected to the hydrosonde. Calibration values of the sensors are entered into the microcomputer before the first tow of the cruise. The four parameters are measured in 1-second intervals. During the tows all values of these parameters are transmitted from the hydrosonde to the deck unit where they are displayed digitally and stored in 10-second intervals, together with the net number and time elapsed from opening. Data on distance traveled by the sampler are used for on-line

calculation of the speed of the sampler. The values of two of the measured parameters, usually depth and volume of water strained, are plotted on the XYY recorder.

During each tow three lists are generated by the computer. The first list includes information on tow identification, time, and location, the second list gives all data stored in 10-second intervals, and the third gives data summaries. The latter include the data on tow duration, distance traveled by the sampler, and water volume strained for each of the six nets. Also they list the minimum, maximum, mean, standard deviation, and coefficient of variation of the depth, temperature speed data for each net, which are calculated from the values stored in 10-second intervals.

For cruise 8003-EB the MESSHAI sampler was deployed from an A-frame at the stern of the ship. All tows were stepped oblique hauls at either 50 m or 200 m maximum depth. In the shallow tows the sampler was lowered to 50 m with the first net open. Nets 2-6 were then activated sequentially through an oblique tow path to sample five discrete 10 m strata. In each stratum the sampler was retrieved in 2-1/2 meter steps at 2-minute intervals, with a total of 5 horizontal phases per stratum (Figure 4). For net 6 the last horizontal phase was deleted to avoid turbulence and damage from the ship's propeller. The same procedures were used for the 200 m tows except that 5 discrete 40 m strata were sampled. The sampler was retrieved in 5 m steps at 2 minute intervals with a total of 9 horizontal phases per depth stratum (Figure 4). A total of 18 shallow tows (10 day/8 night) and 9 deep tows (5 day/4 night) were taken on 90.36 and 24 shallow tows (12 day/12 night) and 12 deep tows (6 day/6 night) were taken on 90.28 (Figures 5 and 6). Three tows, numbers 2, 4, and 5 were discarded because of technical problems with the sampling system and one tow, number 35 was interrupted but completed by supplementary sampling. Improper preservation resulted in the loss of anchovy eggs in net 4 of tow 42 and the loss of the entire sample from net 3 of tow 61.

O/C BOBL

The O/C BOBL tows sampled 0-200 m and 200-400 m strata on station 90.36 and only the 200-400 m stratum on stations 90.28. The nets had mouth diameters of 71 cm and a mesh size of 333 μm . A flowmeter was mounted in the mouth opening of the starboard net. For the shallow tows the net was lowered closed to approximately 200 m (300 m wire out), opened at depth with a messenger and retrieved according to standard CalCOFI procedures for oblique hauls (Smith and Richardson, 1977). For the deep tows the net was lowered closed to approximately 400 m (600 m wire out), opened with a messenger, retrieved as a standard oblique haul to approximately 200 m, and then closed with a second messenger. A total of 7 shallow tows (4 day/3 night) and 7 deep tows (4 day/3 night) were made on 90.36 and a total of 10

deep tows (5 day/5 night) were made on 90.28 (Table 1, Figure 2). There was one failure in net closure; during deep tow no. 19 the starboard net did not close and sampled the 0-400 m water column.

CalBOBL

A standard CalBOBL net equipped with 333 μ m mesh was used to sample the 0-200 m stratum on station 90.28. CalCOFI procedures for oblique tows were followed (Smith and Richardson, 1977) except that the system for rigging the tow cable on the E. B. Scripps required a slower payout speed (about 33 m wire/minute). A total of 11 tows (6 day/5 night) were made on 90.28 (Table 1, Figure 2).

Sampling activities on each station were scheduled to run on a 24-hour basis with consecutive day and night series; however, on station 90.36 this was interrupted by heavy seas on March 21 and March 26 and on station 90.28 a major storm precluded sampling on April 1-2 (Figures 7 and 8). On station 90.28 sampling activity was coordinated with Dr. M. Mullin (Food Chain Research Group, Scripps Institution of Oceanography), aboard M/V Fisherette, who made day and night pump stations simultaneous with our tows. The Fisherette arrived on station at about 0900 and 2100 Pacific Standard Time and a vertical series of pump samples to 50 m at 5 m intervals was taken (Mullin et al., 1985).

Shipboard processing and preservation of the net tow samples followed standard procedures of CalCOFI (Smith and Richardson, 1977) except that 59 samples were preserved in 80% ethanol for study of daily growth increments of the otoliths of anchovy larvae. Plankton volume determination, sorting, and identification of ichthyoplankton followed standard procedures described in Kramer et al. (1972) and Smith and Richardson (1977). All fish larvae were identified to the lowest taxon possible. The embryonic stages of the anchovy eggs were determined according to the methods of Moser and Ahlstrom (1985) and then the ages of the eggs were estimated by the method of Lo (1985). Anchovy larvae were measured to the nearest 0.5 mm; length measurements of other fish larvae (OFL) were made to 0.1 mm.

EXPLANATION OF TABLES

There are 59 tables in this report. Tables 1-13 present the data collected on Cruise 8003-EB and Tables 14-59 are a series of statistical summaries of that data. Table 1 gives the order of station occupancy, the chronology for all nets and samplers, and some environmental observations (surface temperature, wind conditions,² sea state, and sky cover). Table 2 lists tow data

²The value 999 indicates that the wind direction could not be determined.

for the 41 Manta net tows, including date, duration, and volume filtered. Also listed are sample data, including displacement plankton volume, numbers of anchovy eggs and larvae and numbers of all other fish eggs and larvae. Values per 100 m³ of water strained are also listed for anchovy eggs and larvae. Table 3 lists the numbers of anchovy eggs of each stage and estimated age for each Manta tow. In addition to the 11 morphological stages, the numbers of disintegrated (Dis.) eggs are also listed.³ There are 6 age categories, S, A, B, C, D, and E. Age "S" refers to newly-spawned eggs collected between 1800 and 0200. "A" to "E" age classes refer to 0, 1, 2, 3, and 4 day eggs in consecutive 24-hour periods from 0200 to 0200 (see Lo, 1985). Table 4 lists the number of anchovy larvae in 0.5-mm length classes from 2 to 15 mm. Larvae larger than 15 mm are lumped in one category and there is a category for disintegrated (Dis.) larvae. Table 5 lists the tow data for the 60 MESSHAI tows. Although the tows are numbered consecutively from 1 to 63, tows 2, 4, and 5 were eliminated because of technical failure. For each tow the date and start time are given and for each of the 6 net samples the following data are listed: target depth stratum, minimum depth, maximum depth, mean depth, mean temperature, mean speed, distance traveled, and volume of water filtered. The minimum and maximum depths are selected from the values stored in 10-second intervals and the means of depth, temperature, and speed are calculated from these stored data sets. Catch data listed for each net are: displacement plankton volume, numbers and densities (numbers per 100 m³ of water strained) of anchovy eggs and larvae, and numbers of all other fish eggs and larvae. Table 6 lists the anchovy egg stage and age data for each MESSHAI tow and net, and Table 7 gives the length class counts for anchovy larvae. Formats for these two tables are the same as in Tables 3 and 4. Table 8 lists tow data for port and starboard sides of the 24 opening/closing Bongo (O/C BOBL) tows, including date, start time, durations, minimum depth, maximum depth, and volume of water filtered. Displacement plankton volume, and numbers and densities of eggs and larvae of anchovies and other fishes are presented as in Tables 2 and 5. Anchovy egg stage and age data and larval length data are given in Tables 9 and 10. Tow and catch data for the starboard side of the Bongo (CalBOBL) tows are listed in Table 11 in the same format as in Table 8. Tables 12 and 13 give the anchovy egg and larval data as for the other samplers.

The statistical summaries of anchovy egg and larval data are prefaced by Table 14, which gives the numbers of net samples for the 11 depth strata assessed on the cruise, broken down by station, pre-/post-storm period, and day/night period. The irregularity in the numbers of observations of the post-storm night series of station 90.28 at 30-40 m is caused by preservation problems with the sample from net 3 of MESSHAI tow 61. This sample was ignored during the calculations of the

³ Before assigning ages to the egg stages the numbers of disintegrated eggs were prorated to all stage groups.

statistical summaries. This is also true for the sample of anchovy eggs from net 4 of MESSHAI tow 42 (pre-storm day series of station 90.28 at 20-30 m). Since there was a usable sample of larvae from that tow there is no irregularity in the number of observations listed in Table 14. Loss of the eggs from this sample is reflected in the numbers of observations listed in Tables 31-37.

The remaining tables are grouped by station under 3 headings: 90.36 (Tables 15-29), 90.28 before the storm (Tables 30-44), and 90.28 after the storm (Tables 45-59). The first table in each group (Tables 15, 30, 45) is a statistical summary of sampling depths. The following parameters are given for each of the 11 depths, broken down by day, night, and day + night period: mean value, standard deviation and coefficient of variation of the minimum, maximum, and mean depth values of the individual samples.⁴ For each of the 3 station headings there are 7 tables summarizing parameter estimates for anchovy egg ages and 7 tables summarizing anchovy larval length classes, broken down by day period, night period, and day + night period. Before calculating the larval parameters the numbers of disintegrated larvae were prorated to the larval length groups. The 7 parameter estimates presented in each series of tables are: mean number (numbers/100 m³), median number (numbers/100 m³), standard deviation (numbers/100 m³), coefficient of variation, proportion of positive catches (%), minimum number (numbers/100 m³), and maximum number (numbers/100 m³). In calculations of these values for the O/C BOBL, the numbers caught by both the port and starboard net were added and the volume filtered (resulting from flowmeter measurements in the starboard net) was doubled.

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⁴Depth values for the Manta net were derived from the height of the mouth opening (0.16 m); values for MESSHAI strata were derived from the data stored in 10-second intervals; values for the O/C BOBL net were based on standard calculations using wire angle and length.

James Thraillkill supervised the sorting of the plankton and processing of the fish eggs and larvae and also calculated depths and volumes filtered for nets other than the MESSHAI. Plankton sorting and processing was done expertly by Lucy Dunn, Mary Farrell, Jeanne Haddox, Alice Lumpkins, and Frances Poczynich. Staging of anchovy eggs and identification of other fish larvae was done by Barbara Sumida MacCall, Elaine Sandknop Acuña, and Elizabeth Stevens, who were helpful in proofreading all data. We are especially indebted to Richard Charter, assisted by Carol Miller, for indispensable services in all aspects of data processing. Nancy Lo read the manuscript and made many helpful comments. The Deutsche Forschungsgemeinschaft provided funding to the senior author.

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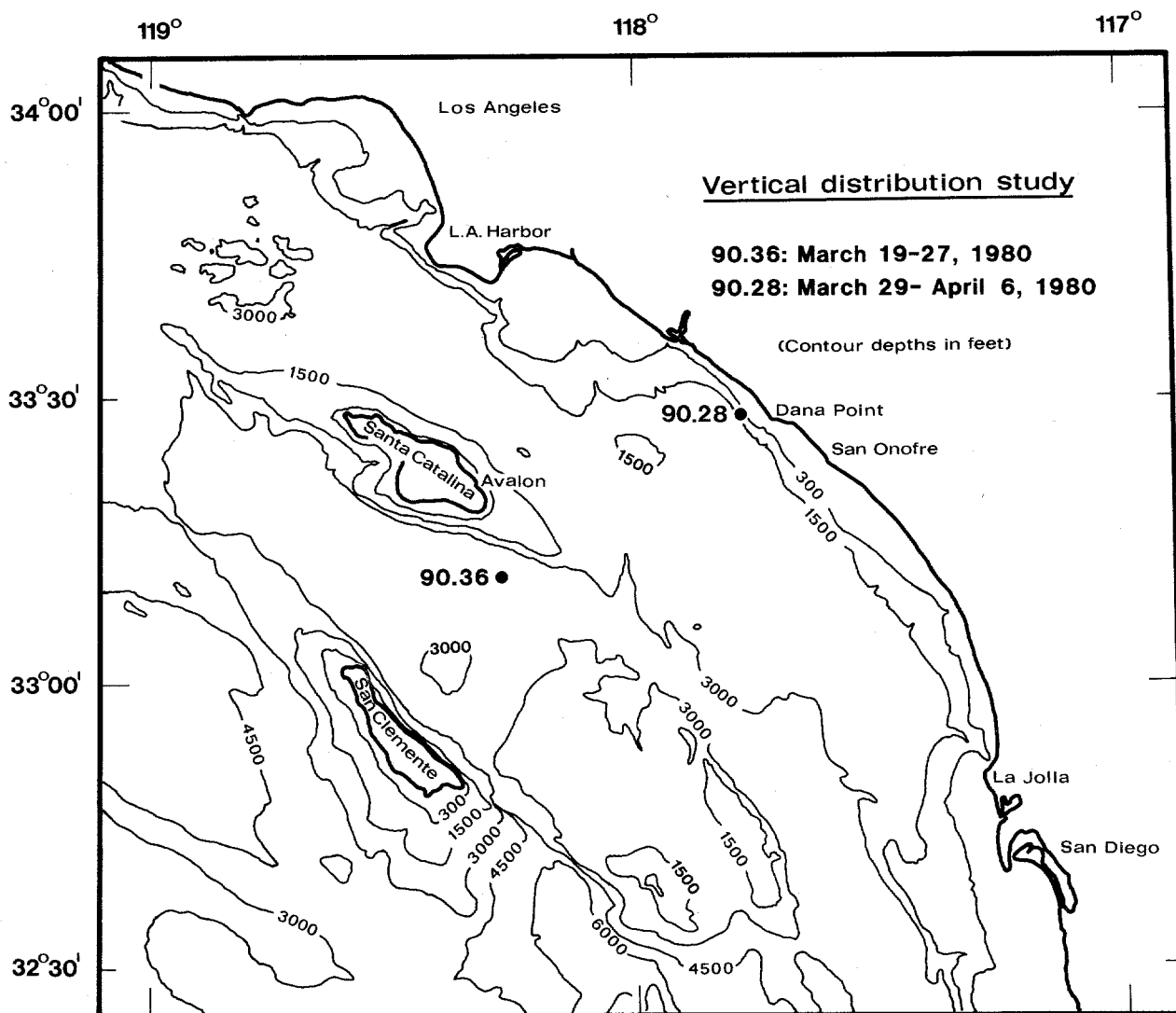


Figure 1. Map of the Southern California Bight showing sampling sites for Cruise 8003-EB. Map adapted from Shepard and Emery (1941).

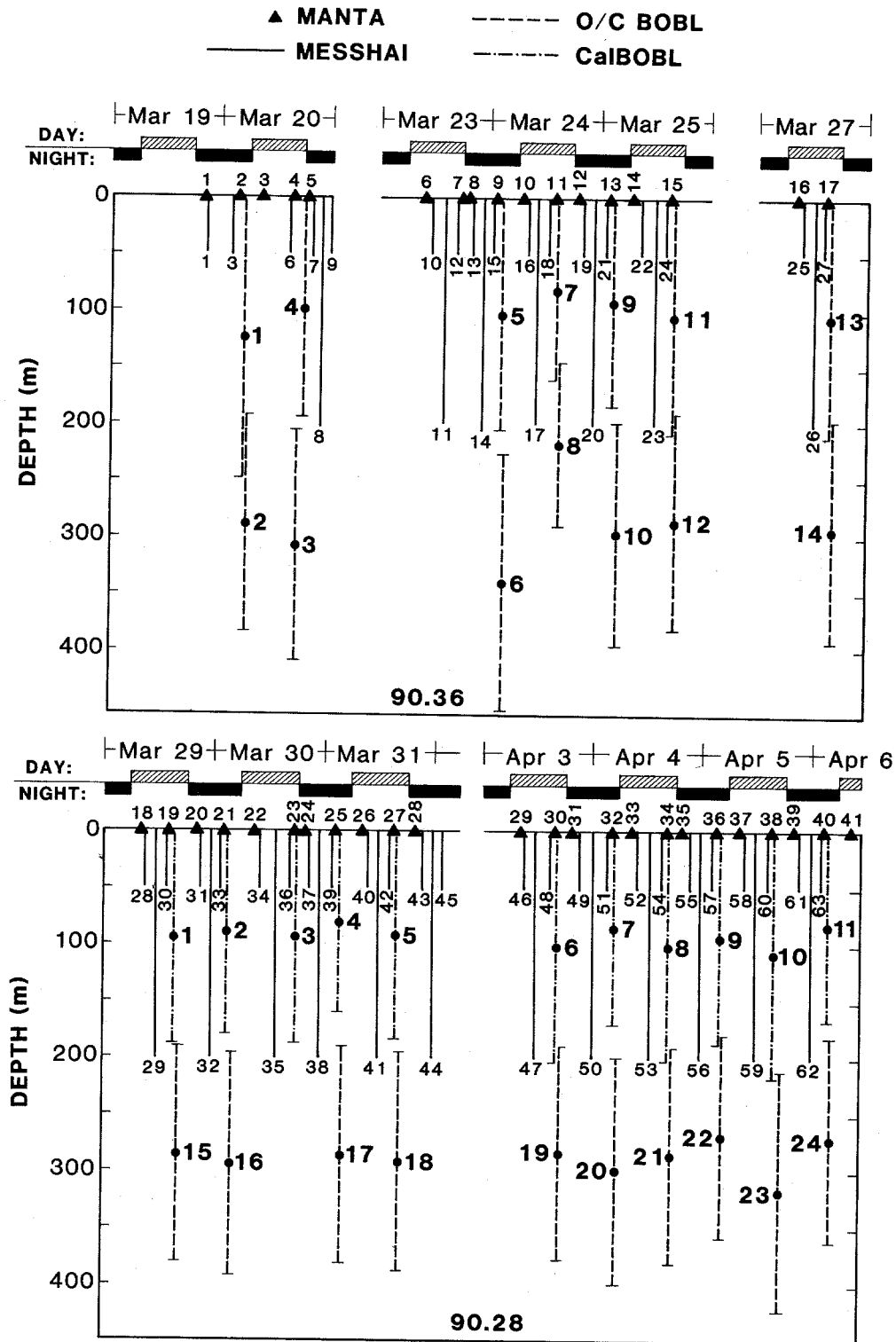


Figure 2. Diagram showing depth strata sampled by all samplers during Cruise 8003-EB.

The Multiple High-speed Zooplankton Sampler 'MESSHAI'

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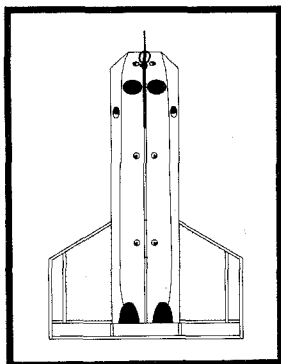
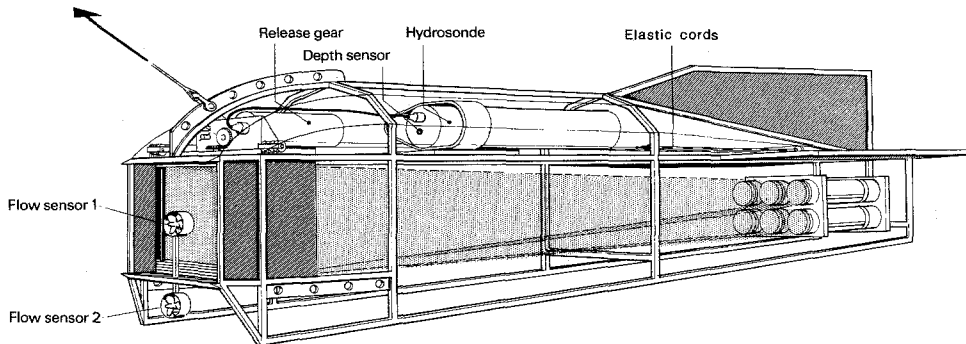
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1. The system „MESSHAI” was developed for sampling of zooplankton, particularly ichthyoplankton, in water bodies

exactly defined by their depth, temperature, and salinity. It integrates sampling with sensing, telemetering, display, moni-

toring, on-line evaluation of haul and environmental data, and final biological evaluation.

THE SAMPLER

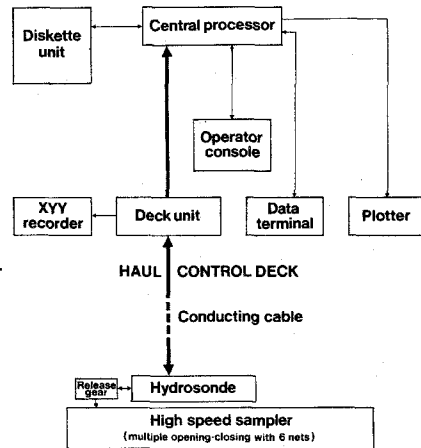


2. The sampler is basically a modified Gulf-V sampler with a TUCKER mouth opening for 6 nets. The sequential net change is driven by rubber strings; the release gear is operated via the hydrosonde. The hydrosonde has sensors for pressure, flow in- and outside the mouth opening, as well as for temperature and conductivity. The data and net commands are telemetered via a conducting cable, dis-

played on the deck unit, fed into a mobile EDP system, and selectively plotted on an analogue recorder.

3. The EDP system generates clear-text data of the volume filtered, speed, flow in-/outside ratio (clogging index), and salinity. These and the unprocessed depth and temperature data are stored on diskettes and listed by the data terminal. The stored data can be projected on the plotter during the hauls, e.g. for locating the thermocline. All display units can be used for specific sampling control. Data summaries are given after each haul and after the cruise. The station sheet data can be fed into the system on board or in the laboratory together with the biological results for final evaluation.

THE SYSTEM 'MESSHAI'



4. The „MESSHAI” was used successfully for the first time in August 1979 for investigations of the horizontal and vertical distribution of mackerel larvae in the northern North Sea.

Figure 3. Side and top views of MESSHAI sampler with block diagram of MESSHAI sampling system and explanation. Modified from Pommeranz et al. (1979, see footnote, p. 1).

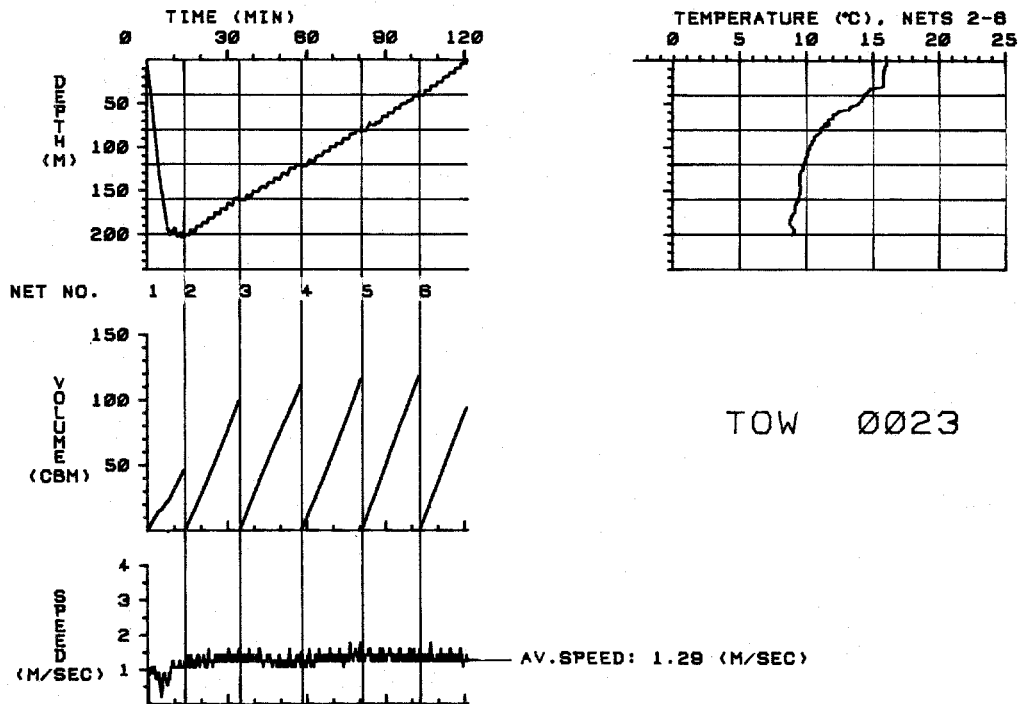
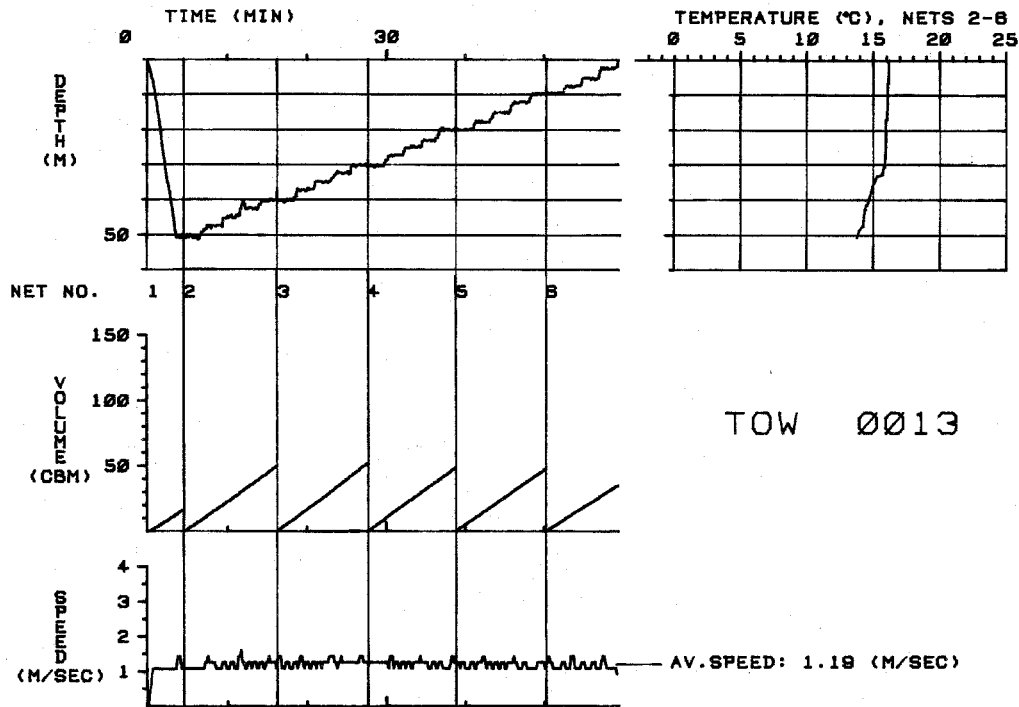


Figure 4. Plots of typical MESSHAI tows from Cruise 8003-EB. Above: Tow track, volume of water strained by each net, net speed, and temperature profile for a shallow tow (No. 13). Below: Same for a deep tow (No. 23).

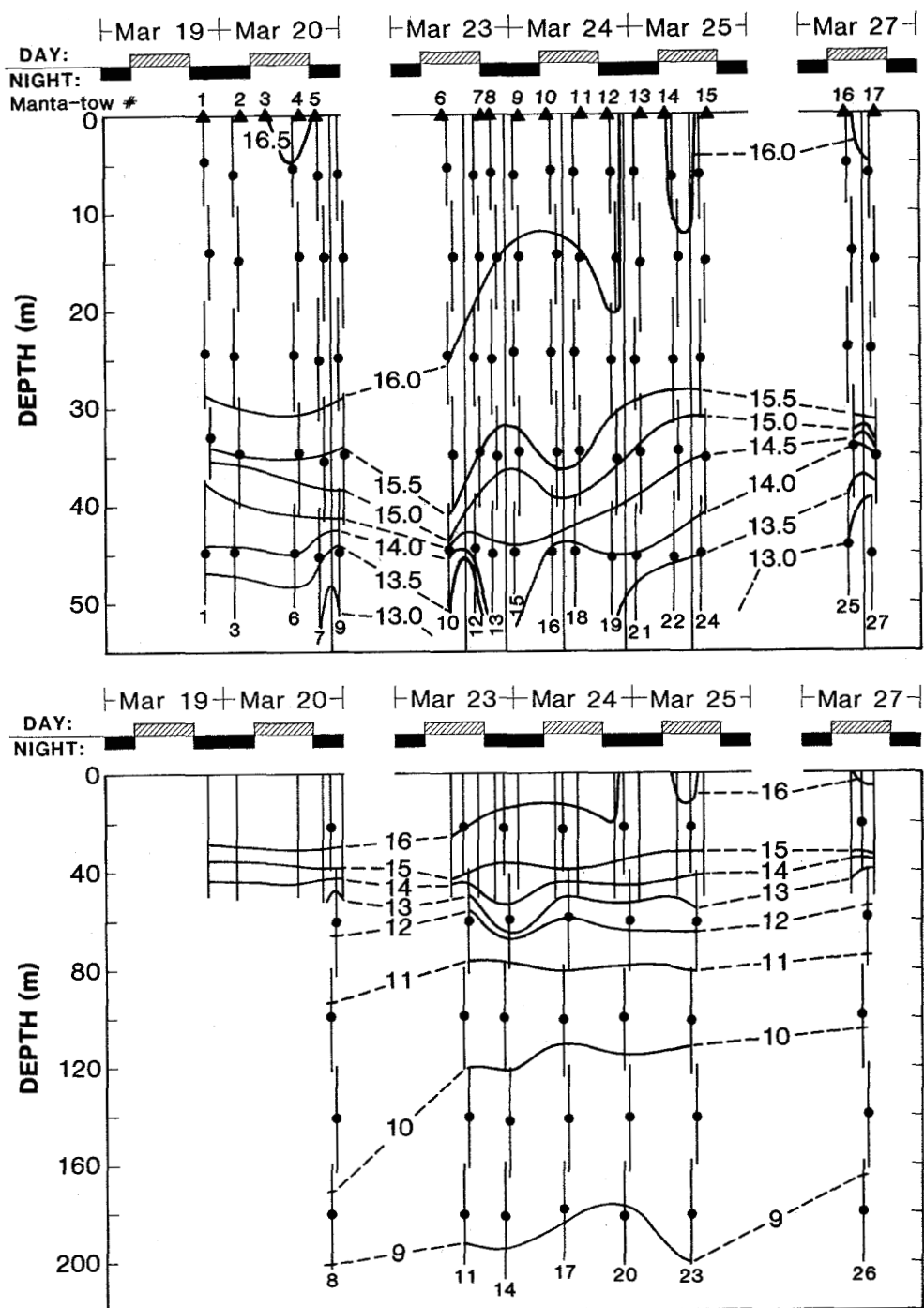


Figure 5. Diagram showing chronology of MESSHAI tows, depth strata sampled, and isotherms for station 90.36. Above: Shallow (50 m) tows and Manta tows; the dots represent the mean depths for each net calculated from depth values stored in 10-second intervals; the 7 complete vertical lines indicate when deep (200 m) tows were taken. Below: Deep tows; the 17 lines extending down to 50 m indicate when the shallow tows were taken.

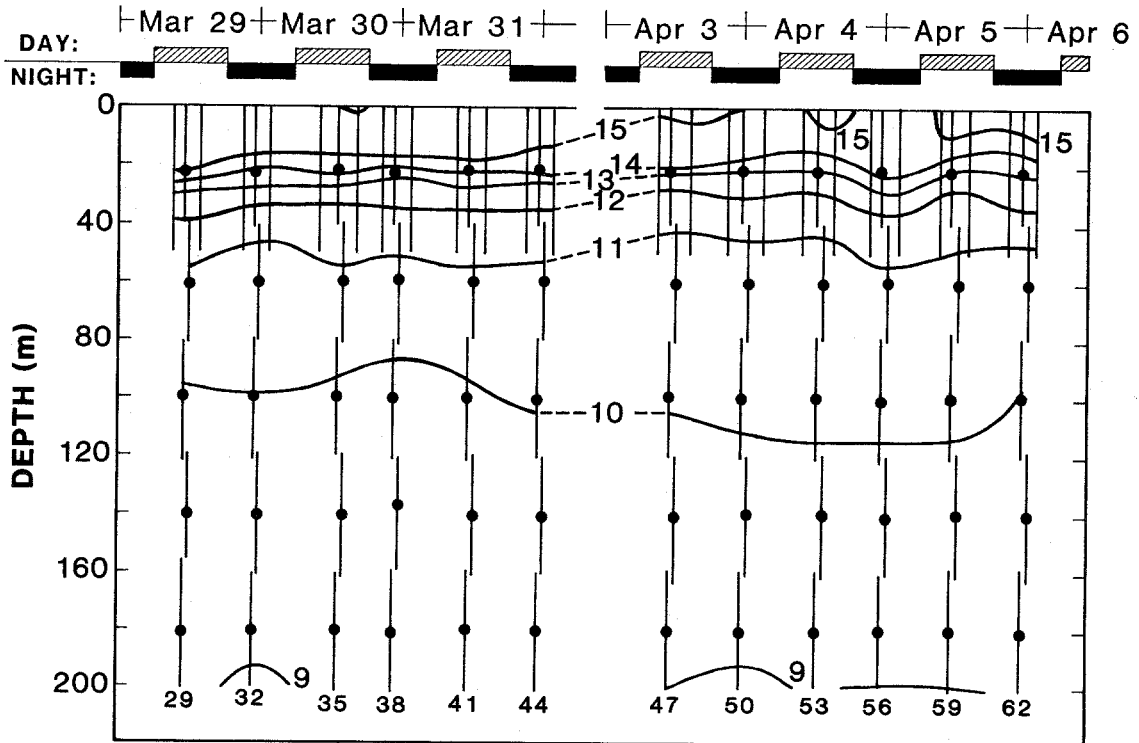
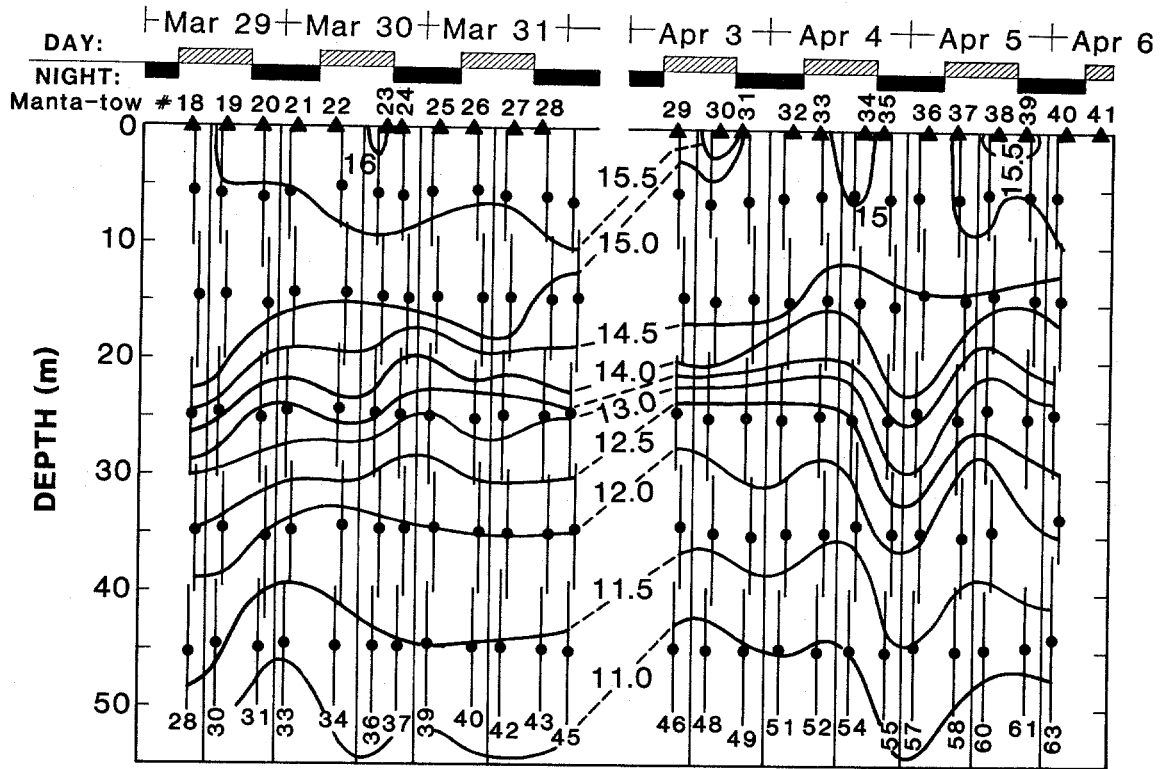


Figure 6. Diagrams showing chronology of MESSHAI tows, depth strata sampled, and isotherms at station 90.28. Symbols the same as in Figure 5.

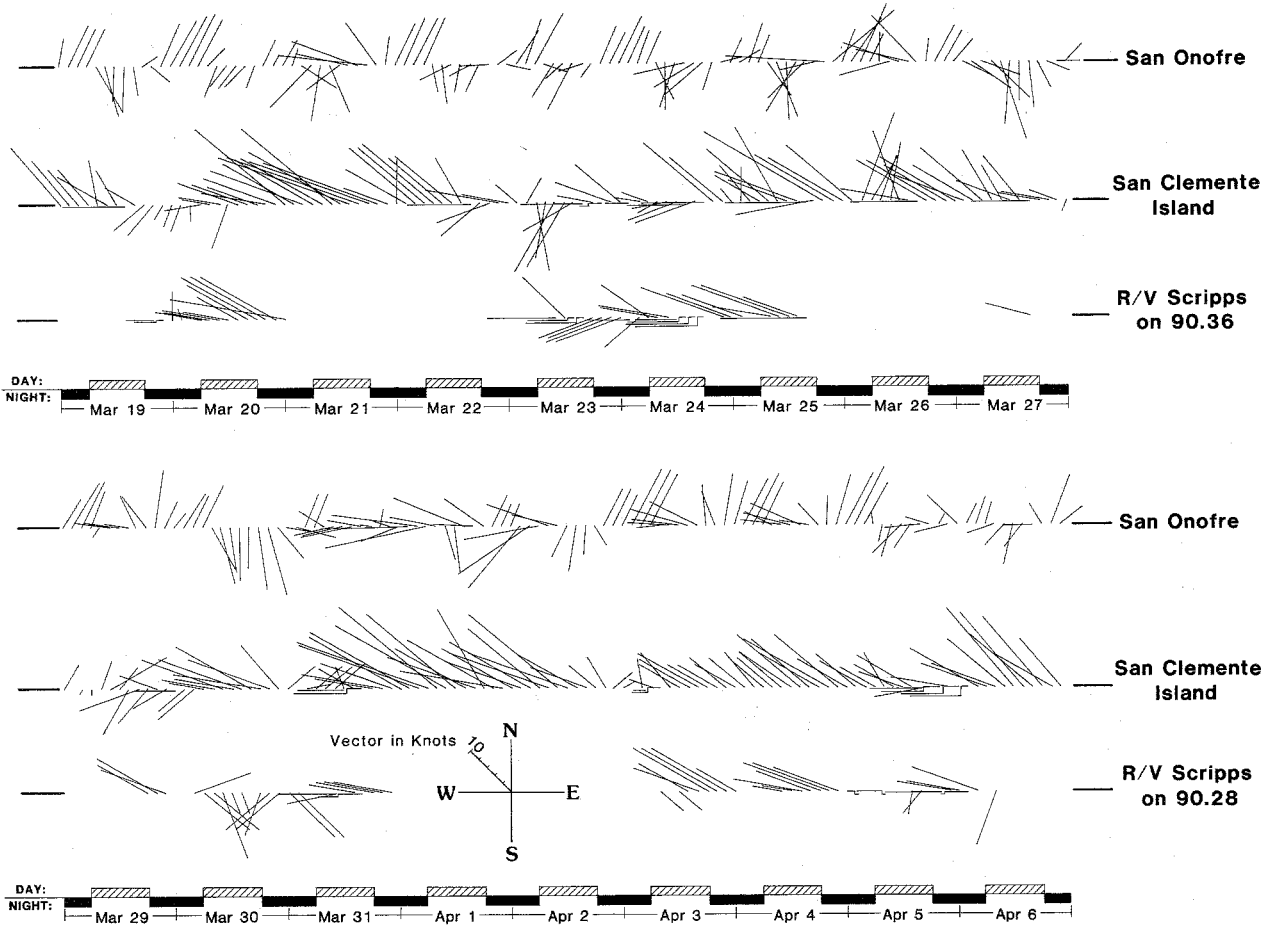


Figure 7. Wind direction and speed at three locations during Cruise 8003-EB. Wind vectors point to direction from which wind is coming.

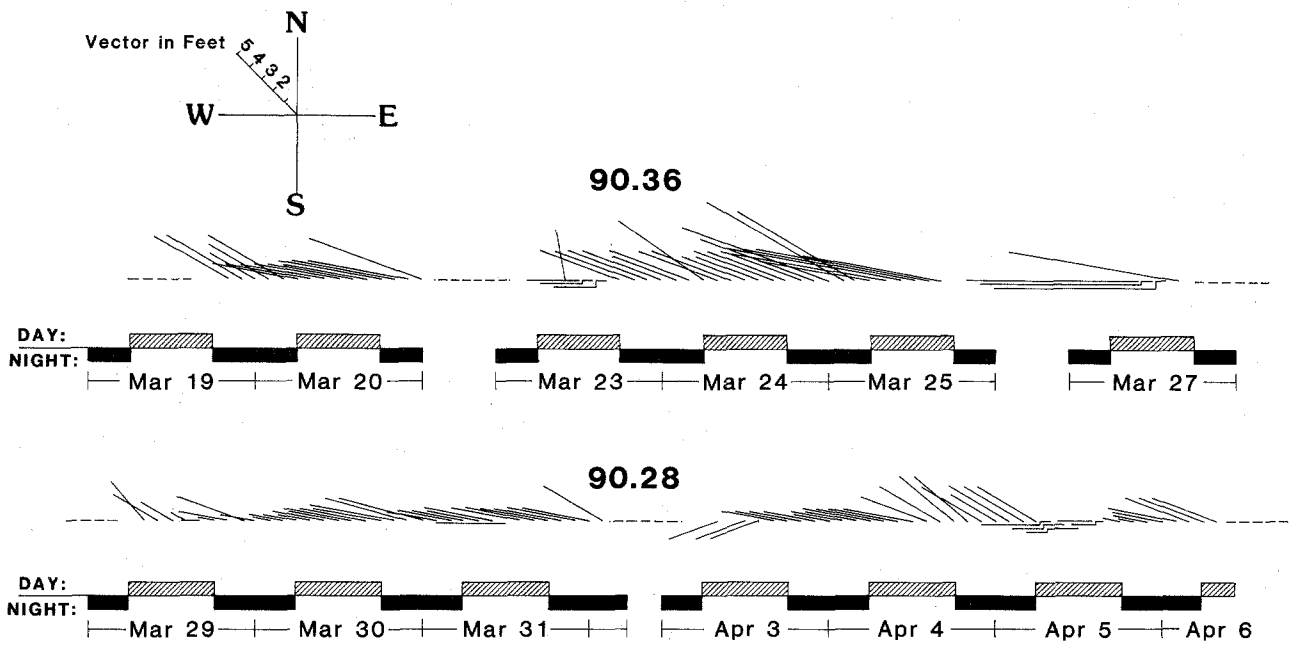


Figure 8. Swell direction and height during Cruise 8003-EB. Vectors point to direction from which swells are coming.

Table 1. Station data for vertical distribution cruise 8003-EB.

CalCOFI Station	Date	Order Occupied	Sampler	Tow No.	Approx. Depth Stratum (m)	Night or Day	Start Time	Preservative (Form. or Eth.)	Chlorophyll file	Particle file	Surface Temp. (°C)	Wind Direction (degr.)	Wind Speed (knots)	Swell Direction (degr.)	Swell Height (ft.)	Total Sky Cover (1-10)
90.2 35.8	3-19	1	Manta	1	Surface	N	20:15	Eth.			16.44	270	5	300	5	0
90.2 35.8	3-19	1	Messhai	1	0-50	N	20:21	Eth.			16.44	270	5	300	5	0
90.2 35.8	3-20	1	Messhai	3	0-50	N	02:06	Eth.			16.27	340	2	300	4	0
90.2 35.8	3-20	1	Manta	2	Surface	N	03:39	Eth.			16.27	999	0	300	5	0
90.2 35.8	3-20	1	O/C BOBL	1	0-200	N	04:43	Eth.			16.27	999	0	300	2	2
90.2 35.8	3-20	1	O/C BOBL	2	200-400	N	05:24	Eth.			16.27	280	8	280	5	2
90.2 35.8	3-20	1	Manta	3	Surface	D	08:57	Eth.			16.30	280	8	280	5	2
90.2 35.8	3-20	2	Messhai	6	0-50	D	14:21	Eth.			16.67	300	8	280	5	2
90.2 35.8	3-20	2	Manta	4	Surface	D	15:32	Eth.			16.67	300	12	280	5	2
90.2 35.8	3-20	2	O/C BOBL	3	200-400	D	16:20	Eth.			16.67	300	12	280	5	2
90.2 35.8	3-20	2	O/C BOBL	4	0-200	D	18:00	Eth.			16.34	300	15	280	6	3
90.2 35.8	3-20	3	Manta	5	Surface	N	18:57	Form.			16.34	300	15	280	6	3
90.2 35.8	3-20	3	Messhai	7	0-50	N	19:17	Form.			16.27	300	15	280	6	3
90.2 35.8	3-20	3	Messhai	8	0-200	N	20:50	Form.			16.19	280	20	290	7	5
90.2 35.8	3-23	5	Manta	6	Surface	D	09:50	Form.			16.27	270	12	350	3	3
90.2 35.8	3-23	5	Messhai	10	0-50	D	10:51	Form.		+	16.27	270	12	350	3	3
90.2 35.8	3-23	5	Messhai	11	0-200	D	13:08	Form.			16.37	270	8	270	3	1
90.2 35.8	3-23	5	Messhai	12	0-50	D	16:08	Form.			16.27	270	10	270	3	3
90.2 35.8	3-23	5	Manta	7	Surface	D	17:52	Form.			16.27	250	10	290	5	4
90.2 35.8	3-23	6	Manta	8	Surface	D	19:11	Form.			16.14	250	10	290	5	4
90.2 35.8	3-23	6	Messhai	13	0-50	N	19:43	Form.		+	16.14	250	10	290	5	4
90.2 35.8	3-23	6	Messhai	14	0-200	N	21:22	Form.			16.12	250	12	290	5	3
90.2 35.8	3-24	6	Messhai	15	0-50	N	00:16	Form.			16.07	250	12	290	5	4
90.2 35.8	3-24	6	Manta	9	Surface	N	01:27	Form.			16.07	270	8	290	4	4
90.2 35.8	3-24	6	O/C BOBL	5	0-200	N	02:20	Form.			16.07	270	8	290	4	4
90.2 35.8	3-24	6	O/C BOBL	6	200-400	N	03:08	Form.			16.07	230	8	290	5	4
90.2 35.8	3-24	7	Manta	10	Surface	D	07:08	Form.			16.02	280	10	290	5	9
90.2 35.8	3-24	7	Messhai	16	0-50	D	07:45	Form.		+	16.02	280	10	290	5	9
90.2 35.8	3-24	7	Messhai	17	0-200	D	09:05	Form.			16.14	280	12	290	5	8
90.2 35.8	3-24	7	Messhai	18	0-50	D	12:24	Form.			16.14	270	8	290	4	8
90.2 35.8	3-24	7	Manta	11	Surface	D	14:02	Form.			16.24	270	10	290	4	7
90.2 35.8	3-24	7	O/C BOBL	7	0-200	D	14:23	Form.			16.24	270	10	290	4	7
90.2 35.8	3-24	7	O/C BOBL	8	200-400	D	15:04	Form.			16.24	270	12	290	5	4
90.2 35.8	3-24	8	Manta	12	Surface	N	19:18	Form.			16.14	270	12	290	5	6
90.2 35.8	3-24	8	Messhai	19	0-50	N	19:36	Form.		+	16.14	270	12	290	5	6
90.2 35.8	3-24	8	Messhai	20	0-200	N	21:15	Form.			15.74	290	15	290	7	4
90.2 35.8	3-25	8	Messhai	21	0-50	N	00:47	Form.			15.67	290	12	290	9	4
90.2 35.8	3-25	8	Manta	13	Surface	N	02:03	Form.			15.67	290	11	300	9	4
90.2 35.8	3-25	8	O/C BOBL	9	0-200	N	02:48	Form.			15.67	290	11	300	9	4
90.2 35.8	3-25	8	O/C BOBL	10	200-400	N	03:48	Form.			15.67	999	1	300	8	2
90.2 35.8	3-25	9	Manta	14	Surface	D	07:05	Form.		+	16.04	280	10	280	9	4
90.2 35.8	3-25	9	Messhai	22	0-50	D	08:27	Form.			16.04	280	10	280	9	4
90.2 35.8	3-25	9	Messhai	23	0-200	D	10:53	Form.			16.04	290	16	280	10	4
90.2 35.8	3-25	9	Messhai	24	0-50	D	13:55	Form.			15.94	290	10	280	10	4
90.2 35.8	3-25	9	Manta	15	Surface	D	15:39	Form.			15.94	270	15	280	8	9
90.2 35.8	3-25	9	O/C BOBL	11	0-200	D	15:54	Form.			15.94	270	15	280	8	9
90.2 35.8	3-25	9	O/C BOBL	12	200-400	D	16:35	Form.			15.94	270	15	280	8	9

Table 1. Continued.

CalCOFI Station	Date	Order Occupied	Sampler	Tow No.	Approx. Depth Stratum (m)	Night or Day	Start Time	Preservative (Form. or Eth.)	Chlorophyll Profile	Particle Profile	Surface Temp. (°C)	Wind Direction (degr.)	Wind Speed (knots)	Swell Direction (degr.)	Swell Height (ft.)	Total Sky Cover (1-10)
90.2 35.8	3-27	10	Manta	16	Surface	D	08:58	Form.			15.99	999	1	270	10	3
90.2 35.8	3-27	10	Messhai	25	0-50	D	09:13	Eth.		+	15.99	999	1	270	10	3
90.2 35.8	3-27	10	Messhai	26	0-200	D	10:56	Eth.			16.04	999	1	270	10	3
90.2 35.8	3-27	10	Messhai	27	0-50	D	13:52	Eth.			16.32	999	1	270	10	4
90.2 35.8	3-27	10	Manta	17	Surface	D	15:00	Eth.			16.32	280	8	280	10	3
90.2 35.8	3-27	10	O/C BOBL	13	0-200	D	15:31	Eth.			16.32	280	8	280	10	3
90.2 35.8	3-27	10	O/C BOBL	14	200-400	D	16:24	Eth.			16.32	280	8	280	10	3
90.0 28.2	3-29	11	Manta	18	Surface	D	08:20	Eth.			15.49	999	1	320	3	0
90.0 28.2	3-29	11	Messhai	28	0-50	D	08:40	Eth.		+	15.49	999	1	320	3	0
90.0 28.2	3-29	11	Messhai	29	0-200	D	10:29	Eth.			15.69	999	1	300	3	0
90.0 28.2	3-29	11	Messhai	30	0-50	D	13:20	Eth.			15.89	999	1	300	1	0
90.0 28.2	3-29	11	Manta	19	Surface	D	14:26	Eth.			15.89	999	1	300	1	0
90.0 28.2	3-29	11	O/C BOBL	1	0-200	D	15:18	Eth.			15.89	999	1	270	1	0
90.0 28.2	3-29	11	O/C BOBL	15	200-400	N	15:56	Eth.			15.89	999	1	270	1	0
90.0 28.2	3-29	12	Manta	20	Surface	N	20:11	Eth.		+	15.84	300	12	280	3	0
90.0 28.2	3-29	12	Messhai	31	0-50	N	20:30	Eth.			15.84	300	12	280	3	0
90.0 28.2	3-29	12	Messhai	32	0-200	N	22:14	Eth.			15.77	290	12	290	4	0
90.0 28.2	3-30	12	Messhai	33	0-50	N	00:59	Eth.			15.64	999	1	280	2	0
90.0 28.2	3-30	12	Manta	21	Surface	N	02:14	Eth.			15.64	999	1	280	1	0
90.0 28.2	3-30	12	CalBOBL	2	0-200	N	02:45	Eth.			15.64	999	1	280	1	0
90.0 28.2	3-30	12	O/C BOBL	16	200-400	N	03:50	Eth.			15.64	70	10	280	2	3
90.0 28.2	3-30	13	Manta	22	Surface	D	08:41	Form.		+	15.74	130	10	280	2	4
90.0 28.2	3-30	13	Messhai	34	0-50	D	09:39	Form.			15.74	160	12	280	3	5
90.0 28.2	3-30	13	Messhai	35	0-200	D	11:39	Form.			15.99	160	4	280	4	3
90.0 28.2	3-30	13	Messhai	36	0-50	D	15:55	Form.			16.07	999	0	280	4	3
90.0 28.2	3-30	13	Manta	23	Surface	D	17:32	Form.			16.07	999	0	280	4	5
90.0 28.2	3-30	13	CalBOBL	3	0-200	D	19:43	Form.			16.07	999	0	280	4	5
90.0 28.2	3-30	14	Manta	24	Surface	N	19:47	Form.		+	15.72	230	10	280	5	6
90.0 28.2	3-30	14	Messhai	37	0-50	N	20:09	Form.			15.72	230	10	280	5	6
90.0 28.2	3-30	14	Messhai	38	0-200	N	21:59	Form.			15.67	230	10	285	5	5
90.0 28.2	3-31	14	Messhai	39	0-50	N	01:09	Form.			15.67	135	11	280	3	5
90.0 28.2	3-31	14	Manta	25	Surface	N	02:29	Form.			15.67	135	11	280	3	5
90.0 28.2	3-31	14	CalBOBL	4	0-200	N	02:55	Form.			15.67	135	11	280	3	5
90.0 28.2	3-31	14	O/C BOBL	17	200-400	N	03:40	Form.			15.67	999	1	280	3	0
90.0 28.2	3-31	15	Manta	26	Surface	D	08:20	Form.		+	15.59	999	0	280	3	3
90.0 28.2	3-31	15	Messhai	40	0-50	D	08:58	Form.			15.59	999	0	280	3	3
90.0 28.2	3-31	15	Messhai	41	0-200	D	10:41	Form.			15.84	270	10	280	4	4
90.0 28.2	3-31	15	Messhai	42	0-50	D	13:38	Form.			15.79	280	8	280	4	1
90.0 28.2	3-31	15	Manta	27	Surface	D	15:00	Form.			15.79	270	8	280	4	0
90.0 28.2	3-31	15	O/C BOBL	5	0-200	D	15:24	Form.		+	15.79	270	8	280	4	0
90.0 28.2	3-31	16	Manta	18	200-400	D	16:13	Form.			15.79	270	8	280	4	0
90.0 28.2	3-31	16	Messhai	28	Surface	N	19:55	Form.		+	15.72	280	10	280	4	3
90.0 28.2	3-31	16	Messhai	43	0-50	N	20:50	Form.			15.72	280	10	280	4	3
90.0 28.2	3-31	16	Messhai	44	0-200	N	22:40	Form.			15.89	280	10	280	4	3
90.0 28.2	4-01	16	Messhai	45	0-50	N	01:19	Form.			15.74	999	1	280	4	2
90.0 28.2	4-03	17	Manta	29	Surface	D	08:27	Eth.			15.17	130	5	250	3	0
90.0 28.2	4-03	17	Messhai	46	0-50	D	08:53	Eth.		+	15.17	130	5	250	3	0
90.0 28.2	4-03	17	Messhai	47	0-200	D	10:36	Eth.			15.54	130	5	250	3	0

Table 1. Continued.

CalCOFI Station	Date	Order Occupied	Sampler	Tow No.	Approx. Depth Stratum (m)	Night or Day	Start Time	Preservative (Form. or Eth.)	Chlorophyll Profile	Particle Profile	Surface Temp. (°C)	Wind Direction (degr.)	Wind Speed (knots)	Swell Direction (degr.)	Swell Height (ft.)	Total Sky Cover (1-10)
90.0 28.2	4-03	17	Messhai	48	0-50	D	14:06	Eth.			15.37	300	10	250	3	0
90.0 28.2	4-03	17	Manta	30	Surface	D	15:49	Eth.			15.37	290	12	280	3	2
90.0 28.2	4-03	17	CalBOBL	6	0-200	D	16:01	Eth.			15.37	290	12	280	3	2
90.0 28.2	4-03	17	O/C BOBL	19	200-400	D	16:45	Eth.			15.37	290	12	280	3	2
90.0 28.2	4-03	18	Manta	31	Surface	N	19:42	Eth.			14.94	300	15	280	3	2
90.0 28.2	4-03	18	Messhai	49	0-50	N	20:35	Eth.	+		14.94	300	15	280	3	2
90.0 28.2	4-03	18	Messhai	50	0-200	N	22:41	Eth.			14.77	300	15	280	3	3
90.0 28.2	4-04	18	Messhai	51	0-50	N	02:37	Eth.			14.84	999	1	280	3	2
90.0 28.2	4-04	18	Manta	32	Surface	N	04:13	Eth.			14.84	999	0	280	3	3
90.0 28.2	4-04	18	CalBOBL	7	0-200	N	04:30	Eth.			14.84	999	0	280	3	3
90.0 28.2	4-04	18	O/C BOBL	20	200-400	N	05:05	Eth.			14.84	999	0	280	4	3
90.0 28.2	4-04	19	Manta	33	Surface	D	08:45	Eth.			14.79	999	0	280	4	3
90.0 28.2	4-04	19	Messhai	52	0-50	D	09:20	Eth.	+		14.79	280	5	280	4	3
90.0 28.2	4-04	19	Messhai	53	0-200	D	11:10	Form.			15.42	280	5	280	4	3
90.0 28.2	4-04	19	Messhai	54	0-50	D	14:50	Form.			15.14	280	12	290	4	4
90.0 28.2	4-04	19	Manta	34	Surface	D	16:27	Form.			15.14	290	10	300	4	4
90.0 28.2	4-04	19	CalBOBL	8	0-200	D	16:36	Form.			15.14	290	10	300	4	4
90.0 28.2	4-04	19	O/C BOBL	21	200-400	D	17:15	Form.			15.14	290	14	310	4	7
90.0 28.2	4-04	20	Manta	35	Surface	N	19:44	Form.			14.82	290	14	310	4	5
90.0 28.2	4-04	20	Messhai	55	0-50	N	20:50	Form.	+		14.82	290	14	310	4	5
90.0 28.2	4-04	20	Messhai	56	0-200	N	22:42	Form.			14.74	290	12	300	4	3
90.0 28.2	4-05	20	Messhai	57	0-50	N	01:45	Form.			14.67	90	5	300	4	8
90.0 28.2	4-05	20	Manta	36	Surface	N	03:27	Form.			14.67	999	1	300	4	8
90.0 28.2	4-05	20	CalBOBL	9	0-200	N	03:40	Form.			14.67	999	1	300	4	8
90.0 28.2	4-05	20	O/C BOBL	22	200-400	N	04:20	Form.			14.67	999	1	300	4	8
90.0 28.2	4-05	21	Manta	37	Surface	D	08:06	Form.			15.06	90	10	270	4	9
90.0 28.2	4-05	21	Messhai	58	0-50	D	08:50	Form.	+		15.06	90	10	270	4	9
90.0 28.2	4-05	21	Messhai	59	0-200	D	10:31	Eth.			15.69	999	0	270	3	8
90.0 28.2	4-05	21	Messhai	60	0-50	D	13:42	Eth.			15.82	190	4	270	2	8
90.0 28.2	4-05	21	Manta	38	Surface	D	15:09	Eth.			15.82	220	5	270	2	8
90.0 28.2	4-05	21	CalBOBL	10	0-200	D	15:25	Eth.			15.82	220	5	270	2	8
90.0 28.2	4-05	21	O/C BOBL	23	200-400	D	16:50	Eth.			15.82	220	5	270	2	8
90.0 28.2	4-05	22	Manta	39	Surface	N	20:00	Eth.			15.59	999	1	280	1	8
90.0 28.2	4-05	22	Messhai	61	0-50	N	20:40	Eth.	+		15.59	999	1	280	1	8
90.0 28.2	4-05	22	Messhai	62	0-200	N	22:35	Eth.			15.26	280	9	280	2	8
90.0 28.2	4-06	22	Messhai	63	0-50	N	01:27	Eth.			15.44	270	5	280	4	7
90.0 28.2	4-06	22	Manta	40	Surface	N	02:38	Eth.			15.44	270	5	280	4	7
90.0 28.2	4-06	22	CalBOBL	11	0-200	N	03:10	Eth.			15.44	290	12	290	4	3
90.0 28.2	4-06	22	O/C BOBL	24	200-400	N	03:50	Eth.			15.44	290	12	290	4	3
90.0 28.2	4-06	23	Manta	41	Surface	D	08:39	Form.			15.50	200	10	290	4	1

Table 2. Tow and catch data for MANTA nets.

Tow No.	Date	Time	Duration (min)	Vol. Filtered (m ³)	Plankton Vol. (ml)	An-chovy Eggs	An-chovy Larvae	An-chovy Eggs/100 m ³	An-chovy Larvae	An-chovy Larv./100 m ³	Other Fish Eggs	Other Fish Larvae
1	3-19	20:15	5.0	31.19	2.9	186	9	596.34	9	28.86	0	0
2	3-20	03:39	5.0	35.15	3.2	128	11	364.15	11	31.29	0	0
3	3-20	08:57	5.2	40.05	2.7	938	1	2342.07	1	2.50	2	0
4	3-20	15:32	5.0	29.62	1.6	189	0	638.08	0	.00	0	0
5	3-20	18:57	5.0	52.23	7.3	208	70	398.24	70	134.02	0	0
6	3-23	09:50	5.0	35.65	4.0	427	0	1197.76	0	.00	0	0
7	3-23	17:52	5.0	52.51	2.8	559	29	1064.56	29	55.23	0	0
8	3-23	19:11	5.3	51.62	8.5	447	95	865.94	95	184.04	0	0
9	3-24	01:27	5.0	39.69	13.4	556	25	1400.86	25	62.99	4	0
10	3-24	07:08	5.0	30.90	1.4	927	17	3000.00	17	55.02	0	0
11	3-24	14:02	5.0	33.87	3.6	2227	35	6575.14	35	103.34	0	0
12	3-24	19:18	5.0	45.83	7.8	708	36	1544.84	36	78.55	0	1
13	3-25	02:03	5.0	54.41	9.0	3146	294	5782.03	294	540.34	0	0
14	3-25	07:05	5.0	32.83	3.3	1892	57	5763.02	57	173.62	0	0
15	3-25	15:39	5.2	61.37	4.8	1370	228	2232.36	228	371.52	0	0
16	3-27	08:58	5.0	43.12	1.0	735	14	1704.55	14	32.47	0	0
17	3-27	15:00	5.0	35.51	2.9	378	1	1064.49	1	2.82	0	0
18	3-29	08:20	5.0	44.91	22.7	1886	383	4199.51	383	852.82	39	40
19	3-29	14:26	5.0	41.65	10.6	63	7	151.26	7	16.81	0	4
20	3-29	20:11	5.0	41.33	15.2	1	28	2.42	28	67.75	0	3
21	3-30	02:14	5.0	53.05	11.5	746	7	1406.22	7	13.20	149	3
22	3-30	08:41	5.0	47.23	21.9	3003	168	6358.25	168	355.71	9	1
23	3-30	17:32	5.0	34.55	31.7	75	189	217.08	189	547.03	0	0
24	3-30	19:47	5.1	44.51	24.7	75	19	168.50	19	42.69	0	1
25	3-31	02:29	5.0	37.08	12.9	745	8	2009.17	8	21.57	1	0
26	3-31	08:20	5.1	37.05	37.2	4084	6	11022.94	6	16.19	1	0
27	3-31	15:00	5.0	49.94	11.0	492	127	985.18	127	254.31	0	0
28	3-31	19:55	5.0	42.55	17.7	332	236	780.26	236	554.64	1	5
29	4-03	08:27	5.0	42.51	13.8	180	10	423.43	10	23.52	74	9
30	4-03	15:49	5.0	29.22	10.3	484	2	1656.40	2	6.84	219	8
31	4-03	19:42	5.1	49.76	85.8	308	122	618.97	122	245.18	726	35
32	4-04	04:13	5.0	30.04	42.8	965	27	3212.38	27	89.88	496	32
33	4-04	08:45	5.0	31.83	8.2	781	38	2453.66	38	119.38	158	24
34	4-04	16:27	5.0	47.76	6.9	205	34	429.23	34	71.19	3	0
35	4-04	19:44	5.1	43.98	46.0	353	264	802.64	264	600.27	146	27
36	4-05	03:27	5.0	36.37	6.3	82	89	225.46	89	244.71	127	5
37	4-05	08:06	5.0	35.33	5.2	45	22	127.37	22	62.27	51	2
38	4-05	15:09	5.0	40.65	14.8	2425	116	5965.56	116	285.36	0	0
39	4-05	20:00	5.0	58.09	4.5	3182	68	5477.71	68	117.06	2	3
40	4-06	02:38	5.0	20.70	30.3	426	83	2057.97	83	400.97	2	2
41	4-06	08:39	5.0	12.37	9.0	165	91	1333.87	91	735.65	17	1

Table 3. Stages and ages of anchovy eggs taken in MANTA nets.

Tow No.	Stages										Dis. Eggs	Ages						
	I	II	III	IV	V	VI	VII	VIII	IX	X		XI	S	A	B	C	D	E
1	0	1	0	3	113	1	0	10	42	0	0	16	1	128	57	0	0	0
2	0	0	8	6	15	38	0	0	0	59	1	1	0	14	53	61	0	0
3	0	0	858	0	0	34	27	0	0	0	0	19	0	876	62	0	0	0
4	0	0	0	36	0	2	64	78	0	0	1	8	0	38	150	1	0	0
5	0	0	0	0	30	0	0	130	27	0	0	21	0	33	175	0	0	0
6	0	0	213	0	0	72	138	0	0	0	1	3	0	214	212	1	0	0
7	0	0	0	0	388	1	1	98	60	0	0	11	0	397	162	0	0	0
8	0	0	0	138	96	0	73	71	0	0	0	69	0	277	170	0	0	0
9	0	252	3	0	57	74	0	86	57	0	27	265	0	141	150	0	0	0
10	0	0	213	0	0	440	52	0	1	100	113	8	0	215	496	216	0	0
11	0	0	0	1332	0	4	660	153	4	0	0	74	0	1378	849	0	0	0
12	20	0	0	108	166	0	0	229	135	0	0	50	22	295	391	0	0	0
13	0	1593	0	0	1197	64	0	123	169	0	53	129	0	1593	1261	292	0	0
14	0	571	148	0	0	885	23	0	0	83	0	310	0	1240	130	0	0	0
15	0	0	0	959	0	0	79	22	0	13	1	49	0	599	121	15	0	0
16	0	0	3	3	3	0	2	1	0	0	0	37	0	375	3	0	0	0
17	0	0	75	260	3	0	19	11	0	11	0	351	0	1117	732	37	0	0
18	0	0	905	4	581	15	0	0	0	6	0	0	0	55	2	6	0	0
19	0	0	42	13	0	0	2	0	0	0	0	0	0	0	1	0	0	0
20	0	0	0	0	0	0	1	0	0	0	0	207	0	18	547	181	0	0
21	0	13	0	7	387	1	0	130	1	42	0	121	0	1927	994	82	0	0
22	0	1764	85	0	393	556	6	0	36	43	15	0	0	13	62	0	0	0
23	0	0	4	9	0	0	1	1	2	12	9	0	0	38	28	9	0	0
24	0	0	0	38	0	0	0	16	0	0	0	0	0	324	370	51	0	0
25	0	0	0	0	333	37	0	10	40	1	0	350	0	3720	338	26	0	0
26	0	324	0	0	0	301	8	0	24	0	0	64	0	107	288	97	0	0
27	0	3035	366	0	0	146	104	1	0	59	25	0	0	97	235	0	0	0
28	0	0	93	0	0	6	182	38	1	6	0	3	0	94	60	26	0	0
29	0	0	0	96	58	0	0	0	0	25	0	6	0	446	22	16	0	0
30	0	3	336	91	1	14	7	0	0	14	1	17	0	90	189	29	0	0
31	0	0	21	57	2	11	143	13	0	23	3	35	0	90	101	774	0	0
32	0	2	87	74	21	4	0	761	2	0	0	14	0	387	163	231	0	0
33	0	0	372	0	156	0	0	35	176	11	0	31	0	145	38	22	0	0
34	0	0	130	14	0	17	8	6	13	21	1	1	0	25	80	248	0	0
35	0	0	0	22	2	42	30	7	20	213	11	7	0	4	59	19	0	0
36	0	0	4	0	18	5	7	4	1	13	0	1	0	18	17	10	0	0
37	0	17	0	1	11	2	4	0	3	1	0	0	0	2246	107	72	0	0
38	0	0	213	2023	10	107	0	0	0	53	19	0	0	3004	178	0	0	0
39	0	0	0	0	2399	293	0	108	0	19	0	331	0	10	390	26	0	0
40	0	0	10	2	358	11	6	18	7	7	0	14	0	38	124	3	0	0
41	0	37	0	0	0	113	7	0	2	1	0	5	0	0	0	0	0	0

Table 5. Tow and catch data for MESSHAI nets.

Tow Net No.	Date	Time	Duration (min)	Approx. Depth Stratum (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Dis- tance (m)	Vol. Fil- tered (m ³)	Plank- ton Vol. (ml)	An- chovy Eggs	An- chovy Eggs/ 100 m ³	An- chovy Larv. / 100 m ³	Other Fish Eggs	Other Fishvae
1	3-19	20:21	13.9	0-50	0	69.1	57.0	12.7	.89	294	294	17.46	1.6	20	114.55	16	91.64	0
2			3.0	40-50	37.7	50.0	44.9	13.9	1.19	208	208	11.50	2.5	0	.00	15	130.43	0
3			3.8	30-40	29.9	37.7	33.0	15.5	1.37	316	316	17.49	2.1	174	994.85	75	428.82	0
4			4.3	20-30	19.6	29.9	24.3	16.1	1.41	359	359	19.94	2.4	54	270.81	46	230.69	0
5			3.7	10-20	10.3	19.6	14.0	16.2	1.31	283	283	16.87	.9	41	243.03	15	88.92	0
6			2.3	0-10	0	10.3	4.6	16.4	.88	124	124	7.36	.7	15	203.80	1	13.59	0
3	3-20	02:06	4.0	0-50	0	52.9	32.1	14.8	.58	140	140	7.52	.6	1	13.30	1	13.30	0
2			10.5	40-50	39.2	51.4	44.8	13.7	.95	596	596	35.59	2.3	0	.00	51	143.30	0
3			10.7	30-40	28.9	40.2	34.6	15.4	.91	580	580	33.75	3.2	102	302.22	59	174.81	0
4			10.7	20-30	19.6	29.9	24.6	16.2	.78	499	499	28.84	3.0	354	1227.46	44	152.57	0
5			10.5	10-20	9.3	20.1	14.9	16.3	.84	531	531	29.91	1.7	42	140.42	8	26.75	0
6			9.0	0-10	0	10.3	6.0	16.3	.78	421	421	23.62	2.8	79	334.46	35	148.18	0
6	3-20	14:21	4.9	0-50	0	52.4	48.5	14.1	.56	155	155	9.28	.5	5	53.88	3	32.33	2
2			10.5	40-50	39.7	50.4	44.9	14.1	.58	370	370	22.70	.9	0	.00	23	101.32	0
3			11.2	30-40	29.4	41.1	34.6	15.6	.68	459	459	27.61	1.4	123	445.49	51	184.72	0
4			11.3	20-30	19.1	30.4	24.5	16.1	.83	564	564	35.43	2.5	168	474.17	71	200.40	0
5			10.5	10-20	8.8	20.1	14.1	16.3	.82	521	521	32.21	2.5	173	537.10	17	52.78	0
6			8.8	0-10	0	9.3	5.4	16.4	.89	475	475	27.61	2.2	156	565.01	5	18.11	0
7	3-20	19:17	4.0	0-50	0	50.4	35.6	15.0	.47	119	119	7.36	.3	0	.00	2	27.17	1
2			10.5	40-50	40.2	52.4	45.3	14.1	.67	421	421	30.07	.7	1	3.33	13	43.23	0
3			12.7	30-40	28.9	41.6	35.5	15.7	.89	680	680	44.48	3.2	37	83.18	102	229.32	0
4			11.2	20-30	18.6	31.3	25.1	16.1	.76	513	513	33.44	3.9	70	209.33	77	230.26	0
5			11.5	10-20	9.3	21.0	14.5	16.2	.79	545	545	36.81	2.0	36	97.80	43	116.82	0
6			9.8	0-10	0	10.8	6.1	16.3	.91	540	540	36.20	3.5	191	527.62	14	38.67	0
8	3-20	20:50	13.5	0-200	0	205.7	154.6	10.7	1.06	685	685	39.58	1.3	20	50.53	13	32.84	3
2			22.8	160-200	159.2	202.8	180.1	9.7	1.13	1554	1554	91.73	8.5	9	9.81	6	6.54	1
3			22.5	120-160	119.5	162.6	140.8	10.1	.82	1106	1106	74.24	1.2	1	1.35	7	9.43	1
4			22.3	80-120	79.3	121.4	99.5	11.0	1.05	1416	1416	98.02	2.6	0	.00	5	5.10	17
5			23.8	40-80	38.2	82.8	60.2	12.5	1.14	1632	1632	113.82	7.1	5	4.39	151	132.67	34
6			21.0	0-40	0	39.2	21.6	15.8	1.42	1786	1786	113.21	12.5	543	479.64	432	381.59	5
9	3-20	23:20	7.5	0-50	0	52.9	41.1	14.1	1.27	477	477	32.98	2.0	20	60.64	11	33.35	12
2			10.7	40-50	38.2	51.4	44.9	13.5	1.41	904	904	70.87	1.5	0	.00	32	45.15	3
3			11.2	30-40	28.4	42.1	34.8	15.3	1.23	825	825	65.04	3.1	274	421.28	135	207.56	0
4			12.2	20-30	18.6	30.4	24.9	16.1	1.18	866	866	67.19	5.3	220	327.43	157	233.67	0
5			11.2	10-20	8.8	22.0	14.5	16.2	1.36	909	909	74.40	2.3	61	81.99	41	55.11	1
6			8.0	0-10	0	10.8	6.0	16.3	1.39	667	667	65.96	6.0	288	436.63	51	77.32	0
10	3-23	10:51	8.2	0-50	0	50.4	27.2	15.4	.97	475	475	29.61	1.8	62	209.39	21	70.92	3
2			11.0	40-50	39.7	50.4	44.6	14.7	1.32	869	869	58.29	2.6	20	34.31	157	269.34	4
3			10.5	30-40	28.9	40.6	34.8	16.0	1.31	825	825	55.84	2.1	125	223.85	65	116.40	0
4			10.3	20-30	19.1	29.9	24.7	16.0	1.27	785	785	53.23	1.2	209	392.64	35	65.75	0
5			10.8	10-20	8.8	20.1	14.5	16.0	1.23	796	796	54.30	1.1	206	379.37	22	40.52	0
6			8.5	0-10	0	9.3	5.4	16.1	1.24	637	637	38.96	1.0	159	408.11	0	.00	0

Table 5. Continued.

Tow Net Date Time	Duration (min)	Approx. Depth (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered (m ³)	Plankton Vol. (ml)	An-chovy Eggs	An-chovy Larvae	An-chovy Eggs/100 m ³	An-chovy Larvae/100 m ³	Other Fish Eggs	Other Fish Larvae
11 1	3-23 13:08	0-200	0	202.3	117.1	11.6	.83	750	45.10	.7	6	15	13.30	33.26	3	1
2		160-200	159.2	200.3	180.4	9.3	1.13	1505	91.73	2.0	0	9	.00	9.81	1	0
3		120-160	119.5	161.1	140.1	9.8	1.15	1408	89.89	2.1	5	0	5.56	.00	1	4
4		80-120	79.3	120.5	99.0	10.4	1.23	1570	103.54	9.4	1	0	.97	1.93	19	16
5		40-80	38.7	81.3	60.0	12.3	1.13	1408	92.04	8.4	4	69	4.35	74.97	35	8
6		0-40	0	40.2	21.4	16.0	1.08	1171	75.78	5.0	272	51	358.93	67.30	0	0
12 1	3-23 16:08	0-50	0	59.3	42.5	14.1	.76	264	15.95	1.9	6	17	37.62	106.58	4	0
2		40-50	38.7	50.9	44.5	14.0	.79	504	32.06	2.8	5	74	15.60	230.82	3	1
3		30-40	28.9	40.2	34.6	15.6	.73	461	29.15	1.3	3	21	10.29	72.04	0	0
4		20-30	19.6	29.9	24.9	16.0	.83	542	33.75	2.3	76	27	225.19	80.00	0	0
5		10-20	8.3	20.1	14.6	16.0	.84	553	34.67	2.7	26	8	74.99	23.07	0	0
6		0-10	0	10.3	6.1	16.2	.67	356	19.63	1.2	115	4	585.84	20.38	0	0
13 1	3-23 19:43	0-50	0	50.9	28.7	15.4	1.07	302	17.18	2.7	38	40	221.19	232.83	0	1
2		40-50	39.7	51.4	45.0	14.3	1.18	836	50.47	9.2	6	171	11.89	338.82	4	0
3		30-40	29.9	40.6	35.0	15.2	1.25	858	52.15	9.2	30	215	57.53	412.27	1	4
4		20-30	19.1	30.9	25.0	15.9	1.22	815	48.63	6.4	219	174	450.34	357.80	0	0
5		10-20	9.3	20.1	14.7	16.0	1.19	820	48.47	5.6	512	79	1036.32	162.99	0	0
6		0-10	0	9.8	5.8	16.1	1.16	637	35.59	3.7	482	22	1354.31	61.82	0	0
14 1	3-23 21:22	0-200	0	200.3	133.1	10.7	.84	788	45.41	1.4	36	12	79.28	26.43	6	1
2		160-200	159.2	206.7	181.4	9.1	1.21	1619	100.01	2.1	0	29	.00	29.00	2	9
3		120-160	120.0	165.0	141.9	9.5	1.43	1964	118.27	1.8	0	11	.00	9.30	0	4
4		80-120	76.4	121.9	100.0	10.3	1.37	1878	113.51	3.1	1	1	.88	.88	12	19
5		40-80	40.2	79.3	59.2	13.3	1.25	1629	104.92	10.1	48	124	45.75	118.19	21	9
6		0-40	0	41.1	22.0	15.8	1.20	1446	91.42	12.8	319	170	348.94	185.95	0	1
15 1	3-24 00:16	0-50	0	50.4	39.4	15.0	1.13	289	17.17	1.7	37	31	215.49	180.55	2	0
2		40-50	39.7	49.0	44.9	14.4	1.03	691	46.33	4.6	19	72	41.01	155.41	2	1
3		30-40	28.9	41.1	34.7	15.2	.92	610	40.50	6.5	67	57	165.43	140.74	0	1
4		20-30	19.1	29.9	24.3	15.9	1.08	691	46.33	6.9	99	119	213.68	256.85	0	0
5		10-20	9.3	20.1	14.5	16.0	1.05	674	45.71	5.9	145	102	317.22	223.15	0	0
6		0-10	0	9.8	6.1	16.1	1.03	486	30.37	5.9	321	26	1056.96	85.61	0	0
16 1	3-24 07:45	0-50	0	50.4	35.0	15.1	1.20	406	24.12	1.4	70	31	290.22	128.52	2	1
2		40-50	38.2	51.4	44.9	14.5	1.46	1004	70.98	5.3	90	90	126.80	126.80	7	16
3		30-40	28.4	40.2	34.6	15.7	1.48	987	71.02	5.2	305	184	429.46	259.08	0	0
4		20-30	19.1	29.9	24.4	15.9	1.59	882	63.81	3.4	295	147	462.31	230.37	0	1
5		10-20	9.3	19.6	14.3	16.0	1.36	906	62.74	2.3	400	59	637.55	94.04	0	1
6		0-10	0	10.3	5.7	16.0	1.38	750	49.39	2.2	312	15	631.71	30.37	1	0
17 1	3-24 09:05	0-200	0	201.8	123.7	10.9	1.12	1187	70.05	2.2	38	15	54.25	21.41	5	8
2		160-200	158.7	199.3	178.8	9.1	1.40	1931	112.90	2.9	6	15	5.31	13.29	2	9
3		120-160	119.5	162.6	141.3	9.6	1.33	1780	103.39	1.8	32	5	30.95	4.84	0	0
4		80-120	77.9	123.9	100.5	10.4	1.37	1856	108.30	3.8	0	0	.00	.00	31	14
5		40-80	38.7	80.8	58.9	12.4	1.31	1565	101.70	8.0	11	91	10.82	89.48	58	7
6		0-40	0	39.2	22.5	15.7	1.31	1349	88.97	5.9	697	124	783.41	139.37	1	1

Table 5. Continued.

Tow Net No.	Date	Time	Duration (min)	Approx. Depth Stratum (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered Vol. (m ³)	Plankton Vol. (ml)	Anchoovy Eggs	Anchoovy Eggs/100 m ³	Anchoovy Larvae	Anchoovy Larv./100 m ³	Other Fish Eggs	Other Fish Larvae
18	3-24	12:24	5.3	0-50	0	50.0	32.0	15.4	1.46	469	27.92	1.3	128	458.45	50	179.08	1	1
2			11.7	40-50	39.2	50.4	44.9	14.7	1.50	1047	66.11	5.9	62	93.78	155	234.46	3	2
3			11.0	30-40	28.9	40.2	34.5	15.8	1.45	955	61.20	5.4	179	292.48	226	369.28	1	0
4			10.7	20-30	19.1	30.4	24.4	15.9	1.46	944	60.44	5.2	445	736.27	150	248.18	0	0
5			11.2	10-20	9.8	20.1	14.7	15.9	1.46	968	61.82	3.9	770	1245.55	131	211.91	0	0
6			8.5	0-10	0	10.3	5.8	16.1	1.51	763	46.33	3.8	999	2156.27	39	84.18	0	0
19	3-24	19:36	11.2	0-50	0	52.4	36.7	14.8	1.38	844	50.77	6.0	88	173.33	113	222.57	2	2
2			11.2	40-50	39.7	51.4	45.3	14.4	1.63	1090	72.56	11.1	27	37.21	154	212.24	4	1
3			11.3	30-40	30.4	41.1	35.3	15.4	1.69	1144	77.00	12.1	97	125.97	182	236.36	0	4
4			10.7	20-30	19.6	31.3	25.2	15.9	1.62	1030	69.95	10.3	326	466.05	232	331.67	0	0
5			10.3	10-20	9.3	20.6	14.7	16.1	1.51	931	61.51	7.4	726	1180.30	145	235.73	0	1
6			8.5	0-10	0	10.3	5.9	16.1	1.48	750	49.39	6.4	731	1480.06	60	121.48	0	0
20	3-24	21:15	33.5	0-200	0	203.7	137.4	10.2	1.34	2708	161.37	4.3	100	61.97	52	32.22	8	12
2			25.8	160-200	158.7	201.3	181.3	9.0	1.51	2344	150.48	4.1	1	.66	10	6.65	2	9
3			22.2	120-160	119.0	162.6	140.9	9.4	1.46	1940	126.09	8.2	24	19.03	44	34.90	4	0
4			21.0	80-120	79.8	121.4	99.9	10.3	1.34	1683	105.23	3.9	1	.95	2	1.90	17	10
5			20.8	40-80	39.2	80.3	60.0	12.4	1.36	1710	111.67	10.7	23	20.60	116	103.88	60	22
6			19.2	0-40	0	41.1	21.9	15.2	1.34	1543	101.85	18.3	2009	1972.51	1188	1166.42	1	3
21	3-25	00:47	7.4	0-50	0	50.9	41.0	14.5	1.37	531	31.54	4.9	128	405.83	89	282.18	4	2
2			10.5	40-50	39.7	51.9	45.3	13.9	1.37	869	57.68	7.7	21	36.41	227	393.55	8	3
3			10.0	30-40	28.9	41.1	34.6	15.1	1.40	842	56.76	14.1	227	399.93	671	1182.17	1	0
4			10.8	20-30	21.0	30.4	25.2	15.7	1.42	920	63.05	15.6	1374	2179.22	579	918.32	0	0
5			10.5	10-20	9.3	22.5	15.2	15.8	1.43	904	62.59	9.5	2279	3641.16	611	976.19	0	0
6			9.0	0-10	0	10.8	5.8	15.7	1.38	739	48.17	15.0	1648	3421.22	575	1193.69	0	0
22	3-25	08:27	5.2	0-50	0	51.4	32.3	14.6	1.07	335	23.62	1.1	28	118.54	24	101.61	3	0
2			11.8	40-50	38.7	50.9	45.4	13.4	1.30	923	66.27	1.7	0	.00	56	84.50	0	0
3			11.0	30-40	29.4	39.7	34.4	15.0	1.24	825	59.82	2.8	5	8.36	86	143.76	1	1
4			11.3	20-30	19.1	31.8	25.1	15.9	1.25	847	63.51	2.4	105	165.33	167	262.95	0	0
5			10.7	10-20	8.8	22.0	14.7	16.0	1.31	836	61.51	1.2	97	157.70	94	152.82	0	0
6			6.7	0-10	0	10.8	6.3	16.0	1.37	545	38.66	2.3	389	1006.21	66	170.72	0	0
23	3-25	10:53	17.8	0-200	0	203.2	146.4	10.5	.91	823	48.71	2.2	27	55.43	10	20.53	8	3
2			20.7	160-200	158.2	201.3	180.6	9.1	1.30	1619	100.32	2.6	1	1.00	10	9.97	2	8
3			23.5	120-160	119.0	160.6	140.9	9.6	1.28	1805	111.98	3.1	2	1.79	2	1.79	2	1
4			22.8	80-120	79.8	123.4	101.0	10.3	1.35	1859	117.19	15.2	0	.00	7	5.97	26	20
5			22.2	40-80	39.7	81.3	60.8	12.6	1.40	1867	119.34	16.6	23	19.27	198	165.91	76	15
6			18.2	0-40	0	40.6	21.7	15.6	1.37	1489	95.11	7.9	1111	1168.12	596	626.64	0	2
24	3-25	13:55	7.0	0-50	0	50.9	35.4	14.4	1.30	540	33.29	3.3	160	480.62	102	306.40	9	2
2			11.7	40-50	39.2	50.9	45.0	13.4	1.41	993	67.49	7.9	11	16.30	178	263.74	40	14
3			10.7	30-40	30.4	41.1	35.2	14.4	1.53	982	68.11	10.2	88	129.20	561	823.67	0	20
4			10.8	20-30	19.1	30.9	25.0	15.4	1.51	974	66.11	8.3	813	1229.77	646	977.16	1	1
5			10.8	10-20	9.3	21.5	15.0	15.8	1.45	947	63.51	9.1	1408	2216.97	668	1051.80	0	0
6			9.0	0-10	0	10.8	6.1	15.9	1.43	772	50.93	6.9	1419	2786.18	293	575.30	0	1

Table 5. Continued.

Tow Net No.	Date Time	Duration (min)	Approx. Depth Stratum (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered Vol. (m ³)	Plankton Vol. (mL)	Anchoovy Eggs	Anchoovy Eggs/100 m ³	Anchoovy Larvae	Anchoovy Larv./100 m ³	Other Fish Eggs	Other Fish Larvae
25	1 3-27 09:13	4-9	0-50	.0	51.4	46.3	13.2	1.04	209	12.53	1.1	35	279.33	26	207.50	13	0
2	10-0	40-50	38.7	49.5	44.1	13.1	1.08	647	44.02	3.7	6	13.63	91	206.72	30	6	
3	10-2	30-40	27.9	39.7	34.2	14.5	1.14	688	45.93	4.2	75	163.29	306	666.23	10	3	
4	10-2	20-30	18.1	29.9	23.9	15.9	1.11	682	46.02	4.4	237	514.99	313	680.14	0	1	
5	10-2	10-20	8.8	19.6	14.0	15.9	1.11	680	44.48	4.2	372	836.33	195	438.40	0	1	
6	8.5	0-10	.0	9.3	5.0	15.9	1.01	507	32.83	3.5	257	782.82	20	60.92	1	0	
26	1 3-27 10:56	29-2	0-200	.0	200.8	141.5	9.7	1.11	1578	93.25	3.4	36	38.61	30	32.17	11	5
2	22-7	160-200	158.2	200.3	179.3	8.8	1.29	1759	105.54	3.2	1	.95	2	1.90	1	5	
3	22-3	120-160	118.5	162.1	139.6	9.4	1.31	1753	109.22	2.7	2	1.83	10	9.16	1	5	
4	21.8	80-120	78.3	121.0	99.0	10.3	1.36	1778	111.21	3.7	1	.90	2	1.80	29	16	
5	21.5	40-80	38.7	78.8	58.4	11.8	1.45	1875	122.41	8.0	5	4.08	16	13.07	25	17	
6	20.5	0-40	.0	39.7	20.5	15.4	1.42	1748	111.37	12.1	282	253.21	347	311.57	6	3	
27	1 3-27 13:52	5-0	0-50	.0	54.8	38.4	13.8	1.20	364	22.55	2.6	15	66.52	18	79.82	9	0
2	11.7	40-50	39.2	50.4	45.2	12.7	1.48	1030	70.41	6.8	4	5.68	44	62.49	30	5	
3	10.5	30-40	29.4	40.2	35.0	14.4	1.44	914	61.67	7.4	3	4.86	132	214.04	7	5	
4	11.0	20-30	19.6	30.4	25.1	15.9	1.36	896	60.13	5.3	38	63.20	171	284.38	0	0	
5	11.3	10-20	9.8	21.0	15.0	15.9	1.38	933	60.90	5.0	58	95.24	63	103.45	0	0	
6	8.7	0-10	.0	10.8	6.1	16.0	1.41	728	46.33	6.3	44	94.97	42	90.65	0	2	
28	1 3-29 08:40	5-2	0-50	.0	51.4	33.7	13.3	1.09	286	17.79	2.5	88	494.66	123	691.40	0	2
2	11.0	40-50	39.7	50.4	45.3	11.7	1.19	793	49.09	6.0	7	14.26	122	248.52	13	16	
3	10.7	30-40	29.4	40.2	34.8	12.6	1.18	750	46.79	8.9	11	23.51	371	792.90	4	19	
4	10.5	20-30	20.1	30.4	24.8	14.3	1.20	761	46.63	9.0	120	257.35	1258	2697.83	1	3	
5	10.8	10-20	9.3	21.0	14.7	15.3	1.31	847	50.31	9.1	492	977.94	1378	2739.02	3	0	
6	8.5	0-10	.0	10.3	5.6	15.4	1.35	685	39.27	9.0	721	1836.01	344	875.99	1	0	
29	1 3-29 10:29	15-2	0-200	.0	203.2	121.6	10.5	.72	516	30.62	2.0	113	369.04	114	372.31	3	4
2	23.8	160-200	156.2	200.8	181.2	9.3	1.16	1662	95.57	5.7	1	1.05	6	6.28	2	3	
3	21.8	120-160	119.0	156.2	140.1	9.6	1.27	1673	99.71	5.1	5	5.01	39	39.11	1	11	
4	21.3	80-120	80.3	121.9	100.0	10.0	1.28	1646	100.20	6.7	3	2.99	67	66.87	13	13	
5	21.5	40-80	39.2	81.3	61.0	11.0	1.34	1732	102.93	12.5	15	14.57	272	264.26	35	12	
6	15.8	0-40	.0	40.2	22.8	14.4	1.40	1554	80.72	20.7	523	647.92	4471	5538.90	4	6	
30	1 3-29 13:20	7-2	0-50	.0	51.9	43.0	12.0	1.07	359	21.34	2.5	41	192.13	99	463.92	8	1
2	10.2	40-50	39.2	50.0	44.7	11.4	1.09	672	39.88	5.6	6	15.05	88	220.66	27	2	
3	10.3	30-40	29.9	39.7	34.6	12.3	1.19	739	44.48	6.3	15	33.72	478	1074.64	4	0	
4	10.3	20-30	19.1	30.4	24.6	14.0	1.18	728	42.03	7.1	72	171.31	1419	3376.16	2	8	
5	10.3	10-20	9.3	20.1	14.5	15.3	1.20	745	44.18	9.0	975	2206.88	1296	2933.45	1	3	
6	8.3	0-10	.0	10.3	5.8	15.5	1.25	626	35.89	10.8	342	952.91	305	849.82	0	1	
31	1 3-29 20:30	8-2	0-50	.0	51.9	36.1	12.9	.99	496	29.15	3.4	5	17.15	86	295.03	5	0
2	10.7	40-50	39.2	50.0	45.0	11.6	1.25	804	51.54	9.0	2	3.88	53	102.83	12	3	
3	11.0	30-40	29.4	42.6	35.3	12.5	1.21	804	52.46	10.4	0	.00	160	304.99	5	5	
4	10.8	20-30	19.6	30.9	25.1	14.2	1.33	863	56.76	15.5	10	17.62	471	829.81	0	0	
5	10.5	10-20	9.8	20.6	15.3	15.3	1.24	788	48.78	13.6	139	284.95	1361	2790.08	0	1	
6	8.5	0-10	.0	12.2	6.2	15.6	1.31	664	42.03	10.8	6	14.28	243	578.16	29	0	

Table 5. Continued.

Tow Net No.	Date	Time	Duration (min)	Approx. Depth Stratum (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered Vol. (m ³)	Plankton Vol. (ml)	Anchoy Eggs	Anchoy Larvae	Anchoy Larvae/100 m ³	Other Fish Eggs	Other Fish Larvae	
32	1	3-29	22:14	0-200	.0	201.8	123.8	10.3	1.07	1430	84.06	4.7	10	11.90	149	177.25	10	24
	2		21.8	160-200	160.6	200.3	180.6	9.2	1.34	1759	103.08	4.3	0	.00	0	.00	5	31
	3		22.5	120-160	119.5	161.1	140.5	9.5	1.28	1737	101.85	5.1	0	.00	9	8.84	1	17
	4		22.8	80-120	79.3	121.0	99.9	10.0	1.28	1756	104.46	6.9	3	2.87	35	33.51	16	14
	5		22.3	40-80	40.2	80.3	60.1	10.8	1.33	1780	105.84	11.8	11	10.39	90	85.03	41	30
	6		17.2	0-40	.0	41.1	22.9	13.6	1.32	1362	77.92	25.1	1633	2095.74	1185	1520.79	8	5
33	1	3-30	00:59	0-50	.0	54.8	44.5	11.7	1.33	492	29.23	3.9	141	482.38	107	366.06	15	4
	2		10.2	40-50	39.2	50.0	44.6	11.1	1.39	852	52.15	6.8	1	1.92	26	49.86	36	11
	3		10.2	30-40	28.9	39.7	34.8	11.7	1.39	847	51.96	10.7	1	1.92	180	346.42	11	12
	4		10.3	20-30	19.1	30.4	24.5	13.0	1.39	869	53.07	17.8	73	137.55	732	1379.31	3	6
	5		10.0	10-20	8.8	19.1	14.3	14.5	1.33	796	47.25	16.3	1396	2954.50	1156	2446.56	2	0
	6		8.0	0-10	.0	9.8	5.7	15.4	1.41	693	38.97	14.0	1478	3792.66	765	1963.05	4	0
34	1	3-30	09:39	0-50	.0	51.4	34.5	13.3	1.10	233	13.92	1.2	26	186.78	35	251.44	0	0
	2		10.3	40-50	39.7	50.0	44.8	11.5	1.31	815	49.24	4.1	0	.00	64	129.98	11	6
	3		10.2	30-40	28.9	41.1	34.4	12.0	1.25	758	48.01	5.0	2	4.17	132	274.94	4	4
	4		10.0	20-30	18.6	29.4	24.3	13.9	1.28	769	48.47	7.3	22	45.39	572	1180.11	0	5
	5		10.0	10-20	8.3	20.6	14.3	15.3	1.30	782	50.62	7.0	753	1487.55	927	1831.29	2	1
	6		7.8	0-10	.0	8.8	5.1	15.7	1.37	642	40.19	4.8	915	2276.69	121	301.07	1	1
35	1	3-30	11:39	0-200	.0	201.8	139.1	10.0	.85	815	47.86	2.6	68	142.08	51	106.56	3	1
	2		20.5	160-200	160.6	201.3	180.6	9.3	1.27	1559	94.80	3.9	0	.00	2	2.11	0	9
	3		22.0	120-160	119.5	162.6	140.5	9.6	1.25	1656	104.31	4.8	0	.00	5	4.79	1	12
	4		21.3	80-120	79.3	120.0	99.8	9.9	1.20	1538	100.32	5.7	0	.00	21	20.93	10	17
	5		21.0	40-80	39.7	81.3	59.9	10.8	1.09	1376	92.04	5.4	1	1.09	7	7.61	46	32
	6		19.2	0-40	.0	40.6	21.9	13.7	1.01	1160	79.15	17.0	230	290.59	1473	1861.02	17	40
36	1	3-30	15:55	0-50	.0	50.0	31.8	13.1	1.32	356	20.56	3.2	58	282.10	158	768.48	1	5
	2		11.5	40-50	39.7	50.4	44.8	11.4	1.45	995	62.43	7.1	2	3.20	35	56.06	18	4
	3		10.7	30-40	29.4	40.6	34.6	12.2	1.45	923	59.36	8.1	4	6.74	122	205.53	3	3
	4		11.2	20-30	19.1	30.4	24.7	13.8	1.45	968	61.05	11.1	134	219.49	725	1187.55	8	5
	5		11.2	10-20	9.3	20.6	14.7	15.3	1.48	990	62.13	9.6	1233	1984.55	2348	3779.17	26	6
	6		8.7	0-10	.0	10.3	5.7	15.8	1.43	747	44.48	7.4	1226	2756.29	1425	3203.69	11	3
37	1	3-30	20:09	0-50	.0	50.4	34.3	13.1	1.28	437	25.62	4.8	13	50.74	262	1022.64	7	10
	2		11.5	40-50	39.7	50.4	44.8	11.8	1.41	971	60.59	8.1	2	3.30	51	84.17	23	28
	3		11.7	30-40	29.4	40.2	34.7	12.3	1.47	1030	67.95	15.0	4	5.89	246	362.03	8	56
	4		11.0	20-30	19.1	30.4	24.8	13.6	1.41	933	55.84	18.3	24	42.98	1427	2555.52	1	18
	5		11.3	10-20	9.3	20.6	14.8	15.3	1.44	979	61.82	19.8	527	852.47	2883	4663.54	2	5
	6		9.0	0-10	.0	9.8	5.9	15.6	1.52	817	50.31	13.0	397	789.11	499	991.85	1	2
38	1	3-30	21:59	0-200	.0	200.3	130.7	10.2	1.09	1311	76.70	5.3	7	9.13	100	130.38	8	11
	2		22.2	160-200	159.6	201.8	181.4	9.3	1.26	1678	101.60	4.7	0	.00	13	12.80	0	48
	3		22.8	120-160	120.5	159.6	137.1	9.6	1.30	1387	105.31	4.8	0	.00	91	86.41	1	23
	4		22.8	80-120	79.8	121.9	100.4	9.9	1.34	1832	112.90	4.0	2	1.77	50	44.29	3	32
	5		22.3	40-80	39.2	81.3	59.8	10.8	1.37	1848	116.58	17.0	8	6.86	235	201.58	40	38
	6		18.3	0-40	.0	40.6	22.8	13.4	1.38	1516	91.73	15.7	407	443.69	889	969.15	7	15

Table 5. Continued.

Tow No.	Net Date Time	Duration (min)	Approx. Depth Stratum (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered Vol. (m ³)	Plankton Vol. (ml)	Anchoovy Eggs/100 m ³	Anchoovy Larvae	Anchoovy Eggs/100 m ³	Anchoovy Larvae/100 m ³	Other Fish Eggs	Other Fish Larvae
39	1 3-31 01:09	9.9	0-50	.0	97.4	65.2	10.9	1.27	682	40.36	2.8	17.34	42	104.06	8		6
2		9.8	40-50	39.2	50.0	44.6	11.4	1.47	866	55.07	8.1	.00	10	18.16	18		11
3		9.8	30-40	29.9	40.2	34.5	11.8	1.46	863	56.45	15.7	5.31	155	274.58	12		24
4		10.0	20-30	18.6	30.9	24.7	12.9	1.46	874	55.99	19.1	51.79	899	1605.64	2		33
5		9.8	10-20	9.3	19.6	14.7	14.9	1.50	888	56.60	13.4	1973.50	1426	2519.43	1		3
6		8.2	0-10	.0	10.3	5.5	15.6	1.41	682	42.03	10.8	2110.40	102	242.68	7		1
40	1 3-31 08:58	6.0	0-50	.0	51.9	47.7	11.8	1.17	320	19.02	3.6	31.55	174	914.83	9		5
2		10.2	40-50	39.7	50.0	44.9	11.6	1.38	847	51.23	7.0	1.95	16	31.23	19		15
3		10.2	30-40	28.9	40.2	34.8	12.3	1.37	836	52.15	11.3	3.84	12	23.01	6		10
4		10.0	20-30	20.1	30.9	25.2	13.8	1.37	825	47.86	19.4	16.72	699	1460.51	0		10
5		9.8	10-20	9.3	20.6	14.7	15.2	1.30	772	42.64	16.5	154.78	2240	5253.28	1		10
6		8.0	0-10	.0	9.8	5.4	15.5	1.34	647	37.43	13.2	459.52	1824	4873.10	2		3
41	1 3-31 10:41	11.6	0-200	.0	201.3	135.5	9.9	.64	423	25.05	2.2	151.70	251	1002.00	2		2
2		19.5	160-200	159.6	201.8	180.4	9.3	1.30	1524	88.97	6.0	.00	3	3.37	1		25
3		20.2	120-160	119.5	161.1	140.6	9.6	1.41	1713	105.23	6.9	1.90	25	23.76	2		22
4		20.0	80-120	78.8	122.4	100.5	9.9	1.48	1772	108.45	6.0	.92	48	44.26	11		22
5		21.3	40-80	39.7	79.8	59.8	11.0	1.57	2021	128.85	11.8	5.43	151	117.19	42		46
6		20.2	0-40	.0	41.1	21.9	13.9	1.61	1942	118.42	20.1	249.96	1732	1462.59	8		27
42	1 3-31 13:38	5.3	0-50	.0	50.9	35.7	12.9	1.38	335	19.48	3.2	492.81	284	1457.91	19		6
2		11.7	40-50	38.2	50.9	44.9	11.4	1.48	1033	63.81	7.0	25.07	88	137.91	57		31
3		11.3	30-40	29.4	40.6	35.0	12.0	1.66	1125	76.24	13.4	17.05	17	22.30	46		30
4		11.2	20-30	19.1	30.4	24.8	13.0	1.62	1082	65.04	24.4	.00	184	282.90	1		52
5		10.5	10-20	9.3	20.1	14.6	14.6	1.65	1036	62.43	17.2	99.31	2615	4188.69	1		3
6		8.5	0-10	.0	9.8	5.8	15.6	1.68	844	51.85	15.5	459.02	2698	5203.47	3		6
43	1 3-31 20:50	7.2	0-50	.0	50.4	38.2	12.5	1.08	378	22.55	4.6	115.30	68	301.55	22		5
2		12.2	40-50	39.7	50.4	45.0	11.5	1.30	950	59.21	11.5	10.13	3	5.07	75		22
3		10.8	30-40	29.9	40.2	35.0	12.0	1.28	842	52.77	20.1	7.58	29	54.96	29		16
4		10.5	20-30	19.1	30.4	24.8	12.9	1.29	804	48.47	12.2	55.70	189	389.93	5		5
5		10.7	10-20	9.3	20.1	14.8	14.7	1.26	809	48.17	11.2	483.70	1349	2800.50	0		3
6		8.7	0-10	.0	9.8	5.9	15.6	1.35	696	42.34	11.7	571.56	730	1724.14	1		0
44	1 3-31 22:40	14.5	0-200	.0	200.8	138.6	10.2	.87	761	44.48	2.5	42.72	79	177.61	3		7
2		22.5	160-200	160.1	201.8	180.9	9.2	1.18	1597	93.57	5.2	.00	2	2.14	2		23
3		20.7	120-160	120.5	161.1	141.0	9.6	1.20	1494	89.28	7.5	1.12	26	29.12	1		23
4		20.0	80-120	79.3	121.0	100.5	10.0	1.24	1486	89.54	4.0	.00	23	25.69	7		25
5		19.2	40-80	39.2	79.8	59.7	10.8	1.34	1535	96.18	11.3	8.32	209	217.30	16		35
6		17.0	0-40	.0	40.2	21.4	13.8	1.28	1306	78.85	20.2	697.53	1443	1830.06	11		6
45	1 4-01 01:19	6.1	0-50	.0	50.4	48.8	11.4	1.54	391	23.20	5.3	525.86	66	284.48	18		13
2		10.5	40-50	39.2	51.4	45.1	11.5	1.47	925	61.67	25.5	19.46	12	19.46	55		21
3		10.2	30-40	28.9	39.7	34.6	12.3	1.51	917	62.59	20.2	25.56	349	557.60	25		8
4		10.0	20-30	20.1	30.4	24.7	14.0	1.51	904	55.84	8.2	666.19	609	1090.62	1		6
5		10.0	10-20	8.8	21.0	14.7	15.0	1.33	793	52.46	7.2	3124.29	1466	2794.51	0		3
6		7.5	0-10	.0	10.8	6.3	15.6	1.32	593	41.11	7.1	1578.69	553	1345.17	5		1

Table 5. Continued.

Tow Net No.	Date	Time	Duration (min)	Approx. Depth (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered (m ³)	Plankton Vol. (ml)	Anchoovy Eggs	Anchoovy Eggs/100 m ³	Anchoovy Larvae	Anchoovy Larv./100 m ³	Other Fish Eggs	Other Fish Larvae
46	1	4-03	08:53	3.5	0-50	50.9	41.8	12.3	1.49	218	12.99	2.4	5	38.49	77	592.76	8	21
2	2		10.2	40-50	39.2	50.4	44.9	11.4	1.38	847	52.77	10.0	1	1.90	1	1.90	35	60
3	3		11.0	30-40	28.9	39.7	34.3	12.0	1.35	901	55.84	13.2	3	5.37	3	5.37	13	46
4	4		10.3	20-30	19.6	29.4	24.5	13.6	1.41	866	48.17	16.0	230	477.48	69	143.24	18	23
5	5		10.2	10-20	9.3	20.1	14.5	14.7	1.48	901	49.55	11.9	60	121.09	289	583.25	34	48
6	6		8.3	0-10	.0	10.3	5.5	14.9	1.53	758	43.56	20.9	30	68.87	243	557.85	112	23
47	1	4-03	10:36	18.6	0-200	200.8	143.0	9.7	1.14	1019	60.31	89.1	9	14.92	11	18.24	9	7
2	2		22.0	160-200	159.2	201.3	180.7	9.3	1.40	1853	106.46	6.8	0	.00	1	.94	4	31
3	3		21.5	120-160	120.0	164.1	140.8	9.6	1.34	1732	101.24	8.3	5	4.94	1	.99	3	26
4	4		20.7	80-120	80.3	120.5	99.7	9.9	1.43	1775	103.54	9.0	12	11.59	8	7.73	9	9
5	5		22.3	40-80	39.7	80.8	60.0	10.5	1.42	1907	112.44	41.1	6	5.34	62	55.14	50	54
6	6		17.7	0-40	.0	40.2	21.8	12.9	1.37	1449	80.38	22.4	205	255.04	132	164.22	74	61
48	1	4-03	14:06	10.1	0-50	50.9	49.5	10.8	1.67	745	44.07	5.2	33	74.88	23	52.19	32	16
2	2		12.0	40-50	39.7	50.4	45.0	10.8	1.68	1211	77.00	10.2	4	5.19	6	7.79	70	48
3	3		11.2	30-40	29.9	41.1	34.8	11.2	1.50	1009	61.05	15.9	5	8.19	4	6.55	52	29
4	4		10.7	20-30	19.1	30.4	25.0	11.9	1.52	971	57.98	14.1	8	13.80	10	17.25	15	21
5	5		11.0	10-20	9.3	20.1	14.8	14.0	1.43	936	49.24	18.8	268	544.27	64	129.98	169	54
6	6		6.7	0-10	.0	9.3	6.4	14.9	1.47	587	29.45	11.0	124	421.05	68	230.90	98	65
49	1	4-03	20:35	5.3	0-50	50.9	34.5	12.5	1.28	415	23.62	4.4	12	50.80	61	258.26	12	16
2	2		11.3	40-50	39.7	51.4	45.0	11.2	1.47	1004	61.05	5.2	14	22.93	1	1.64	55	7
3	3		11.3	30-40	29.9	40.2	35.1	11.6	1.43	971	61.36	12.0	12	19.56	1	1.63	35	12
4	4		11.0	20-30	19.6	30.4	24.9	12.3	1.34	882	54.00	16.9	9	16.67	8	14.81	20	23
5	5		10.5	10-20	8.3	20.1	14.6	14.1	1.25	782	44.48	27.0	166	373.20	213	478.87	22	57
6	6		8.3	0-10	.0	9.8	6.1	14.9	1.23	612	35.89	24.8	161	448.59	197	548.90	29	9
50	1	4-03	22:41	35.2	0-200	207.6	172.7	9.4	1.28	2356	139.18	7.8	12	8.62	49	35.21	8	29
2	2		25.2	160-200	159.6	200.8	180.8	9.2	1.73	2619	187.45	7.4	2	1.07	0	.00	2	21
3	3		23.5	120-160	119.5	161.1	139.8	9.6	1.74	2447	180.09	10.6	3	1.67	1	.56	8	18
4	4		22.7	80-120	78.3	120.5	100.0	10.0	1.82	2474	163.06	7.2	0	.00	1	.61	10	7
5	5		20.8	40-80	39.2	80.8	59.9	10.4	1.66	2072	142.35	13.3	17	11.94	10	7.02	36	22
6	6		17.7	0-40	.0	39.2	21.3	13.1	1.48	1570	92.04	21.0	291	316.17	47	51.06	94	30
51	1	4-04	02:37	4.2	0-50	50.9	36.9	12.7	1.38	320	19.02	7.1	11	57.83	174	914.83	6	30
2	2		10.3	40-50	39.7	50.4	44.9	11.4	1.59	982	61.97	14.0	15	24.21	5	8.07	22	23
3	3		10.0	30-40	29.9	40.2	34.8	12.0	1.61	963	61.67	27.3	11	17.84	1	1.62	12	18
4	4		10.0	20-30	20.1	30.4	25.0	13.2	1.49	896	52.77	33.0	42	79.59	576	1091.53	11	121
5	5		10.2	10-20	9.3	20.6	14.8	14.7	1.32	804	42.34	17.3	101	238.52	698	1648.56	18	81
6	6		8.2	0-10	.0	10.3	5.8	14.8	1.32	642	35.89	16.5	186	518.25	156	434.66	25	21
52	1	4-04	09:20	4.1	0-50	51.4	45.0	11.7	1.65	281	16.70	3.5	4	23.95	76	455.09	4	24
2	2		10.2	40-50	39.2	50.4	45.1	11.1	1.50	912	54.92	7.6	5	9.10	0	.00	24	47
3	3		10.3	30-40	29.4	40.2	34.8	11.7	1.51	939	58.60	12.9	12	20.48	4	6.83	17	14
4	4		10.2	20-30	20.1	29.9	24.7	12.3	1.53	931	54.00	19.1	19	35.19	352	651.85	5	25
5	5		10.2	10-20	8.8	20.6	14.7	13.8	1.47	893	51.54	23.3	290	562.67	478	927.43	28	78
6	6		8.2	0-10	.0	9.8	5.6	14.6	1.31	631	34.05	17.2	406	1192.36	411	1207.05	28	72

Table 5. Continued.

Tow Net No.	Date	Time	Duration (min)	Approx. Depth Stratum (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered (m ³)	Plankton Vol. (ml)	An-chovy Eggs	An-chovy Eggs/100 m ³	An-chovy Larvae/100 m ³	Other Fish Eggs	Other Fish Larvae		
53	1	4-04	11:10	37.4	0-200	202.8	177.3	9.3	1.44	251.3	148.46	7.0	4	2.69	16	10.78	11	38	
	2			22.7	160-200	159.6	180.9	9.3	1.61	217.7	140.05	8.4	0	.00	0	.00	6	43	
	3			24.0	120-160	119.0	162.1	9.6	1.67	240.1	163.37	8.2	4	2.45	0	.00	9	20	
	4			24.3	80-120	78.8	121.4	99.6	1.70	248.2	163.83	8.5	1	.61	3	1.83	24	5	
	5			22.2	40-80	39.7	79.8	60.0	1.73	230.6	154.93	34.5	11	7.10	31	20.01	60	96	
	6			18.5	0-40	.0	40.6	21.4	1.67	185.1	120.26	23.3	226	187.93	909	755.86	31	187	
54	1	4-04	14:50	7.0	0-50	.0	51.9	41.3	1.55	653	40.19	3.9	8	19.91	27	67.18	21	11	
	2			11.3	40-50	39.7	50.4	45.0	1.54	104.7	67.19	6.0	7	10.42	4	5.95	37	24	
	3			11.8	30-40	26.9	40.6	34.2	1.55	110.6	72.10	12.0	11	15.26	10	13.87	25	27	
	4			11.7	20-30	19.6	30.4	25.0	1.58	109.8	62.74	16.3	61	97.23	150	239.08	18	45	
	5			11.2	10-20	9.8	20.1	14.8	1.47	98.2	58.90	19.5	95	161.29	689	1169.78	36	105	
	6			8.7	0-10	.0	10.3	5.5	1.40	72.6	44.18	15.5	137	310.10	743	1681.76	8	78	
55	1	4-04	20:50	4.7	0-50	.0	50.9	32.4	1.34	383	21.48	22.1	6	27.93	66	307.26	8	14	
	2			11.5	40-50	39.7	50.9	45.1	1.57	107.6	66.42	9.8	3	4.52	0	.00	32	38	
	3			10.8	30-40	29.4	40.2	34.9	1.49	97.4	61.36	30.0	5	8.15	7	11.41	12	10	
	4			10.8	20-30	19.1	29.9	25.0	1.47	94.7	56.45	22.6	26	46.06	99	175.38	19	29	
	5			10.7	10-20	9.8	20.6	15.1	1.48	94.4	55.22	28.0	67	121.33	1036	1876.13	24	147	
	6			8.7	0-10	.0	10.8	5.9	1.41	72.6	42.34	15.0	109	257.44	666	1572.98	16	47	
56	1	4-04	22:42	14.8	0-200	.0	201.3	144.1	1.28	1130	64.58	3.8	10	15.48	30	46.45	1	16	
	2			22.0	160-200	160.6	200.3	180.2	9.4	1.58	209.6	137.14	5.4	0	.00	0	.00	4	48
	3			22.8	120-160	120.0	161.1	141.1	9.7	1.69	232.0	174.56	9.1	3	1.72	0	.00	7	14
	4			24.5	80-120	78.3	122.9	100.5	9.9	1.73	254.4	177.48	6.0	9	5.07	11	6.20	12	18
	5			20.5	40-80	39.2	79.8	59.7	10.8	1.65	202.9	140.66	20.3	3	2.13	22	15.64	56	48
	6			17.7	0-40	.0	40.2	21.5	1.54	163.7	99.40	26.4	50	50.30	350	352.11	9	68	
57	1	4-05	01:45	4.8	0-50	.0	50.9	44.5	1.33	313	18.56	4.5	17	91.59	34	183.19	1	13	
	2			10.8	40-50	39.7	50.9	44.6	1.62	105.7	67.80	14.2	1	1.47	1	1.47	22	49	
	3			10.5	30-40	28.9	40.6	34.8	1.53	96.6	57.98	17.9	2	3.45	3	5.17	7	6	
	4			10.2	20-30	19.1	29.9	24.4	1.42	86.9	47.55	22.8	23	48.37	376	790.75	17	46	
	5			10.3	10-20	8.3	19.6	14.1	1.43	89.0	50.31	14.5	48	95.41	520	1033.59	10	20	
	6			8.2	0-10	.0	10.3	5.7	1.44	71.2	40.50	13.5	56	138.27	469	1158.02	31	8	
58	1	4-05	08:50	4.8	0-50	.0	51.9	43.5	1.44	289	17.17	1.4	13	75.71	13	75.71	1	9	
	2			10.2	40-50	39.2	50.4	45.0	1.44	87.4	52.92	6.4	2	3.78	6	11.34	19	34	
	3			10.2	30-40	29.9	40.2	35.1	1.45	88.5	52.77	11.0	4	7.58	1	1.90	3	40	
	4			10.2	20-30	20.1	31.3	25.0	1.33	80.9	40.65	11.5	7	17.22	31	76.26	4	11	
	5			10.0	10-20	8.8	20.6	14.7	1.24	73.9	37.43	8.1	156	416.78	311	830.88	1	2	
	6			8.0	0-10	.0	10.8	5.8	1.30	62.0	35.59	8.0	198	556.34	531	1491.99	8	8	
59	1	4-05	10:31	21.5	0-200	.0	204.7	167.0	9.4	1.27	139.7	82.58	5.5	16	19.38	16	19.38	7	35
	2			20.8	160-200	158.7	201.8	180.2	9.2	1.59	199.6	123.64	9.0	0	.00	0	.00	3	35
	3			23.8	120-160	118.5	162.1	140.0	9.7	1.66	237.9	158.61	9.0	0	.00	0	.00	6	10
	4			21.8	80-120	77.9	121.4	99.8	9.9	1.69	221.7	144.19	13.7	2	1.39	0	.00	26	5
	5			21.5	40-80	39.7	80.3	60.2	10.6	1.67	215.8	140.82	21.6	425	301.80	236	167.59	17	21
	6			18.5	0-40	.0	40.6	21.8	1.66	184.0	112.29	27.9	23	20.48	12	10.69	40	40	

Table 5. Continued.

Tow Net No.	Date	Time	Duration (min)	Approx. Depth (m)	Stratum (m)	Min. Depth (m)	Max. Depth (m)	Mean Depth (m)	Mean Temp. (°C)	Mean Speed (m/s)	Distance (m)	Filtered (m ³)	Plankton Vol. (ml)	Anchovy Eggs	Anchovy Eggs/100 m ³	Anchovy Larvae	Anchovy Larv./100 m ³	Other Fish Eggs	Other Fish Larvae
60	1	4-05	13:42	5.6	0-50	.0	50.4	38.9	12.0	1.49	421	23.93	3.0	38	158.80	40	167.15	3	18
2	11.2	40-50	39.7	50.9	44.9	39.7	50.9	44.9	11.1	1.63	1095	69.64	8.6	3	4.31	1	1.44	14	69
3	11.0	30-40	29.9	39.7	34.6	29.9	39.7	34.6	11.6	1.62	1066	68.72	17.5	4	5.82	1	1.46	8	15
4	10.8	20-30	18.6	30.4	24.0	18.6	30.4	24.0	12.7	1.64	1063	60.59	17.0	32	52.81	82	135.34	10	9
5	10.7	10-20	8.8	19.1	14.2	8.8	19.1	14.2	14.2	1.53	979	47.25	6.0	78	165.08	216	457.14	1	2
6	8.8	0-10	.0	9.3	5.4	.0	9.3	5.4	15.2	1.55	820	45.71	12.2	358	783.20	489	1069.79	0	12
61	1	4-05	20:40	4.2	0-50	.0	50.4	35.1	12.6	1.30	329	19.02	3.5	31	162.99	39	205.05	0	11
2	11.0	40-50	39.2	50.4	44.7	39.2	50.4	44.7	11.2	1.55	1030	63.81	10.0	12	18.81	0	.00	9	12
3	11.0	30-40	29.9	39.7	34.7	29.9	39.7	34.7	11.9	1.62	1068	69.64	.0	0	.00	0	.00	0	0
4	10.8	20-30	18.6	30.9	24.9	18.6	30.9	24.9	13.1	1.58	1022	60.74	19.5	39	64.21	58	95.49	1	8
5	10.7	10-20	8.8	20.1	14.5	8.8	20.1	14.5	14.2	1.53	979	57.98	18.9	366	631.25	268	462.23	0	3
6	8.7	0-10	.0	9.3	5.5	.0	9.3	5.5	15.1	1.53	798	46.33	12.7	745	1608.03	167	360.46	0	0
62	1	4-05	22:35	17.2	0-200	.0	205.2	156.1	9.9	1.28	1316	75.47	3.3	23	30.48	6	7.95	2	11
2	23.5	160-200	158.7	201.3	181.0	158.7	201.3	181.0	9.3	1.57	2217	144.81	6.1	4	2.76	0	.00	3	28
3	21.3	120-160	118.0	163.1	140.4	118.0	163.1	140.4	9.6	1.58	2023	135.91	6.4	5	3.68	0	.00	2	11
4	22.8	80-120	79.3	120.5	99.4	79.3	120.5	99.4	9.9	1.58	2166	136.22	6.2	4	2.94	1	.73	6	15
5	21.0	40-80	39.2	80.8	60.5	39.2	80.8	60.5	10.6	1.52	1923	121.80	17.5	24	19.70	15	12.32	40	47
6	17.2	0-40	.0	39.7	21.8	.0	39.7	21.8	13.3	1.52	1548	90.81	23.0	380	418.46	350	385.42	1	6
63	1	4-06	01:27	4.9	0-50	.0	51.4	46.1	11.7	1.51	343	20.41	3.8	22	107.79	20	97.99	5	6
2	12.7	40-50	36.7	50.9	43.8	36.7	50.9	43.8	11.5	1.56	1187	76.70	15.1	7	9.13	1	1.30	11	28
3	8.0	30-40	29.4	37.2	33.5	29.4	37.2	33.5	12.2	1.52	728	45.71	17.4	17	37.19	3	6.56	2	6
4	9.8	20-30	20.1	29.9	24.4	20.1	29.9	24.4	12.9	1.44	858	51.23	24.8	36	70.27	46	89.79	0	11
5	10.2	10-20	9.3	20.6	14.5	9.3	20.6	14.5	14.5	1.42	861	46.33	12.2	368	794.30	353	761.93	0	6
6	8.2	0-10	.0	9.8	5.6	.0	9.8	5.6	15.3	1.54	747	40.19	14.2	521	1296.34	183	455.34	0	3

Table 6. Stages and ages of anchovy eggs taken in MESSHAI nets.

Tow Net No.	Stages											Ages						
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	Dis. Eggs	S	A	B	C	D	E
1	0	1	0	0	5	0	0	0	8	0	0	6	2	7	11	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	157	9	1	0	0	0	0	1	0	0	6	163	10	1	0	0	0
4	2	31	0	0	6	0	0	13	0	0	2	34	6	14	0	0	0	0
5	0	0	0	0	15	0	0	19	1	0	6	0	18	23	0	0	0	0
6	0	0	0	0	6	0	0	0	8	0	1	0	0	6	9	0	0	0
3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	94	0	0	1	0	0	0	0	0	7	0	0	0	0	0	0
4	0	1	300	0	2	12	0	5	25	1	8	0	308	14	32	0	0	0
5	0	10	0	0	1	13	1	0	12	2	3	0	11	16	15	0	0	0
6	0	0	2	0	1	48	0	3	16	6	3	0	2	51	26	0	0	0
6	0	0	0	3	0	0	0	2	0	0	0	0	3	2	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	21	6	95	0	0	0	0	0	1	0	123	0	0	0	0	0
4	0	0	12	115	0	7	34	0	0	0	0	0	127	41	0	0	0	0
5	0	0	0	4	13	0	77	74	0	1	3	0	17	156	0	0	0	0
6	0	0	0	15	2	0	128	7	0	0	3	0	17	139	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
3	0	0	0	34	0	0	2	1	0	0	0	0	0	34	3	0	0	0
4	0	1	0	2	40	0	0	27	0	0	0	0	1	42	27	0	0	0
5	0	0	0	7	0	1	6	21	0	0	1	0	0	8	28	0	0	0
6	0	1	0	0	63	0	69	57	0	0	1	0	1	63	127	0	0	0
8	0	0	6	0	0	0	0	13	0	0	1	0	0	6	14	0	0	0
1	0	0	0	0	2	0	4	2	0	0	1	0	9	0	0	0	0	0
2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	1	0	0	2	0	1	0	0	0	1	0	0	4	0	1	0	0
6	22	141	3	10	127	0	0	217	23	0	0	0	163	140	240	0	0	0
9	0	12	0	0	0	0	0	0	5	0	3	0	14	0	6	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	23	0	0	3	0	0	5	0	248	23	3	0	0	0
3	0	243	0	0	66	15	0	30	0	0	0	0	109	81	30	0	0	0
4	0	109	0	0	17	0	0	10	25	0	3	0	6	18	37	0	0	0
5	0	6	0	0	44	0	101	111	2	0	6	0	25	45	218	0	0	0
6	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	17	5	0	0	35	3	0	1	0	1	0	22	39	1	0	0
1	0	2	11	1	0	5	1	0	0	0	0	0	0	14	6	0	0	0
2	0	1	51	0	0	1	70	0	0	2	0	0	0	52	71	2	0	0
3	0	0	0	54	0	1	138	7	0	2	1	6	0	56	150	3	0	0
4	0	0	0	18	0	1	166	3	0	2	2	0	0	32	170	4	0	0
5	0	0	14	1	0	0	105	0	0	2	2	0	0	53	106	0	0	0
6	0	0	52	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Table 6. Continued.

Tow Net No. No.	Stages						Dis. Eggs	Ages												
	I	II	III	IV	V	VI		VII	VIII	IX	X	XI	S	A	B	C	D	E		
11	0	0	0	3	0	0	1	2	0	0	0	0	0	0	3	3	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	1	4	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0
4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
5	0	0	0	1	0	0	0	3	0	0	0	0	0	0	1	3	0	0	0	0
6	0	0	10	48	0	0	177	37	0	0	0	0	0	0	58	214	0	0	0	0
12	0	0	0	5	0	0	0	0	1	0	0	0	0	0	5	1	0	0	0	0
2	0	0	0	2	0	0	0	2	1	0	0	0	0	0	2	2	1	0	0	0
3	0	0	1	1	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0	0
4	0	0	6	20	2	0	0	14	34	0	0	0	0	0	28	48	0	0	0	0
5	0	0	0	10	0	0	0	1	15	0	0	0	0	0	10	16	0	0	0	0
6	0	0	5	38	0	1	0	14	57	0	0	0	0	0	44	71	0	0	0	0
13	0	0	0	0	16	0	0	0	18	0	0	4	0	0	18	20	0	0	0	0
2	0	1	0	3	0	0	0	1	0	0	1	0	0	0	4	1	1	0	0	0
3	0	2	1	0	18	0	0	1	8	0	0	0	0	2	19	9	0	0	0	0
4	0	3	103	0	0	0	0	24	61	0	0	1	0	3	131	85	0	0	0	0
5	0	23	0	0	299	0	0	111	75	0	0	4	0	23	301	188	0	0	0	0
6	21	54	0	0	291	0	0	0	114	2	0	0	0	75	291	116	0	0	0	0
14	0	4	0	24	0	2	0	0	4	2	0	0	0	4	26	6	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5	0	20	0	3	10	0	0	3	6	2	2	2	2	0	35	9	4	0	0	0
6	0	99	0	2	103	3	1	4	106	1	0	0	0	99	108	112	0	0	0	0
15	0	12	0	2	14	0	0	0	4	5	0	0	0	12	16	9	0	0	0	0
2	0	12	0	1	5	1	0	0	0	0	0	0	0	0	18	1	0	0	0	0
3	0	32	0	0	27	0	0	1	1	6	0	0	0	32	27	8	0	0	0	0
4	0	22	0	0	9	26	0	0	13	29	0	0	0	22	35	42	0	0	0	0
5	0	26	0	0	60	1	0	0	35	23	0	0	0	26	61	58	0	0	0	0
6	0	119	1	0	88	0	0	1	58	53	0	1	0	120	89	112	0	0	0	0
16	0	0	26	0	0	23	5	0	0	6	3	7	0	0	29	31	10	0	0	0
2	0	37	4	0	25	10	0	0	5	7	0	2	0	0	42	36	12	0	0	0
3	0	3	159	0	0	99	15	1	1	14	11	2	0	0	163	116	26	0	0	0
4	0	2	77	0	0	137	13	0	1	27	36	2	0	0	80	151	64	0	0	0
5	1	1	82	1	0	178	54	0	0	59	22	2	0	0	86	233	81	0	0	0
6	0	0	72	0	0	65	102	0	0	40	31	2	0	0	73	168	71	0	0	0
17	0	0	14	0	0	1	23	0	0	0	0	0	0	0	14	24	0	0	0	0
2	0	0	3	0	3	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0
3	0	9	1	0	16	0	2	0	0	1	3	0	0	32	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	3	0	2	2	4	0	0	0	0	0	0	0	3	8	0	0	0	0
6	0	1	238	6	0	22	408	0	1	9	11	1	0	0	245	432	20	0	0	0

Table 6. Continued.

Tow Net No.	Stages											Dis. Eggs	Ages					
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		S	A	B	C	D	E
18	0	1	54	0	1	0	69	3	0	0	0	0	0	56	72	0	0	0
2	0	1	10	0	0	14	27	6	2	2	0	0	0	11	41	10	0	0
3	0	0	23	25	0	45	83	0	0	1	1	1	0	48	129	2	0	0
4	0	0	143	0	0	4	266	25	0	1	3	3	0	144	297	4	0	0
5	0	1	366	52	0	0	231	116	0	0	2	2	0	420	348	2	0	0
6	0	2	461	157	0	0	192	183	0	3	1	0	0	620	378	1	0	0
19	0	4	1	1	31	0	4	18	28	0	0	1	4	34	50	0	0	0
2	0	0	0	7	0	0	7	4	8	0	0	1	0	7	11	9	0	0
3	0	0	0	10	5	1	16	40	23	0	0	2	0	15	82	0	0	0
4	0	0	0	52	65	0	3	69	126	2	0	9	0	120	206	0	0	0
5	0	22	0	1	339	0	0	147	210	1	0	6	22	343	361	0	0	0
6	9	13	0	0	391	0	0	2	316	0	0	0	22	391	318	0	0	0
20	0	10	0	0	39	0	0	5	33	4	0	9	11	43	46	0	0	0
2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
3	0	0	0	1	3	0	4	12	1	0	0	3	24	0	0	0	0	0
4	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5	0	10	1	0	10	0	0	2	0	0	0	0	0	21	0	2	0	0
6	0	1168	0	0	655	17	0	15	141	0	0	13	1176	676	157	0	0	0
21	0	34	0	5	33	6	1	0	14	35	0	0	34	44	50	0	0	0
2	0	1	5	0	4	1	1	1	4	1	0	0	0	10	5	6	0	0
3	0	11	0	0	134	3	4	5	30	40	0	0	11	137	79	0	0	0
4	0	238	2	0	657	254	0	0	144	71	0	8	239	919	216	0	0	0
5	0	698	0	2	1092	144	1	2	155	76	0	109	733	1300	246	0	0	0
6	0	648	9	3	869	1	0	24	90	3	0	1	648	883	117	0	0	0
22	0	0	6	0	0	7	9	0	0	0	0	4	0	6	18	4	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	1	0	0	1	3	0	0	0	1	4	0	0
4	0	19	3	0	0	35	13	0	0	12	22	1	0	22	49	34	0	0
5	0	0	16	0	0	10	45	0	0	0	26	0	0	16	55	26	0	0
6	0	0	74	0	0	1	226	2	0	4	61	21	0	78	242	69	0	0
23	0	0	16	0	0	3	7	0	0	0	1	0	0	16	10	1	0	0
2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
3	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	1	2	7	3	7	0	2	1	0	0	3	18	2	0
6	0	0	204	23	0	1	788	74	3	4	9	5	0	228	867	16	0	0
24	0	0	49	7	0	2	84	14	0	0	2	2	0	57	101	2	0	0
2	0	0	3	0	2	1	2	0	1	2	0	0	0	3	5	3	0	0
3	0	1	16	7	2	36	14	1	3	8	0	0	0	24	53	11	0	0
4	0	0	548	0	1	11	229	7	0	7	5	5	0	552	249	12	0	0
5	0	3	371	138	0	0	623	260	2	2	4	5	0	514	888	6	0	0
6	0	3	208	327	0	4	652	222	0	0	3	0	0	538	878	3	0	0

Table 6. Continued.

Tow Net No.	←-- Stages --→						←-- Ages --→						Dis. Eggs	XI	IX	X	Dis. Eggs	S	A	B	C	D	E
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	IX											
25	0	0	13	0	1	5	0	0	0	0	0	0	0	8	2	6	0	16	7	12	0	0	
1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	4	0
3	0	0	33	0	9	8	0	0	2	0	21	2	0	0	2	0	0	34	17	24	0	0	
4	0	0	93	0	0	7	89	6	0	4	22	16	0	0	0	0	0	100	109	28	0	0	
5	0	0	39	81	0	212	0	0	3	19	17	1	0	0	0	0	0	120	213	39	0	0	
6	0	0	101	0	0	39	83	11	0	2	16	5	0	0	0	0	0	103	136	18	0	0	
26	0	0	14	0	0	3	15	3	0	0	1	0	0	0	0	0	0	14	21	1	0	0	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	
4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	1	3	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	
6	0	0	25	150	3	42	32	22	2	1	2	3	0	0	0	0	0	177	100	5	0	0	
27	0	0	0	6	0	1	6	1	0	0	1	0	0	1	0	0	0	6	8	1	0	0	
1	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	
2	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	
3	0	0	6	18	0	0	4	10	0	0	0	0	0	0	0	0	0	24	14	0	0	0	
4	0	0	7	7	22	0	1	14	1	0	0	6	0	0	0	0	0	40	18	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	8	0	0	0	
6	0	0	0	0	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	0	0	70	0	0	7	0	0	0	0	11	0	0	11	0	0	0	70	7	11	0	0	
1	0	0	0	0	1	0	0	0	0	5	1	0	0	1	0	0	0	0	0	1	0	6	
2	0	0	0	0	1	0	0	3	2	4	0	1	0	0	1	0	0	0	0	1	3	7	
3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	55	0	0	0	0	0	23	34	2	6	0	0	0	0	0	58	0	62	0	0	
5	0	0	371	0	14	0	1	2	35	23	3	43	0	0	0	0	0	407	18	67	0	0	
6	0	0	565	0	60	0	0	0	1	13	2	80	0	0	0	0	0	636	67	18	0	0	
29	0	0	92	0	7	4	0	0	0	1	1	0	0	1	0	8	0	99	12	2	0	0	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	0	0	5	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	3	0	
5	0	6	0	0	0	0	0	1	2	0	6	0	0	0	0	0	0	6	0	1	8	0	
6	0	1	0	0	0	1	1	1	24	308	183	4	0	0	0	0	0	1	3	519	0	0	
30	0	0	29	2	1	4	0	0	0	0	0	5	0	0	0	5	0	35	6	0	0	0	
1	0	0	0	0	0	0	0	0	0	3	1	0	2	0	0	0	0	0	0	0	6	0	
2	0	0	0	0	1	0	0	0	0	14	0	0	0	0	0	0	0	0	0	1	14	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	27	0	0	21	0	1	2	9	9	3	0	0	0	0	0	28	23	21	0	0	
5	0	0	724	127	0	28	1	2	3	38	13	39	0	0	0	0	0	886	35	54	0	0	
6	0	0	254	41	0	9	2	0	2	10	6	18	0	0	0	0	0	311	14	17	0	0	
31	0	1	1	2	0	0	0	0	0	0	0	1	0	0	0	1	0	4	0	0	0	0	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	7	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	10	0	0	0	0	
5	0	100	10	10	0	0	0	0	0	1	0	18	0	0	0	0	0	115	23	1	0	0	
6	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	

Table 6. Continued.

Tow Net No.	Stages						Ages						Dis. Eggs				
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	S		A	B	C	D
32	0	2	0	0	0	1	1	0	0	2	2	2	1	4	3	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	1	0	0	0	0	2	0	0	0	0	1	0	0	2	0
5	0	0	7	0	1	0	0	0	0	0	3	0	10	1	0	0	0
6	0	1282	78	4	221	0	0	14	1	0	1	1308	309	15	1	0	0
33	0	111	0	0	10	0	0	0	2	0	0	127	12	2	0	0	0
2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
3	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
4	0	43	7	0	6	1	0	0	2	0	14	0	69	1	3	0	0
5	0	0	1155	38	50	3	2	0	0	1	0	0	1390	5	1	0	0
6	0	671	19	4	588	12	7	90	11	0	0	707	657	114	0	0	0
34	0	0	18	0	0	6	2	0	0	0	0	0	18	8	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0
4	0	15	1	1	2	0	0	0	0	0	3	0	19	3	0	0	0
5	0	5	601	0	0	110	3	0	2	4	0	0	629	118	6	0	0
6	0	2	376	0	1	505	18	0	0	7	0	0	381	527	7	0	0
35	0	0	50	0	1	17	0	0	0	0	0	0	50	18	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
6	0	1	27	10	0	2	4	1	19	150	15	0	38	26	166	0	0
36	0	0	30	18	0	4	4	0	0	1	0	0	49	8	1	0	0
1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0
2	1	0	1	0	0	0	0	2	0	0	0	1	1	0	2	0	0
3	0	0	15	8	0	15	10	1	14	60	7	0	24	26	84	0	0
4	0	3	102	381	0	11	442	57	5	143	82	7	489	518	226	0	0
5	0	0	16	637	0	34	423	0	0	47	31	38	674	472	80	0	0
6	0	0	0	4	0	0	0	0	1	4	2	2	5	6	2	0	0
37	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	3	0	0	0	0	0	0	1	0	4	0	0	0	0
4	0	2	8	10	0	0	2	0	0	1	0	1	21	2	1	0	0
5	24	39	3	408	0	0	23	22	0	3	0	5	64	415	48	0	0
6	6	7	8	290	7	0	9	46	3	3	4	14	13	316	64	4	0
38	0	1	0	0	1	0	1	2	1	1	0	0	1	1	5	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0
5	2	3	0	2	0	1	0	0	0	0	0	0	2	5	1	0	0
6	22	185	1	24	166	0	0	8	0	0	0	1	208	191	8	0	0

Table 6. Continued.

Tow Net No. No.	←-- Stages --→						←-- Ages --→											
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	Dis. Eggs	S	A	B	C	D	E
46	0	0	2	1	0	0	0	1	0	0	0	1	0	3	1	1	0	0
2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
3	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0	1	1	0
4	0	0	146	0	7	0	1	3	8	0	0	65	0	204	10	16	0	0
5	0	0	33	2	5	0	0	7	5	0	0	8	0	38	8	14	0	0
6	0	0	10	0	15	0	0	0	2	0	0	3	0	11	17	2	0	0
47	0	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0
4	0	0	4	0	0	0	1	2	2	1	0	2	12	0	0	0	0	0
5	0	1	2	0	0	0	0	1	2	0	0	0	0	3	0	0	3	0
6	0	0	147	0	5	10	1	3	3	17	0	19	0	162	18	25	0	0
48	0	0	29	1	0	0	0	1	0	1	0	1	0	31	1	1	0	0
2	0	1	0	0	1	0	0	0	2	0	0	0	0	1	1	0	2	0
3	0	0	0	0	0	0	0	0	2	1	0	2	0	0	0	0	5	0
4	0	3	0	0	1	1	0	1	0	0	0	2	0	4	1	3	0	0
5	0	0	212	12	1	15	0	0	7	12	0	9	0	231	17	20	0	0
6	0	2	31	0	16	11	26	0	2	25	0	11	0	36	59	29	0	0
49	0	0	5	5	0	0	1	0	1	0	0	0	0	10	2	0	0	0
2	0	0	10	0	0	1	0	0	1	0	0	2	0	12	1	1	0	0
3	0	1	1	4	0	0	4	0	0	0	0	2	0	7	0	5	0	0
4	0	0	1	7	0	0	1	0	0	0	0	0	0	8	1	0	0	0
5	0	0	30	117	0	0	8	5	1	1	0	4	0	151	14	1	0	0
6	2	12	6	124	0	0	6	6	0	1	0	4	2	146	12	1	0	0
50	0	2	0	5	0	0	5	0	0	0	0	0	0	7	5	0	0	0
2	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	1	0	2	3	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	6	8	0	0	0	3	0	0	0	0	0	14	0	3	0	0
6	0	61	100	102	0	0	3	12	2	3	1	7	0	270	17	4	0	0
51	0	0	6	0	0	0	0	3	0	0	0	2	0	7	0	4	0	0
2	0	0	4	0	0	0	3	1	1	0	2	5	0	0	6	5	4	0
3	0	0	2	3	0	3	1	1	1	0	0	0	0	2	3	5	1	0
4	0	17	1	4	4	0	6	2	2	1	0	7	0	22	10	9	1	0
5	1	44	8	5	14	1	19	1	1	0	0	7	0	57	22	22	0	0
6	0	0	117	0	37	0	20	0	0	0	0	12	0	125	40	21	0	0
52	0	0	3	0	0	0	0	0	0	1	0	0	0	3	0	1	0	0
2	0	0	1	1	0	0	0	3	0	0	0	0	0	1	1	0	3	0
3	0	0	0	2	4	0	0	3	2	1	0	0	0	0	6	0	6	0
4	1	4	0	3	7	0	1	3	0	0	0	0	0	5	10	4	0	0
5	4	270	0	0	5	0	0	2	5	3	0	1	0	275	5	10	0	0
6	0	3	357	0	5	2	0	12	25	0	0	2	0	362	7	37	0	0

Table 6. Continued.

Tow Net No. No.	←-- Stages --→						←-- Ages --→											
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	Dis. Eggs	S	A	B	C	D	E
53	0	1	1	0	0	0	0	0	1	1	0	0	0	2	0	2	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
4	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5	0	0	3	2	2	0	1	1	1	0	0	1	0	4	4	2	1	0
6	0	0	182	0	9	3	3	0	11	15	0	3	0	185	15	26	0	0
54	0	0	1	0	1	0	0	4	2	0	0	0	0	1	5	2	0	0
2	0	0	2	1	0	0	1	1	1	0	0	1	0	3	1	2	1	0
3	0	1	0	2	4	0	0	3	0	0	1	1	0	1	7	0	3	0
4	0	0	27	0	10	0	0	5	15	3	0	1	0	28	10	23	0	0
5	0	0	39	0	9	4	0	13	18	12	0	0	0	39	26	30	0	0
6	0	0	88	4	0	11	0	0	12	22	0	0	0	92	23	22	0	0
55	0	0	0	0	0	0	0	0	2	4	0	0	0	0	2	4	0	0
2	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	0	2	0
3	0	0	0	1	1	0	0	1	1	1	0	0	0	0	1	3	0	0
4	0	0	5	0	0	12	0	0	2	6	0	1	0	5	13	8	0	0
5	0	0	22	15	2	1	8	0	4	14	0	1	0	40	13	14	0	0
6	0	1	1	67	0	1	20	0	0	19	0	0	0	69	21	19	0	0
56	0	0	0	5	0	0	1	2	1	1	0	0	0	5	4	1	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0
4	0	0	0	1	3	0	0	1	0	1	0	3	0	9	0	0	0	0
5	0	0	0	1	2	0	0	0	0	0	0	0	0	1	2	0	0	0
6	0	11	0	12	13	4	5	0	0	5	0	0	0	36	9	5	0	0
57	0	0	0	1	4	0	3	7	0	0	2	0	0	5	10	2	0	0
2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
3	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0
4	0	2	0	2	0	5	3	5	0	5	1	0	0	2	7	8	6	0
5	1	4	2	0	8	0	6	9	3	12	3	0	0	7	14	27	0	0
6	0	5	0	4	5	0	18	6	2	15	1	0	0	5	27	24	0	0
58	0	2	0	0	5	0	0	0	2	3	0	1	0	2	6	5	0	0
2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0
3	0	0	0	0	2	0	0	0	1	0	0	1	0	0	3	0	1	0
4	0	0	0	0	0	0	0	2	4	0	0	1	0	0	0	2	5	0
5	0	0	11	0	21	41	0	14	63	6	0	0	0	11	62	83	0	0
6	1	7	7	0	25	81	0	11	50	15	0	1	0	15	107	76	0	0
59	0	0	6	0	0	3	0	1	6	0	0	0	0	6	3	7	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
5	0	2	8	54	3	17	153	23	59	58	3	45	0	11	64	216	134	0
6	0	0	0	0	0	0	8	0	0	9	0	6	0	0	11	12	0	0

Table 6. Continued.

Tow Net No. No.	Stages											Dis. Eggs	Ages							
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		S	A	B	C	D	E		
60	0	0	0	0	19	0	0	12	0	1	3	1	2	0	20	13	5	0	0	0
2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0
3	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	2	1	1	0	0
4	0	0	0	0	0	0	7	0	9	14	0	2	0	0	0	0	17	15	0	0
5	0	0	2	0	0	0	0	32	0	44	0	0	0	0	2	32	44	0	0	0
6	0	0	27	47	1	13	65	51	33	61	5	55	0	89	191	78	0	0	0	0
61	0	0	0	10	4	0	8	6	0	1	0	2	0	15	15	1	0	0	0	0
2	0	0	0	1	0	5	0	0	0	0	0	6	0	2	10	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	1	12	6	0	0	20	0	0	0	0	13	6	20	0	0	0	0
5	10	14	2	42	26	7	90	106	26	29	2	12	10	87	237	32	0	0	0	0
6	0	0	2	125	341	0	40	114	28	26	0	69	0	516	229	0	0	0	0	0
62	0	0	0	13	2	0	0	6	0	0	0	2	0	16	7	0	0	0	0	0
2	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0
3	0	0	0	0	0	2	0	1	0	0	0	2	5	0	0	0	0	0	0	0
4	0	0	0	0	0	1	2	1	0	0	0	0	4	0	0	0	0	0	0	0
5	0	4	0	0	8	0	3	1	5	0	0	3	0	5	9	10	0	0	0	0
6	0	44	30	9	167	0	2	60	39	8	4	17	0	262	106	12	0	0	0	0
63	0	0	0	0	7	6	2	5	0	0	0	2	0	8	14	0	0	0	0	0
2	0	1	0	1	0	0	0	5	0	0	0	0	0	2	0	5	0	0	0	0
3	0	0	0	0	0	0	0	14	0	0	1	2	0	0	0	16	1	0	0	0
4	0	0	0	3	5	0	4	23	1	0	0	0	0	3	9	24	0	0	0	0
5	0	39	0	41	139	0	6	124	0	6	0	13	0	40	193	135	0	0	0	0
6	0	12	0	22	390	7	0	66	2	1	0	21	0	13	436	72	0	0	0	0

Table 7. Continued.

Tow Net No.	Length (mm)																			Dis. Larv.					
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11		12	13	14	15	>15
32	43	11	9	14	11	10	2	6	1	4	1	0	0	0	0	1	0	0	0	0	0	0	0	0	3
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0	1	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4	7	6	3	4	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
5	16	18	8	6	0	4	1	5	4	7	3	9	0	3	1	0	0	1	0	0	0	0	0	0	2
6	447	171	68	110	28	39	22	45	19	34	8	23	3	12	0	2	0	1	0	0	0	0	1	0	20
33	14	25	7	10	7	12	1	4	4	4	1	1	2	2	0	2	0	0	1	0	0	0	0	0	3
2	0	0	1	0	0	0	0	2	1	7	3	6	2	2	1	0	0	2	1	0	0	0	0	0	0
3	0	1	4	7	17	15	13	22	18	17	26	9	6	8	6	1	3	3	0	0	0	0	0	0	0
4	55	141	75	121	68	72	37	42	16	23	8	9	3	5	1	3	2	1	0	0	1	0	0	0	23
5	184	261	360	71	128	15	57	10	28	6	5	2	7	0	6	0	2	0	0	1	0	0	0	0	13
6	296	333	38	10	8	7	2	3	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0
34	13	12	5	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	1	3	4	8	14	12	7	6	4	1	2	0	0	0	0	0	0	0	0	0	0	0	2
3	0	28	22	20	12	9	1	6	9	5	2	3	1	0	1	0	0	0	0	0	0	0	0	0	3
4	25	64	241	40	99	25	37	6	16	2	5	0	1	1	0	0	0	0	0	0	0	0	0	0	10
5	79	396	311	51	44	9	12	5	6	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	3
6	13	26	35	6	5	5	2	2	3	5	2	6	3	0	0	1	0	0	0	0	0	0	0	0	7
35	1	18	11	4	5	4	2	1	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4	3	3	2	4	2	2	1	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	1	3	1	2	0	0	0	0	0	0	0	0	0	0
6	516	408	115	59	101	32	35	21	19	14	6	0	5	0	1	1	0	0	1	0	0	0	0	0	139
36	3	51	61	12	8	4	2	3	1	0	5	3	2	1	0	0	0	0	0	0	0	0	0	0	2
2	1	3	5	3	2	0	3	1	1	1	3	0	2	7	0	1	1	1	0	0	0	0	0	0	0
3	2	10	21	15	20	10	3	8	0	2	10	5	5	2	2	1	0	0	0	0	0	0	0	0	6
4	20	137	273	66	50	38	42	33	21	14	10	5	2	1	1	0	0	0	0	0	0	0	0	0	12
5	89	803	1030	170	118	58	31	2	6	2	7	2	0	0	0	0	0	0	0	0	0	0	0	0	30
6	21	119	532	257	151	122	83	62	15	10	10	9	11	3	4	2	0	0	1	0	0	0	0	0	12
37	17	92	37	18	24	15	9	10	6	4	8	2	1	0	0	0	0	0	0	0	0	0	0	0	19
2	0	3	2	0	2	2	1	3	8	9	3	4	5	4	2	1	1	0	0	0	0	0	0	0	1
3	1	24	19	12	20	21	15	21	16	15	9	11	15	10	5	1	0	0	0	0	0	0	0	0	31
4	15	109	303	166	170	119	120	48	57	49	43	21	17	6	17	2	4	1	2	0	0	0	0	0	158
5	597	950	699	184	116	69	65	30	19	15	10	10	13	2	5	2	5	0	2	0	1	0	0	0	88
6	66	154	177	38	18	10	11	17	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
38	1	10	28	9	3	6	11	3	7	1	1	2	3	0	0	0	0	0	0	0	0	0	0	0	16
2	0	1	0	2	2	2	2	2	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3	1	5	5	7	7	11	10	17	8	4	8	2	3	0	0	0	0	0	0	0	0	0	0	0	3
4	0	1	14	9	7	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5	58	70	23	10	6	4	4	4	1	4	4	3	5	1	2	0	0	0	0	0	0	0	0	0	36
6	9	66	274	110	76	58	54	67	39	22	17	20	19	11	17	6	5	3	1	1	1	0	0	0	13

Table 7. Continued.

Tow Net No.	Length (mm)																			Dis. Larv.					
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11		12	13	14	15	>15
39	2	4	17	2	5	4	1	1	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2
2	0	0	1	0	0	0	0	0	0	0	1	0	4	0	3	0	1	0	0	0	0	0	0	0	0
3	0	0	0	1	1	6	9	16	16	17	15	24	17	7	8	4	7	0	1	1	0	0	0	0	4
4	94	127	102	86	139	59	71	46	42	31	42	14	13	7	10	2	7	0	2	0	0	0	0	0	5
5	44	337	602	122	74	67	37	24	17	6	6	2	1	0	2	1	0	0	1	1	0	0	0	0	81
6	10	14	45	12	10	3	3	1	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
40	17	42	52	13	3	9	10	12	1	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	8
2	1	5	4	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3	0	3	1	3	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4	93	67	36	60	138	74	76	33	42	16	13	3	5	3	1	1	0	0	1	0	0	0	0	0	37
5	50	500	744	185	93	94	162	143	84	59	13	7	6	3	1	0	0	1	0	0	0	0	0	0	95
6	129	351	1132	145	13	13	8	7	3	0	1	2	0	1	0	0	0	1	0	1	0	0	0	0	17
41	69	114	10	4	8	1	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
2	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	3	5	1	2	2	1	0	0	1	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0
4	1	2	6	0	6	7	6	4	6	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	3
5	29	64	15	3	6	4	3	0	2	0	1	0	2	1	0	0	2	0	0	0	0	0	0	0	5
6	99	470	560	92	49	16	37	49	25	41	13	16	7	5	3	0	0	1	0	0	0	0	0	0	19
42	24	121	62	6	4	2	5	4	3	2	3	0	1	1	0	1	0	0	0	0	0	0	0	0	45
2	9	9	39	3	6	0	10	3	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3	1	1	1	0	1	0	2	0	0	0	0	1	4	0	3	0	2	0	0	0	0	0	0	0	1
4	22	37	8	8	16	7	13	3	17	7	13	4	12	2	2	2	1	0	0	0	1	0	0	0	9
5	214	1178	323	117	167	177	143	52	37	22	12	6	4	1	1	1	0	0	0	0	0	0	0	0	160
6	1126	884	157	42	127	80	86	45	43	14	18	9	10	5	2	0	0	0	0	0	0	0	0	0	50
43	4	12	26	4	3	1	3	0	1	5	1	1	0	1	3	1	0	0	0	0	0	0	0	0	2
2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	1	3	3	8	2	5	1	2	1	0	0	0	0	0
4	0	3	7	3	11	10	13	15	10	19	13	9	11	14	8	5	2	4	2	0	0	0	0	0	30
5	51	267	500	149	58	48	40	33	12	11	9	9	0	3	2	1	0	0	0	0	1	0	0	0	155
6	133	117	426	19	11	4	5	5	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
44	2	14	28	8	3	3	3	3	2	0	0	2	1	3	0	1	0	0	0	0	0	0	0	0	6
2	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	3	0	0	0	0	0	3	1	2	2	5	1	9	0	0	0	0	0	0	0	0	0	0
4	3	5	1	1	6	1	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	5	16	58	27	9	4	9	10	4	2	2	3	9	3	3	3	4	0	1	0	0	0	0	0	37
6	84	687	156	31	115	56	78	28	56	38	38	11	23	1	9	4	5	1	2	0	0	0	0	0	20
45	12	18	26	0	0	3	0	1	1	1	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	0	0	0	1	0	1	2	4	0	0	0	1	1	0	0	0	0	0
3	0	0	4	10	12	35	31	23	31	29	22	19	18	9	1	10	0	6	1	0	0	0	0	0	86
4	28	27	148	25	56	12	76	17	52	8	42	6	37	2	13	0	4	1	0	0	0	0	0	0	55
5	170	249	842	83	38	16	21	9	3	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	29
6	58	159	216	33	15	14	10	9	1	4	1	2	2	4	1	1	1	1	0	0	0	0	0	0	21

Table 7. Continued.

Tow Net No.	Length (mm)																		Dis. Larv.											
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5		11	11.5	12	12.5	13	13.5	14	14.5	15	>15	
60	6	1	12	2	4	1	5	0	4	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	11	28	12	1	4	2	7	3	3	1	0	0	1	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
5	49	39	53	11	12	9	11	7	10	2	2	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6	116	104	107	19	14	13	17	7	13	9	14	3	13	7	4	2	2	0	0	0	2	0	1	0	0	0	0	0	0	22
61	11	6	3	2	4	1	3	1	1	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	8	16	8	5	5	3	3	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5	115	23	13	8	10	5	9	2	7	2	5	1	3	1	1	0	1	0	1	0	1	0	2	0	0	0	0	0	0	59
6	45	29	16	9	2	5	8	4	1	2	5	2	5	3	8	3	1	1	1	0	1	0	1	0	0	0	0	0	0	16
62	1	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	3	5	0	1	1	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6	17	59	87	25	34	17	22	12	11	8	15	1	9	1	3	0	6	0	0	0	0	0	1	0	0	0	0	0	0	22
63	0	4	4	8	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	5	7	10	4	5	2	2	0	0	1	2	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	58	92	47	28	14	17	10	10	13	12	9	15	5	1	3	0	3	0	3	2	0	1	0	1	0	0	0	0	0	11
6	46	38	21	7	4	1	4	1	5	3	5	8	3	3	2	3	5	2	1	2	4	1	3	1	0	0	0	0	1	9

Table 8. Tow and catch data for O/C BOBL nets.

Tow No.	Port or Star-board	Date	Time	Duration (min)	Min. Depth (m)	Max. Depth (m)	Vol. Filtered (m ³)	Plankton Vol. (ml)	An-chovy Eggs/100 m ³	An-chovy Larv./100 m ³	An-chovy Eggs	An-chovy Larvae	Other Fish Eggs	Other Fish Larvae
1	P	3-20	04:43	15.0	.0	248.1	705.60	2.2	12.33	3.26	23	0	0	1
	S			15.0	.0	248.1	705.60	1.4	8.08	.85	6	0	0	0
2	P	3-20	05:24	12.0	193.0	384.0	521.50	10.0	.19	.00	0	0	0	27
	S			12.0	193.0	384.0	521.50	11.1	.19	.00	0	0	0	17
3	P	3-20	16:20	15.0	205.2	410.4	383.60	14.6	.00	.00	0	0	2	28
	S			15.0	205.2	410.4	383.60	15.1	.26	.00	0	1	1	32
4	P	3-20	18:00	15.9	.0	194.4	255.80	13.9	16.81	55.90	143	65	25	25
	S			15.9	.0	194.4	255.80	10.6	13.68	37.53	96	54	31	31
5	P	3-24	02:20	15.1	.0	205.2	349.20	21.9	92.78	48.68	170	54	37	37
	S			15.1	.0	205.2	349.20	17.5	103.09	49.83	174	82	34	34
6	P	3-24	03:08	15.1	226.8	453.6	682.90	10.3	.15	1.61	11	3	69	69
	S			15.1	226.8	453.6	682.90	10.1	.15	.29	2	3	31	31
7	P	3-24	14:23	12.0	.0	161.1	494.10	20.8	334.55	173.85	859	118	57	57
	S			12.0	.0	161.1	494.10	16.9	315.93	136.41	674	116	58	58
8	P	3-24	15:04	15.2	145.2	290.4	454.50	14.4	.22	.00	0	17	50	50
	S			15.2	145.2	290.4	454.50	16.8	1.32	1.10	5	14	50	50
9	P	3-25	02:48	15.2	.0	183.3	414.90	33.9	562.06	160.76	667	81	28	28
	S			15.2	.0	183.3	414.90	28.7	483.25	101.95	423	46	27	27
10	P	3-25	03:48	15.0	198.0	396.0	677.50	1.3	.15	2.36	16	0	0	0
	S			15.0	198.0	396.0	677.50	.8	.74	2.51	17	0	0	0
11	P	3-25	15:54	12.0	.0	209.4	468.40	21.9	565.76	215.63	1010	120	130	130
	S			12.0	.0	209.4	468.40	20.4	552.52	225.23	1055	107	124	124
12	P	3-25	16:35	15.0	191.1	382.2	396.20	13.8	2.02	6.31	25	9	29	29
	S			15.0	191.1	382.2	396.20	10.9	1.77	7.07	28	7	14	14
13	P	3-27	15:31	15.0	.0	210.9	232.00	12.8	129.31	137.93	320	62	46	46
	S			15.0	.0	210.9	232.00	7.5	89.66	54.31	126	45	7	7
14	P	3-27	16:24	15.0	196.5	393.0	297.30	14.0	.00	.00	0	0	0	22
	S			15.0	196.5	393.0	297.30	12.8	.67	14.46	43	2	37	37
15	P	3-29	15:56	15.1	190.5	381.0	418.10	14.0	.24	.00	0	1	106	106
	S			15.1	190.5	381.0	418.10	15.0	.48	.00	0	2	39	39
16	P	3-30	03:50	15.0	196.5	393.0	691.60	8.0	.14	.00	0	0	0	41
	S			15.0	196.5	393.0	691.60	.4	.00	.00	0	0	1	1

Table 8. Continued.

Tow No.	Port or Starboard	Date	Time	Duration (min)	Min. Depth (m)	Max. Depth (m)	Vol. Filtered (m ³)	Plankton Vol. (ml)	Anchoovy Eggs	Anchoovy Eggs/100 m ³	Anchoovy Larvae	Anchoovy Larv./100 m ³	Other Fish Eggs	Other Fish Larvae
17	P S	3-31	03:40	15.0 15.0	190.8 190.8	381.6 381.6	398.00 398.00	16.5 12.4	1 1	.25 .25	0 0	.00 .00	2 1	181 195
18	P S	3-31	16:13	20.0 20.0	194.7 194.7	389.4 389.4	685.40 685.40	13.0 15.0	0 0	.00 .00	0 0	.00 .00	2 4	120 111
19	P S	4-03	16:45	16.0 27.8	189.6 .0	379.2 379.2	343.30 598.20	10.5 21.9	1 79	.29 13.21	0 91	.00 15.21	3 52	47 87
20	P S	4-04	05:05	15.0 15.0	199.8 199.8	399.6 399.6	684.50 684.50	7.9 .5	0 1	.00 .15	0 0	.00 .00	0 0	40 2
21	P S	4-04	17:15	15.1 15.1	190.8 190.8	381.6 381.6	729.20 729.20	8.2 17.1	3 5	.41 .69	0 0	.00 .00	1 12	32 100
22	P S	4-05	04:20	15.0 15.0	179.7 179.7	359.4 359.4	719.00 719.00	.2 .1	1 0	.14 .00	0 0	.00 .00	0 0	0 0
23	P S	4-05	16:50	15.0 15.0	211.8 211.8	423.6 423.6	680.50 680.50	19.7 3.3	2 0	.29 .00	0 0	.00 .00	2 0	12 22
24	P S	4-06	03:50	15.0 15.0	181.5 181.5	363.0 363.0	276.80 276.80	9.9 8.0	0 0	.00 .00	0 0	.00 .00	2 1	28 24

Table 11. Tow and catch data for CalBOBL nets.

Tow No.	Port or Star-board	Date	Time	Dura- tion (min)	Min. Depth (m)	Max. Depth (m)	Vol. Fil- tered (m ³)	Plank- ton Vol. (ml)	An- chovy Eggs	An- chovy Eggs/ 100 m ³	An- chovy Lar- vae	An- chovy Larv./ 100 m ³	Other Fish Eggs	Other Fish Lar- vae
1	S	3-29	15:18	22.4	.0	189.0	447.60	28.0	661	147.68	964	215.37	130	115
2	S	3-30	02:45	23.6	.0	179.4	475.90	33.8	695	146.04	1292	271.49	176	84
3	S	3-30	17:43	25.2	.0	188.1	460.80	28.8	47	10.20	1025	222.44	76	109
4	S	3-31	02:55	26.4	.0	161.4	571.90	36.8	163	28.50	1780	311.24	109	114
5	S	3-31	15:24	26.4	.0	184.2	538.90	29.0	78	14.47	779	144.55	53	85
6	S	4-03	16:01	25.8	.0	204.0	465.40	36.3	61	13.11	100	21.49	367	96
7	S	4-04	04:30	27.3	.0	171.3	538.90	49.8	109	20.23	1241	230.28	216	150
8	S	4-04	16:36	26.9	.0	202.5	464.20	33.5	56	12.06	564	121.50	106	228
9	S	4-05	03:40	25.1	.0	187.8	489.60	33.8	18	3.68	580	118.46	103	87
10	S	4-05	15:25	25.8	.0	218.4	472.20	47.0	799	169.21	384	81.32	82	60
11	S	4-06	03:10	25.4	.0	168.0	536.30	50.0	662	123.44	1127	210.14	51	110

Table 12. Stages and ages of anchovy eggs taken in CalBOBL nets.

Tow Port / No. Starb.	Stages											Dis. Eggs	Ages					
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		S	A	B	C	D	E
1 S	0	0	0	501	0	27	17	2	4	9	2	99	0	589	59	13	0	0
2 S	0	410	15	0	147	3	0	14	11	0	0	95	0	492	174	29	0	0
3 S	0	0	5	13	0	1	3	1	0	6	12	6	0	21	5	21	0	0
4 S	0	89	2	6	18	13	0	11	6	0	0	18	0	102	42	19	0	0
5 S	0	0	29	11	0	7	19	4	0	4	2	2	0	41	31	6	0	0
6 S	0	0	59	0	0	0	1	0	0	0	0	1	0	60	1	0	0	0
7 S	0	73	0	0	7	0	0	15	14	0	0	0	0	73	7	29	0	0
8 S	0	0	15	25	0	7	0	0	7	2	0	0	0	40	7	9	0	0
9 S	0	0	0	0	7	0	0	1	9	1	0	0	0	0	7	11	0	0
10 S	0	0	89	558	21	6	26	69	5	11	6	8	0	654	123	22	0	0
11 S	0	0	101	5	174	3	3	78	222	16	4	56	0	110	202	350	0	0

Table 13. Measurements of anchovy larvae taken in CalBOBL nets.

Tow Port / No. Starb.	Length (mm)															Dis. -> 15 Larv.														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9		9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15		
1 S	328	157	97	41	82	36	42	16	50	13	21	12	15	1	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	40
2 S	48	134	297	139	95	66	71	52	45	46	54	36	40	20	19	11	9	8	12	4	3	1	1	1	0	0	1	0	79	
3 S	62	85	252	81	102	34	110	33	58	21	65	13	33	7	12	3	11	2	3	0	1	0	0	0	0	0	0	0	37	
4 S	9	53	159	90	105	172	139	154	130	108	75	64	47	48	48	26	17	9	2	1	1	0	1	0	0	0	0	0	198	
5 S	20	45	169	66	58	40	78	42	48	30	47	24	28	17	14	3	6	2	2	1	1	0	0	0	0	0	0	0	38	
6 S	0	0	8	3	3	2	11	12	7	8	11	8	8	1	4	0	3	0	1	0	0	0	0	0	1	2	0	0	7	
7 S	13	20	122	39	49	56	89	88	73	91	82	71	113	55	78	48	39	10	21	7	12	5	0	0	2	0	0	0	58	
8 S	0	9	32	53	48	43	66	51	48	28	25	25	14	14	7	5	4	3	0	1	2	0	0	0	0	0	0	0	86	
9 S	36	70	83	49	86	61	59	39	33	16	14	3	6	1	1	2	2	0	0	1	0	0	0	0	0	0	0	0	18	
10 S	0	12	23	14	25	21	54	30	44	28	37	12	18	9	10	3	6	5	2	2	5	0	2	0	0	0	0	0	22	
11 S	117	129	146	55	54	60	54	54	68	44	54	46	39	33	26	17	21	8	12	6	5	6	4	2	4	2	4	0	1	62

Table 14. Numbers of discrete vertical samples summarized by depth, station, day/night period, and pre-/post-storm period.

Station: Period :	90.36			90.28 Before the storm			90.28 After the storm			To- tal
	Day	Night	Day + Night	Day	Night	Day + Night	Day	Night	Day + Night	
Depth (m)										
0 -0.16	10	7	17	6	5	11	7	6	13	41
0 - 10	9	8	17	6	6	12	6	6	12	41
10 - 20	9	8	17	6	6	12	6	6	12	41
20 - 30	9	8	17	6	6	12	6	6	12	41
30 - 40	9	8	17	6	6	12	6	5	11	40
40 - 50	9	8	17	6	6	12	6	6	12	41
40 - 80	4	3	7	3	3	6	3	3	6	19
80 -120	4	3	7	3	3	6	3	3	6	19
120-160	4	3	7	3	3	6	3	3	6	19
160-200	4	3	7	3	3	6	3	3	6	19
200-400	4	3	7	2	2	4	3	3	6	17
Total :	75	62	137	50	49	99	52	50	102	338

Table 15. Statistical summary of depth strata (m) sampled on station 90.36, including mean values, standard deviations, and coefficients of variation of the minimum, maximum, and mean depth values obtained.

Day + Night										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	17	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	17	.00	10.22	5.77	.00	.54	.44	.000	.053	.077
10 - 20	17	9.21	20.59	14.57	.47	.94	.34	.051	.046	.023
20 - 30	17	19.23	30.42	24.74	.62	.62	.39	.032	.020	.016
30 - 40	17	29.15	40.50	34.67	.67	.99	.54	.023	.024	.016
40 - 50	17	39.11	50.84	44.94	.67	.87	.33	.017	.017	.007
40 - 80	7	39.03	80.66	59.65	.68	1.32	.84	.017	.016	.014
80 -120	7	78.70	121.94	99.85	1.26	1.27	.73	.016	.010	.007
120-160	7	119.28	162.38	140.80	.48	1.41	.76	.004	.009	.005
160-200	7	158.74	201.70	180.28	.44	2.44	.95	.003	.012	.005
200-400	7	193.69	387.09	290.39	24.54	49.10	36.82	.127	.127	.127

Day										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	10	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	9	.00	10.12	5.76	.00	.65	.44	.000	.064	.076
10 - 20	9	9.08	20.45	14.54	.50	.88	.35	.055	.043	.024
20 - 30	9	19.09	30.36	24.66	.42	.65	.40	.022	.021	.016
30 - 40	9	29.05	40.31	34.64	.69	.55	.32	.024	.014	.009
40 - 50	9	39.01	50.60	44.84	.49	.55	.39	.013	.011	.009
40 - 80	4	38.93	80.56	59.52	.49	1.17	1.08	.013	.014	.018
80 -120	4	78.84	122.19	99.87	.89	1.72	1.01	.011	.014	.010
120-160	4	119.12	161.61	140.48	.47	.89	.77	.004	.006	.005
160-200	4	158.55	200.30	179.80	.47	.80	.85	.003	.004	.005
200-400	4	184.50	369.00	276.75	26.84	53.67	40.25	.145	.145	.145

Night										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	7	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	8	.00	10.34	5.77	.00	.41	.48	.000	.040	.083
10 - 20	8	9.36	20.74	14.62	.41	1.05	.35	.044	.050	.024
20 - 30	8	19.40	30.48	24.82	.78	.63	.39	.040	.021	.016
30 - 40	8	29.26	40.70	34.70	.68	1.35	.74	.023	.033	.021
40 - 50	8	39.23	51.11	45.05	.85	1.11	.23	.022	.022	.005
40 - 80	3	39.17	80.80	59.81	.98	1.77	.57	.025	.022	.010
80 -120	3	78.51	121.61	99.81	1.86	.28	.25	.024	.002	.003
120-160	3	119.49	163.41	141.22	.49	1.41	.63	.004	.009	.004
160-200	3	159.00	203.56	180.92	.28	2.78	.75	.002	.014	.004
200-400	3	205.93	411.20	308.57	18.24	37.21	27.72	.090	.090	.090

Table 16. Anchovy egg age groups: Means (numbers per 100 m³); station 90.36.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	17	2149.08	42.29	1190.01	805.32	111.47	.00	.00
0 - 10	17	1048.95	119.78	448.53	451.51	29.13	.00	.00
10 - 20	17	761.12	77.60	335.67	328.48	19.37	.00	.00
20 - 30	17	565.19	45.20	315.02	184.02	20.94	.00	.00
30 - 40	17	250.45	83.26	105.77	54.44	6.97	.00	.00
40 - 50	17	25.64	.00	11.20	9.95	3.87	.62	.00
40 - 80	7	15.61	.00	8.53	3.29	3.55	.24	.00
80 -120	7	.53	.00	.26	.00	.00	.27	.00
120-160	7	8.64	8.45	.00	.19	.00	.00	.00
160-200	7	2.53	2.53	.00	.00	.00	.00	.00
200-400	7	.56	.56	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	10	2558.20	.00	1525.34	914.39	118.47	.00	.00
0 - 10	9	1001.90	.00	395.26	563.85	42.79	.00	.00
10 - 20	9	686.76	.00	236.42	419.32	31.01	.00	.00
20 - 30	9	473.76	.00	226.34	220.19	27.23	.00	.00
30 - 40	9	189.70	.00	107.33	69.20	13.17	.00	.00
40 - 50	9	34.01	.00	12.59	15.69	4.56	1.17	.00
40 - 80	4	9.63	.00	1.01	3.61	4.59	.42	.00
80 -120	4	.47	.00	.00	.00	.00	.47	.00
120-160	4	10.03	10.03	.00	.00	.00	.00	.00
160-200	4	1.81	1.81	.00	.00	.00	.00	.00
200-400	4	.78	.78	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	1564.63	102.70	710.96	649.51	101.46	.00	.00
0 - 10	8	1101.88	254.54	508.46	325.12	13.76	.00	.00
10 - 20	8	844.78	164.91	447.31	226.29	6.27	.00	.00
20 - 30	8	668.04	96.06	414.78	143.33	13.87	.00	.00
30 - 40	8	318.80	176.94	104.02	37.84	.00	.00	.00
40 - 50	8	16.23	.00	9.64	3.50	3.10	.00	.00
40 - 80	3	23.58	.00	18.56	2.86	2.16	.00	.00
80 -120	3	.61	.00	.61	.00	.00	.00	.00
120-160	3	6.79	6.34	.00	.45	.00	.00	.00
160-200	3	3.49	3.49	.00	.00	.00	.00	.00
200-400	3	.26	.26	.00	.00	.00	.00	.00

Table 17. Anchovy egg age groups: Medians (numbers per 100 m³); station 90.36.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	17	1400.86	.00	695.79	335.06	.00	.00	.00
0 - 10	17	631.71	.00	201.76	350.83	.00	.00	.00
10 - 20	17	379.37	.00	106.70	313.08	.00	.00	.00
20 - 30	17	450.34	.00	125.60	142.22	.00	.00	.00
30 - 40	17	165.43	.00	66.67	17.26	.00	.00	.00
40 - 50	17	13.63	.00	4.45	2.16	.00	.00	.00
40 - 80	7	10.82	.00	2.95	2.51	1.79	.00	.00
80 -120	7	.88	.00	.00	.00	.00	.00	.00
120-160	7	1.83	1.83	.00	.00	.00	.00	.00
160-200	7	.95	.95	.00	.00	.00	.00	.00
200-400	7	.34	.34	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	10	1968.45	.00	1222.59	407.46	1.40	.00	.00
0 - 10	9	631.71	.00	201.76	414.26	2.16	.00	.00
10 - 20	9	537.10	.00	65.68	371.37	7.37	.00	.00
20 - 30	9	462.31	.00	125.37	236.64	6.62	.00	.00
30 - 40	9	163.29	.00	74.03	37.01	3.58	.00	.00
40 - 50	9	15.60	.00	4.45	6.24	1.42	.00	.00
40 - 80	4	7.58	.00	.54	2.89	1.63	.00	.00
80 -120	4	.45	.00	.00	.00	.00	.45	.00
120-160	4	3.70	3.70	.00	.00	.00	.00	.00
160-200	4	.97	.97	.00	.00	.00	.00	.00
200-400	4	.55	.55	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	865.94	.00	410.39	335.06	.00	.00	.00
0 - 10	8	792.29	41.22	233.54	328.22	.00	.00	.00
10 - 20	8	280.13	21.92	120.07	131.61	.00	.00	.00
20 - 30	8	388.88	26.83	148.57	85.70	.00	.00	.00
30 - 40	8	233.83	11.61	61.92	12.00	.00	.00	.00
40 - 50	8	7.61	.00	5.63	.99	.00	.00	.00
40 - 80	3	20.60	.00	18.81	.00	1.79	.00	.00
80 -120	3	.88	.00	.88	.00	.00	.00	.00
120-160	3	1.35	.00	.00	.00	.00	.00	.00
160-200	3	.66	.66	.00	.00	.00	.00	.00
200-400	3	.19	.19	.00	.00	.00	.00	.00

Table 18. Anchovy egg age groups: Standard deviations (numbers per 100 m³); station 90.36.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	17	1993.57	161.58	1143.64	935.69	222.84	.00	.00
0 - 10	17	936.70	332.58	530.88	380.74	57.69	.00	.00
10 - 20	17	940.70	282.40	521.24	339.44	37.45	.00	.00
20 - 30	17	530.90	102.06	409.50	136.46	36.99	.00	.00
30 - 40	17	245.93	237.53	124.22	68.85	14.94	.00	.00
40 - 50	17	35.48	.00	16.33	18.15	5.90	2.21	.00
40 - 80	7	15.03	.00	12.78	3.59	5.30	.63	.00
80 -120	7	.49	.00	.45	.00	.00	.46	.00
120-160	7	11.81	11.96	.00	.51	.00	.00	.00
160-200	7	3.69	3.69	.00	.00	.00	.00	.00
200-400	7	.63	.63	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	10	2040.79	.00	1162.36	1062.15	246.60	.00	.00
0 - 10	9	883.20	.00	466.40	489.13	69.90	.00	.00
10 - 20	9	689.16	.00	299.41	418.36	46.96	.00	.00
20 - 30	9	348.99	.00	251.26	149.42	35.98	.00	.00
30 - 40	9	172.57	.00	145.38	80.33	18.84	.00	.00
40 - 50	9	45.23	.00	19.35	23.51	6.70	3.01	.00
40 - 80	4	7.14	.00	1.39	3.01	7.16	.84	.00
80 -120	4	.54	.00	.00	.00	.00	.54	.00
120-160	4	14.06	14.06	.00	.00	.00	.00	.00
160-200	4	2.38	2.38	.00	.00	.00	.00	.00
200-400	4	.79	.79	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	1916.64	249.76	1003.00	770.90	202.51	.00	.00
0 - 10	8	1052.61	462.18	622.75	153.07	38.92	.00	.00
10 - 20	8	1210.28	407.22	701.17	201.96	17.73	.00	.00
20 - 30	8	694.41	135.00	538.20	116.07	39.23	.00	.00
30 - 40	8	306.80	331.69	105.40	53.52	.00	.00	.00
40 - 50	8	18.66	.00	13.28	5.55	5.20	.00	.00
40 - 80	3	20.84	.00	14.92	4.95	1.50	.00	.00
80 -120	3	.53	.00	.53	.00	.00	.00	.00
120-160	3	10.62	10.99	.00	.78	.00	.00	.00
160-200	3	5.48	5.48	.00	.00	.00	.00	.00
200-400	3	.16	.16	.00	.00	.00	.00	.00

Table 19. Anchovy egg age groups: Coefficients of variation; station 90.36.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	17	.93	3.82	.96	1.16	2.00	.00	.00
0 - 10	17	.89	2.78	1.18	.84	1.98	.00	.00
10 - 20	17	1.24	3.64	1.55	1.03	1.93	.00	.00
20 - 30	17	.94	2.26	1.30	.74	1.77	.00	.00
30 - 40	17	.98	2.85	1.17	1.26	2.14	.00	.00
40 - 50	17	1.38	.00	1.46	1.82	1.52	3.57	.00
40 - 80	7	.96	.00	1.50	1.09	1.49	2.65	.00
80 -120	7	.94	.00	1.71	.00	.00	1.71	.00
120-160	7	1.37	1.41	.00	2.65	.00	.00	.00
160-200	7	1.46	1.46	.00	.00	.00	.00	.00
200-400	7	1.13	1.13	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	10	.80	.00	.76	1.16	2.08	.00	.00
0 - 10	9	.88	.00	1.18	.87	1.63	.00	.00
10 - 20	9	1.00	.00	1.27	1.00	1.51	.00	.00
20 - 30	9	.74	.00	1.11	.68	1.32	.00	.00
30 - 40	9	.91	.00	1.35	1.16	1.43	.00	.00
40 - 50	9	1.33	.00	1.54	1.50	1.47	2.58	.00
40 - 80	4	.74	.00	1.38	.83	1.56	2.00	.00
80 -120	4	1.16	.00	.00	.00	.00	1.16	.00
120-160	4	1.40	1.40	.00	.00	.00	.00	.00
160-200	4	1.31	1.31	.00	.00	.00	.00	.00
200-400	4	1.01	1.01	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	1.22	2.43	1.41	1.19	2.00	.00	.00
0 - 10	8	.96	1.82	1.22	.47	2.83	.00	.00
10 - 20	8	1.43	2.47	1.57	.89	2.83	.00	.00
20 - 30	8	1.04	1.41	1.30	.81	2.83	.00	.00
30 - 40	8	.96	1.87	1.01	1.41	.00	.00	.00
40 - 50	8	1.15	.00	1.38	1.59	1.68	.00	.00
40 - 80	3	.88	.00	.80	1.73	.69	.00	.00
80 -120	3	.87	.00	.87	.00	.00	.00	.00
120-160	3	1.56	1.73	.00	1.73	.00	.00	.00
160-200	3	1.57	1.57	.00	.00	.00	.00	.00
200-400	3	.61	.61	.00	.00	.00	.00	.00

Table 20. Anchovy egg age groups: Proportions of positive catches (%); station 90.36.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	17	100.00	17.65	100.00	100.00	41.18	.00	.00
0 - 10	17	100.00	35.29	100.00	100.00	35.29	.00	.00
10 - 20	17	100.00	29.41	100.00	100.00	41.18	.00	.00
20 - 30	17	100.00	35.29	100.00	100.00	41.18	.00	.00
30 - 40	17	100.00	29.41	94.12	94.12	35.29	.00	.00
40 - 50	17	70.59	.00	64.71	58.82	47.06	11.76	.00
40 - 80	7	100.00	.00	71.43	71.43	71.43	14.29	.00
80 -120	7	57.14	.00	28.57	.00	.00	28.57	.00
120-160	7	85.71	71.43	.00	14.29	.00	.00	.00
160-200	7	71.43	71.43	.00	.00	.00	.00	.00
200-400	7	100.00	100.00	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	10	100.00	.00	100.00	100.00	50.00	.00	.00
0 - 10	9	100.00	.00	100.00	100.00	55.56	.00	.00
10 - 20	9	100.00	.00	100.00	100.00	66.67	.00	.00
20 - 30	9	100.00	.00	100.00	100.00	66.67	.00	.00
30 - 40	9	100.00	.00	88.89	88.89	66.67	.00	.00
40 - 50	9	77.78	.00	66.67	66.67	55.56	22.22	.00
40 - 80	4	100.00	.00	50.00	100.00	50.00	25.00	.00
80 -120	4	50.00	.00	.00	.00	.00	50.00	.00
120-160	4	100.00	100.00	.00	.00	.00	.00	.00
160-200	4	75.00	75.00	.00	.00	.00	.00	.00
200-400	4	100.00	100.00	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	100.00	42.86	100.00	100.00	28.57	.00	.00
0 - 10	8	100.00	75.00	100.00	100.00	12.50	.00	.00
10 - 20	8	100.00	62.50	100.00	100.00	12.50	.00	.00
20 - 30	8	100.00	75.00	100.00	100.00	12.50	.00	.00
30 - 40	8	100.00	62.50	100.00	100.00	.00	.00	.00
40 - 50	8	62.50	.00	62.50	50.00	37.50	.00	.00
40 - 80	3	100.00	.00	100.00	33.33	100.00	.00	.00
80 -120	3	66.67	.00	66.67	.00	.00	.00	.00
120-160	3	66.67	33.33	.00	33.33	.00	.00	.00
160-200	3	66.67	66.67	.00	.00	.00	.00	.00
200-400	3	100.00	100.00	.00	.00	.00	.00	.00

Table 21. Anchovy egg age groups: Minimum values (numbers per 100 m³); station 90.36.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	17	364.15	.00	39.83	8.45	.00	.00	.00
0 - 10	17	94.97	.00	8.47	17.27	.00	.00	.00
10 - 20	17	74.99	.00	21.73	29.56	.00	.00	.00
20 - 30	17	63.20	.00	30.09	23.28	.00	.00	.00
30 - 40	17	4.86	.00	.00	.00	.00	.00	.00
40 - 50	17	.00	.00	.00	.00	.00	.00	.00
40 - 80	7	4.08	.00	.00	.00	.00	.00	.00
80 -120	7	.00	.00	.00	.00	.00	.00	.00
120-160	7	.00	.00	.00	.00	.00	.00	.00
160-200	7	.00	.00	.00	.00	.00	.00	.00
200-400	7	.13	.13	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	10	638.08	.00	128.29	8.45	.00	.00	.00
0 - 10	9	94.97	.00	61.57	17.27	.00	.00	.00
10 - 20	9	74.99	.00	26.01	29.56	.00	.00	.00
20 - 30	9	63.20	.00	34.64	23.28	.00	.00	.00
30 - 40	9	4.86	.00	.00	.00	.00	.00	.00
40 - 50	9	.00	.00	.00	.00	.00	.00	.00
40 - 80	4	4.08	.00	.00	.82	.00	.00	.00
80 -120	4	.00	.00	.00	.00	.00	.00	.00
120-160	4	1.79	1.79	.00	.00	.00	.00	.00
160-200	4	.00	.00	.00	.00	.00	.00	.00
200-400	4	.13	.13	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	364.15	.00	39.83	150.78	.00	.00	.00
0 - 10	8	203.80	.00	8.47	122.28	.00	.00	.00
10 - 20	8	81.99	.00	21.73	49.73	.00	.00	.00
20 - 30	8	209.33	.00	30.09	44.65	.00	.00	.00
30 - 40	8	57.53	.00	19.48	2.96	.00	.00	.00
40 - 50	8	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	4.39	.00	3.51	.00	.88	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	3	.15	.15	.00	.00	.00	.00	.00

Table 22. Anchovy egg age groups: Maximum values (numbers per 100 m³); station 90.36.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	17	6575.14	667.67	4068.50	2966.80	699.03	.00	.00
0 - 10	17	3421.22	1345.24	1833.09	1723.93	178.48	.00	.00
10 - 20	17	3641.16	1171.11	2077.01	1398.21	129.10	.00	.00
20 - 30	17	2179.22	379.06	1457.57	491.40	110.96	.00	.00
30 - 40	17	994.85	931.96	445.49	210.78	52.25	.00	.00
40 - 50	17	126.80	.00	59.17	62.02	16.91	9.09	.00
40 - 80	7	45.75	.00	33.36	8.58	15.08	1.68	.00
80 -120	7	.97	.00	.95	.00	.00	.97	.00
120-160	7	30.95	30.95	.00	1.35	.00	.00	.00
160-200	7	9.81	9.81	.00	.00	.00	.00	.00
200-400	7	1.89	1.89	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	10	6575.14	.00	4068.50	2966.80	699.03	.00	.00
0 - 10	9	2786.18	.00	1338.23	1723.93	178.48	.00	.00
10 - 20	9	2216.97	.00	809.32	1398.21	129.10	.00	.00
20 - 30	9	1229.77	.00	834.97	491.40	100.30	.00	.00
30 - 40	9	445.49	.00	445.49	210.78	52.25	.00	.00
40 - 50	9	126.80	.00	59.17	62.02	16.91	9.09	.00
40 - 80	4	19.27	.00	2.95	7.87	15.08	1.68	.00
80 -120	4	.97	.00	.00	.00	.00	.97	.00
120-160	4	30.95	30.95	.00	.00	.00	.00	.00
160-200	4	5.31	5.31	.00	.00	.00	.00	.00
200-400	4	1.89	1.89	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	5782.03	667.67	2927.77	2317.59	536.67	.00	.00
0 - 10	8	3421.22	1345.24	1833.09	643.86	110.08	.00	.00
10 - 20	8	3641.16	1171.11	2077.01	586.90	50.15	.00	.00
20 - 30	8	2179.22	379.06	1457.57	342.59	110.96	.00	.00
30 - 40	8	994.85	931.96	299.26	139.18	.00	.00	.00
40 - 50	8	41.01	.00	38.85	15.16	12.40	.00	.00
40 - 80	3	45.75	.00	33.36	8.58	3.81	.00	.00
80 -120	3	.95	.00	.95	.00	.00	.00	.00
120-160	3	19.03	19.03	.00	1.35	.00	.00	.00
160-200	3	9.81	9.81	.00	.00	.00	.00	.00
200-400	3	.44	.44	.00	.00	.00	.00	.00

Table 23. Anchovy larval length groups: Means (numbers per 100 m³); station 90.36.

Day + Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	17	109.21	12.26	20.83	15.19	2.44	2.89	2.46	5.07	2.22	7.33
0 - 10	17	164.18	37.84	47.49	41.01	8.01	5.02	2.91	4.34	2.38	3.02
10 - 20	17	238.50	43.87	65.96	65.47	16.84	11.82	7.23	6.82	3.11	4.63
20 - 30	17	337.72	70.66	103.25	77.99	22.12	20.18	11.01	10.51	6.24	4.79
30 - 40	17	344.78	25.44	75.82	83.77	39.71	41.25	20.04	23.10	9.42	9.53
40 - 50	17	178.96	1.64	18.61	25.67	28.44	30.22	21.99	20.85	8.49	7.26
40 - 80	7	99.74	2.90	4.40	15.16	10.80	17.41	13.83	12.15	5.83	5.53
80 -120	7	2.51	.00	.91	.37	.14	.27	.42	.00	.00	.41
120-160	7	9.91	.92	1.34	2.68	.60	1.65	.78	1.32	.00	.38
160-200	7	11.02	.62	.52	1.54	1.88	1.99	.78	1.69	.87	.43
200-400	7	2.55	.27	.49	.64	.26	.31	.07	.23	.05	.08

Day											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	10	79.65	5.60	6.47	21.17	2.34	1.33	.92	3.41	1.44	6.34
0 - 10	9	116.74	36.76	28.70	29.88	7.85	3.82	1.11	2.16	.00	1.76
10 - 20	9	240.98	53.34	60.23	84.91	16.72	11.67	5.31	4.27	1.31	.53
20 - 30	9	336.59	85.68	117.19	71.96	23.80	16.03	7.56	7.33	3.17	1.56
30 - 40	9	316.58	24.56	34.28	75.98	32.29	47.86	23.16	34.06	10.04	12.46
40 - 50	9	175.58	1.66	16.41	25.33	25.08	25.69	18.21	26.54	8.11	8.45
40 - 80	4	85.86	4.60	3.97	11.48	8.29	14.09	11.53	10.71	4.14	4.09
80 -120	4	2.43	.00	1.09	.64	.00	.22	.22	.00	.00	.24
120-160	4	3.94	.23	.92	.69	.24	.69	.69	.48	.00	.00
160-200	4	8.74	1.09	.00	1.26	2.62	1.42	.44	1.43	.25	.00
200-400	4	3.62	.38	.68	.77	.34	.50	.08	.38	.06	.15

Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	7	151.44	21.77	41.33	6.65	2.58	5.12	4.67	7.45	3.34	8.73
0 - 10	8	217.54	39.05	68.63	53.53	8.20	6.38	4.93	6.79	5.05	4.45
10 - 20	8	235.71	33.22	72.40	43.60	16.98	11.99	9.39	9.68	5.13	9.24
20 - 30	8	338.98	53.75	87.56	84.78	20.22	24.84	14.88	14.09	9.71	8.43
30 - 40	8	376.51	26.43	122.54	92.54	48.05	33.80	16.53	10.77	8.73	6.22
40 - 50	8	182.77	1.62	21.08	26.05	32.21	35.32	26.23	14.44	8.92	5.92
40 - 80	3	118.24	.64	4.99	20.08	14.15	21.83	16.89	14.07	8.10	7.45
80 -120	3	2.63	.00	.66	.00	.32	.34	.68	.00	.00	.63
120-160	3	17.88	1.85	1.90	5.32	1.07	2.93	.90	2.44	.00	.90
160-200	3	14.06	.00	1.22	1.92	.89	2.75	1.22	2.03	1.70	1.00
200-400	3	1.13	.12	.25	.47	.15	.05	.05	.02	.02	.00

Table 24. Anchovy larval length groups: Medians (numbers per 100 m³); station 90.36.

Day + Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	17	55.23	.00	.00	.00	1.90	.00	.00	3.21	.00	3.68
0 - 10	17	77.32	12.70	3.29	3.29	6.23	3.62	.00	1.52	.00	.00
10 - 20	17	116.82	14.44	20.63	28.44	7.97	8.65	5.38	3.19	1.34	.00
20 - 30	17	248.18	28.27	74.76	58.26	20.06	19.35	8.47	7.51	5.64	3.33
30 - 40	17	229.32	8.95	32.10	67.45	40.02	29.63	11.44	8.89	6.69	3.90
40 - 50	17	155.41	.00	17.34	17.62	26.19	27.26	19.67	22.54	7.54	5.64
40 - 80	7	103.88	.00	2.17	10.82	9.66	14.75	15.08	13.04	5.72	5.43
80 -120	7	1.90	.00	.95	.00	.00	.00	.00	.00	.00	.00
120-160	7	9.16	.00	.00	.92	.00	.89	.00	1.59	.00	.00
160-200	7	9.81	.00	.00	1.09	2.00	1.99	.00	1.09	.00	.00
200-400	7	.95	.00	.29	.33	.15	.00	.00	.00	.00	.00

Day											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	10	43.74	.00	.00	.00	.00	.00	.00	.00	.00	1.16
0 - 10	9	60.92	18.28	2.16	6.07	.00	.00	.00	.00	.00	.00
10 - 20	9	103.45	14.78	26.27	28.69	7.97	4.93	1.59	3.10	.00	.00
20 - 30	9	248.18	28.27	76.50	49.64	25.40	16.63	6.30	4.72	3.15	.00
30 - 40	9	214.04	14.68	30.48	47.08	39.19	34.05	14.49	14.49	7.04	3.62
40 - 50	9	206.72	.00	14.09	17.62	21.13	24.20	18.15	24.20	9.36	6.05
40 - 80	4	82.22	.41	2.07	7.04	6.93	12.26	14.92	13.22	4.09	5.23
80 -120	4	1.87	.00	.48	.00	.00	.00	.00	.00	.00	.00
120-160	4	3.31	.00	.00	.90	.00	.90	.00	.00	.00	.00
160-200	4	9.89	.00	.00	1.44	2.59	1.04	.00	1.36	.00	.00
200-400	4	3.62	.00	.48	.59	.25	.00	.00	.00	.00	.13

Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	7	78.55	1.94	.00	4.36	2.18	3.68	1.94	7.56	3.87	4.36
0 - 10	8	81.47	10.49	3.67	3.03	9.15	6.06	3.50	5.92	5.41	2.90
10 - 20	8	139.90	14.01	15.02	26.45	10.15	12.62	7.27	6.76	5.28	10.26
20 - 30	8	245.26	26.58	69.38	67.92	20.04	24.68	16.05	10.41	7.93	6.99
30 - 40	8	232.84	3.37	54.27	70.09	40.25	28.65	11.34	8.34	4.55	4.42
40 - 50	8	149.35	.69	17.36	23.43	27.14	34.25	22.88	7.16	4.64	1.41
40 - 80	3	118.19	.00	4.48	20.02	9.66	15.25	16.20	9.53	6.27	8.95
80 -120	3	1.90	.00	.95	.00	.00	.00	.00	.00	.00	.88
120-160	3	9.43	.00	2.54	1.69	.85	.85	.00	1.69	.00	.00
160-200	3	6.65	.00	1.00	1.09	.66	3.00	.66	1.09	1.09	.00
200-400	3	.95	.00	.29	.29	.15	.07	.07	.00	.00	.00

Table 24. Continued*.

Day + Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	17	2.32	5.69	3.21	3.21	2.50	1.90	.00	.00	.00	.00
0 - 10	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	17	2.69	.00	1.34	.00	.00	.00	.00	.00	.00	.00
20 - 30	17	.00	1.51	.00	.00	.00	.00	.00	.00	.00	.00
30 - 40	17	2.18	1.41	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	17	3.12	2.76	1.51	.00	.00	.00	.00	.00	.00	.00
40 - 80	7	2.69	2.69	1.09	.95	.00	.84	.00	.84	.00	.00
80 -120	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Day											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	10	2.11	3.24	1.16	1.52	2.11	.00	.00	.00	.00	.00
0 - 10	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20 - 30	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30 - 40	9	2.18	1.67	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	9	5.15	3.43	1.51	.00	.00	.00	.00	.00	.00	.00
40 - 80	4	3.08	2.49	.95	.91	.49	.96	.00	1.03	.00	.82
80 -120	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	4	.00	.08	.00	.00	.00	.00	.00	.00	.00	.00

Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	7	3.21	5.69	5.74	7.35	5.51	3.83	1.91	.00	.00	.00
0 - 10	8	5.08	.00	.76	.00	.00	.00	.00	.00	.00	.00
10 - 20	8	3.73	3.42	4.32	.00	.00	.00	.00	.00	.00	.00
20 - 30	8	4.82	5.48	3.23	.71	.00	.00	.00	.00	.00	.00
30 - 40	8	2.19	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	8	1.08	1.08	.99	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	2.69	2.69	1.79	.95	.00	.00	.00	.00	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

* The medians for the size categories larger than 11 mm are all = .00 .

Table 25. Anchovy larval length groups: Standard deviations (numbers per 100 m³); station 90.36.

Day + Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	17	145.56	31.80	65.11	35.30	3.49	4.03	4.88	6.14	3.16	8.71
0 - 10	17	296.12	65.10	119.72	94.13	13.75	5.24	4.99	5.58	3.67	4.83
10 - 20	17	309.68	63.93	121.62	112.23	21.09	14.62	9.20	8.30	3.86	7.12
20 - 30	17	265.23	93.82	110.38	61.22	15.86	12.89	8.54	8.95	5.93	5.76
30 - 40	17	293.42	33.67	123.84	68.89	25.34	40.82	19.42	34.55	9.80	13.89
40 - 50	17	101.97	2.65	15.59	18.98	17.04	21.56	16.41	17.77	8.23	7.62
40 - 80	7	48.39	6.52	4.84	14.35	8.77	14.62	7.22	6.72	3.87	3.53
80 -120	7	2.19	.00	1.21	.97	.36	.47	.79	.00	.00	.51
120-160	7	11.66	2.07	1.70	5.15	.89	2.80	1.33	1.48	.00	1.02
160-200	7	8.69	1.65	1.01	1.32	1.90	1.00	1.18	1.79	1.47	1.13
200-400	7	3.13	.57	.63	.69	.32	.75	.12	.57	.09	.15

Day											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	10	116.69	9.09	16.71	45.37	4.24	2.31	2.03	5.74	2.86	8.59
0 - 10	9	179.63	42.00	50.04	68.01	18.65	4.98	2.63	3.31	.00	3.00
10 - 20	9	329.51	68.77	77.80	148.48	26.11	18.87	9.61	6.56	2.23	1.12
20 - 30	9	298.61	106.65	130.18	70.52	20.75	11.97	7.69	8.26	3.37	2.15
30 - 40	9	260.56	32.49	33.57	76.98	18.40	55.74	24.25	44.65	10.41	18.25
40 - 50	9	81.42	3.15	16.56	22.34	16.51	20.16	9.12	18.80	4.74	7.63
40 - 80	4	62.82	8.67	5.27	14.31	9.33	13.33	7.72	6.09	3.49	2.75
80 -120	4	2.52	.00	1.61	1.28	.00	.45	.45	.00	.00	.48
120-160	4	4.01	.46	1.83	.46	.48	.46	1.37	.97	.00	.00
160-200	4	4.84	2.18	.00	1.02	2.20	.82	.89	1.27	.50	.00
200-400	4	3.87	.76	.82	.83	.41	1.01	.17	.76	.13	.17

Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	7	180.37	48.93	100.26	9.51	2.37	5.05	6.91	6.32	3.45	9.36
0 - 10	8	396.74	87.56	170.10	120.95	5.87	5.52	6.34	6.75	3.91	6.21
10 - 20	8	308.39	60.75	163.71	50.59	15.40	9.03	8.82	9.51	4.42	8.28
20 - 30	8	242.66	80.63	89.16	52.76	8.67	13.01	8.17	8.81	6.45	6.49
30 - 40	8	342.10	37.19	170.44	62.53	30.51	11.73	12.78	11.07	9.72	6.06
40 - 50	8	127.11	2.17	15.13	15.90	17.93	23.28	21.93	15.14	11.35	7.89
40 - 80	3	14.39	1.10	5.26	15.71	8.39	17.98	6.52	8.36	3.65	4.06
80 -120	3	2.20	.00	.57	.00	.55	.59	1.18	.00	.00	.55
120-160	3	14.74	3.21	1.68	7.80	1.21	4.36	1.56	1.39	.00	1.56
160-200	3	12.94	.00	1.34	1.82	1.02	.67	1.58	2.63	2.07	1.73
200-400	3	1.23	.21	.23	.57	.15	.04	.04	.04	.04	.00

Table 28. Anchovy larval* length groups: Minimum values (numbers per 100 m³); station 90.36 .

Day + Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	17	23.07	.00	.00	4.85	2.88	.00	.00	.00	.00	.00
20 - 30	17	65.75	.00	3.47	14.81	1.65	3.31	.00	.00	.00	.00
30 - 40	17	72.04	.00	3.43	17.84	3.43	3.43	.00	.00	.00	.00
40 - 50	17	43.23	.00	.00	1.42	1.42	.00	4.23	.00	.00	.00
40 - 80	7	13.07	.00	.00	.00	.00	.00	.00	1.63	.00	.00
80 -120	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	7	1.90	.00	.00	.00	.00	.95	.00	.00	.00	.00
200-400	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Day											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	9	23.07	.00	2.88	4.85	2.88	1.62	.00	.00	.00	.00
20 - 30	9	65.75	1.88	5.64	14.81	1.65	3.31	.00	.00	.00	.00
30 - 40	9	72.04	.00	3.43	17.84	3.43	3.43	.00	.00	.00	.00
40 - 50	9	62.49	.00	.00	1.42	1.42	.00	4.26	.00	.00	.00
40 - 80	4	13.07	.00	.00	.00	.00	.00	.00	1.63	.00	.00
80 -120	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	4	1.90	.00	.00	.00	.00	.95	.00	.00	.00	.00
200-400	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Night											
Depth (m)	N	All lengths	2 mm	2.5 mm	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm
0 -0.16	7	28.86	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	8	13.59	.00	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	8	26.75	.00	.00	13.37	3.34	.00	.00	.00	.00	.00
20 - 30	8	152.57	.00	3.47	36.69	2.99	4.32	2.06	5.02	2.06	2.99
30 - 40	8	140.74	.00	14.81	33.83	19.75	22.22	.00	.00	.00	.00
40 - 50	8	43.23	.00	4.23	7.06	9.98	5.64	4.23	.00	.00	.00
40 - 80	3	103.88	.00	.00	4.39	8.95	8.06	10.75	8.95	5.72	2.86
80 -120	3	.88	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	9.30	.00	.00	.00	.00	.00	.00	1.59	.00	.00
160-200	3	6.54	.00	.00	.66	.00	1.99	.00	.00	.00	.00
200-400	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

* Minimum values other than .00 for the larvae larger than 6 mm:

Day: 7 mm (40-80 m: .98); 10 mm (40-80 m: .84).

Night: 6.5 mm (40-80 m: 1.76); 7 mm (0-0.16 m: 1.84, 40-80 m: 1.91); 7.5 mm (40-80 m: .88).

Table 29. Continued*.

Day + Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	17	26.07	40.68	34.22	32.93	9.69	25.73	5.51	5.51	7.35	12.87
0 - 10	17	16.46	12.46	8.43	6.59	4.05	8.30	8.10	4.15	4.15	2.08
10 - 20	17	11.38	13.13	14.63	17.88	7.99	14.38	12.78	3.34	3.20	1.64
20 - 30	17	12.95	12.69	15.86	17.45	7.93	4.11	1.51	1.59	4.76	2.06
30 - 40	17	35.24	39.64	16.15	8.81	7.05	5.29	3.24	2.94	1.76	1.47
40 - 50	17	11.89	20.80	6.82	10.37	4.26	7.41	1.73	11.85	.00	1.42
40 - 80	7	6.52	5.43	3.81	4.35	1.79	1.63	.95	3.27	.00	1.68
80 -120	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	7	1.69	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	7	1.00	2.00	.00	1.00	.00	.00	.00	.00	.00	.00
200-400	7	.11	.25	.17	.25	.00	.00	.00	.00	.00	.00

Day											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	10	26.07	37.48	34.22	19.55	8.15	6.52	4.89	3.26	1.63	3.05
0 - 10	9	7.85	7.24	3.93	1.96	3.93	5.89	.00	.00	.00	.00
10 - 20	9	3.24	3.28	3.15	1.57	1.64	1.57	.00	.00	.00	1.64
20 - 30	9	3.03	3.33	3.03	.00	.00	1.66	1.51	.00	.00	.00
30 - 40	9	35.24	39.64	16.15	8.81	6.49	3.24	3.24	2.94	.00	1.47
40 - 50	9	10.37	19.26	6.82	10.37	4.26	7.41	.00	11.85	.00	1.42
40 - 80	4	6.52	5.43	1.97	4.35	1.09	1.63	.82	3.27	.00	1.68
80 -120	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	4	.89	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	4	.11	.25	.17	.25	.00	.00	.00	.00	.00	.00

Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	7	3.87	40.68	13.56	32.93	9.69	25.73	5.51	5.51	7.35	12.87
0 - 10	8	16.46	12.46	8.43	6.59	4.05	8.30	8.10	4.15	4.15	2.08
10 - 20	8	11.38	13.13	14.63	17.88	7.99	14.38	12.78	3.34	3.20	.00
20 - 30	8	12.95	12.69	15.86	17.45	7.93	4.11	.00	1.59	4.76	2.06
30 - 40	8	7.69	10.57	14.09	5.72	7.05	5.29	1.76	1.54	1.76	.00
40 - 50	8	11.89	20.80	5.20	6.93	1.73	1.73	1.73	1.73	.00	.00
40 - 80	3	3.81	3.51	3.81	2.69	1.79	.95	.95	.00	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	1.69	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	3	1.00	2.00	.00	1.00	.00	.00	.00	.00	.00	.00
200-400	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

* Maximum values other than .00 for the larvae larger than 11 mm:
 Day: 11.5 mm (40-80 m: .98); 12.5 mm (40-80 m: .82, 200-400 m: .17).
 Night: 11.5 mm (0-0.16 m: 3.68, 0-10 m: 2.02, 10-20 m: 1.63); 12 mm (0-0.16 m: 5.51, 0-10 m: 2.02, 20-30 m: 2.06); 13 mm (0-0.16 m: 3.68); 14 mm (0-0.16 m: 1.84).

Table 30. Statistical summary of depth strata (m) sampled March 29 - April 1, 1980 (before the storm) on station 90.28, including mean values, standard deviations, and coefficients of variation of the minimum, maximum, and mean depth values obtained.

Day + Night										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	11	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	12	.00	10.16	5.74	.00	.81	.34	.000	.080	.059
10 - 20	12	9.18	20.32	14.67	.37	.57	.26	.040	.028	.018
20 - 30	12	19.29	30.40	24.75	.53	.39	.24	.028	.013	.010
30 - 40	12	29.34	40.40	34.76	.39	.82	.25	.013	.020	.007
40 - 50	12	39.33	50.32	44.87	.43	.47	.20	.011	.009	.004
40 - 80	6	39.50	80.64	60.05	.40	.74	.47	.010	.009	.008
80 -120	6	79.49	121.37	100.19	.51	.90	.31	.006	.007	.003
120-160	6	119.74	160.30	139.96	.60	2.21	1.45	.005	.014	.010
160-200	6	159.49	201.28	180.83	1.66	.62	.39	.010	.003	.002
200-400	4	193.13	386.25	289.69	2.95	5.91	4.43	.015	.015	.015

Day										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	6	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	6	.00	9.87	5.55	.00	.57	.27	.000	.058	.049
10 - 20	6	9.14	20.48	14.58	.40	.37	.18	.044	.018	.013
20 - 30	6	19.34	30.28	24.73	.60	.48	.29	.031	.016	.012
30 - 40	6	29.30	40.40	34.70	.37	.51	.21	.013	.013	.006
40 - 50	6	39.33	50.28	44.89	.59	.40	.20	.015	.008	.005
40 - 80	3	39.50	80.80	60.21	.28	.85	.64	.007	.011	.011
80 -120	3	79.49	121.45	100.10	.75	1.30	.33	.009	.011	.003
120-160	3	119.33	159.98	140.42	.28	3.34	.27	.002	.021	.002
160-200	3	158.83	201.28	180.72	2.32	.49	.41	.015	.002	.002
200-400	2	192.60	385.20	288.90	2.97	5.94	4.45	.015	.015	.015

Night										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	5	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	6	.00	10.44	5.93	.00	.96	.30	.000	.092	.051
10 - 20	6	9.22	20.15	14.76	.37	.72	.32	.040	.036	.021
20 - 30	6	19.25	30.52	24.77	.51	.25	.20	.026	.008	.008
30 - 40	6	29.38	40.40	34.82	.44	1.11	.29	.015	.027	.008
40 - 50	6	39.33	50.36	44.86	.25	.57	.21	.006	.011	.005
40 - 80	3	39.50	80.47	59.89	.57	.75	.23	.014	.009	.004
80 -120	3	79.49	121.29	100.28	.28	.57	.33	.004	.005	.003
120-160	3	120.14	160.63	139.50	.57	.85	2.12	.005	.005	.015
160-200	3	160.14	201.28	180.94	.49	.85	.42	.003	.004	.002
200-400	2	193.65	387.30	290.48	4.03	8.06	6.05	.021	.021	.021

Table 31. Anchovy egg age groups: Means (numbers per 100 m³); station 90.28, before the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	11	2481.89	.00	1655.70	732.21	93.98	.00	.00
0 - 10	12	1466.43	154.32	704.69	508.20	99.22	.00	.00
10 - 20	12	1382.04	28.27	1020.90	159.60	173.26	.00	.00
20 - 30	11	152.92	.00	73.67	42.70	36.55	.00	.00
30 - 40	12	11.27	.14	1.41	.90	4.14	4.69	.00
40 - 50	12	8.19	.00	.54	.33	2.87	4.45	.00
40 - 80	6	7.78	.29	4.73	.47	.68	1.61	.00
80 -120	6	1.43	.45	.16	.00	.00	.82	.00
120-160	6	1.34	1.34	.00	.00	.00	.00	.00
160-200	6	.17	.17	.00	.00	.00	.00	.00
200-400	4	.17	.17	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	3822.37	.00	2831.94	901.29	89.14	.00	.00
0 - 10	6	1456.74	.00	881.27	496.07	79.40	.00	.00
10 - 20	6	1151.84	.00	824.62	216.23	110.98	.00	.00
20 - 30	5	142.05	.00	55.16	22.79	64.10	.00	.00
30 - 40	6	14.84	.28	.63	1.27	3.29	9.37	.00
40 - 50	6	9.92	.00	.53	.66	1.04	7.68	.00
40 - 80	3	7.03	.00	3.50	.00	.32	3.21	.00
80 -120	3	1.31	.31	.00	.00	.00	1.00	.00
120-160	3	2.31	2.31	.00	.00	.00	.00	.00
160-200	3	.35	.35	.00	.00	.00	.00	.00
200-400	2	.18	.18	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	5	873.31	.00	244.21	529.31	99.79	.00	.00
0 - 10	6	1476.12	308.64	528.11	520.32	119.04	.00	.00
10 - 20	6	1612.24	56.55	1217.18	102.97	235.54	.00	.00
20 - 30	6	161.97	.00	89.11	59.29	13.58	.00	.00
30 - 40	6	7.71	.00	2.19	.53	4.99	.00	.00
40 - 50	6	6.45	.00	.55	.00	4.69	1.21	.00
40 - 80	3	8.52	.57	5.97	.95	1.04	.00	.00
80 -120	3	1.55	.59	.32	.00	.00	.64	.00
120-160	3	.37	.37	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.16	.16	.00	.00	.00	.00	.00

Table 32. Anchovy egg age groups: Medians (numbers per 100 m³); station 90.28, before the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	11	985.18	.00	214.26	576.69	70.18	.00	.00
0 - 10	12	1265.80	.00	595.99	279.34	41.62	.00	.00
10 - 20	12	1232.75	.00	798.02	62.32	17.45	.00	.00
20 - 30	11	55.70	.00	39.20	8.25	5.65	.00	.00
30 - 40	12	6.31	.00	.00	.00	1.04	.00	.00
40 - 50	12	3.59	.00	.00	.00	.00	.80	.00
40 - 80	6	7.59	.00	4.47	.43	.00	.39	.00
80 -120	6	1.35	.00	.00	.00	.00	.00	.00
120-160	6	.56	.56	.00	.00	.00	.00	.00
160-200	6	.00	.00	.00	.00	.00	.00	.00
200-400	4	.16	.16	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	2592.35	.00	1350.73	744.49	76.28	.00	.00
0 - 10	6	1394.46	.00	907.27	218.38	46.60	.00	.00
10 - 20	6	1232.75	.00	798.02	69.24	71.53	.00	.00
20 - 30	5	171.31	.00	39.31	10.45	49.96	.00	.00
30 - 40	6	11.89	.00	.00	1.61	2.73	4.89	.00
40 - 50	6	8.73	.00	.00	.00	.00	6.91	.00
40 - 80	3	5.43	.00	4.66	.00	.00	1.09	.00
80 -120	3	.92	.00	.00	.00	.00	.00	.00
120-160	3	1.90	1.90	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.18	.18	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	5	780.26	.00	85.37	552.29	20.22	.00	.00
0 - 10	6	1183.90	5.90	365.86	371.82	3.98	.00	.00
10 - 20	6	1412.99	.00	1181.06	60.33	1.94	.00	.00
20 - 30	6	53.75	.00	36.66	5.92	3.72	.00	.00
30 - 40	6	5.60	.00	.96	.00	.00	.00	.00
40 - 50	6	3.59	.00	.00	.00	.96	.00	.00
40 - 80	3	8.32	.00	4.29	.94	.00	.00	.00
80 -120	3	1.77	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.16	.16	.00	.00	.00	.00	.00

Table 33. Anchovy egg age groups: Standard deviations (numbers per 100 m³); station 90.28, before the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	11	3456.92	.00	3072.10	689.45	108.80	.00	.00
0 - 10	12	1126.39	522.79	624.71	506.39	151.61	.00	.00
10 - 20	12	1066.78	71.80	950.72	240.65	393.81	.00	.00
20 - 30	11	189.62	.00	89.63	95.64	52.28	.00	.00
30 - 40	12	10.91	.49	2.13	1.19	6.54	9.61	.00
40 - 50	12	8.42	.00	1.06	.78	5.79	6.50	.00
40 - 80	6	4.57	.70	3.05	.52	1.26	3.06	.00
80 -120	6	1.34	.75	.39	.00	.00	1.31	.00
120-160	6	1.96	1.96	.00	.00	.00	.00	.00
160-200	6	.43	.43	.00	.00	.00	.00	.00
200-400	4	.16	.16	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	4311.52	.00	3888.18	825.72	80.15	.00	.00
0 - 10	6	974.55	.00	632.01	545.32	67.27	.00	.00
10 - 20	6	900.16	.00	743.94	310.85	135.54	.00	.00
20 - 30	5	106.30	.00	44.21	24.28	68.12	.00	.00
30 - 40	6	12.14	.69	.98	1.03	3.28	12.27	.00
40 - 50	6	9.82	.00	.82	1.03	2.56	8.01	.00
40 - 80	3	6.88	.00	3.08	.00	.56	3.95	.00
80 -120	3	1.53	.53	.00	.00	.00	1.73	.00
120-160	3	2.53	2.53	.00	.00	.00	.00	.00
160-200	3	.60	.60	.00	.00	.00	.00	.00
200-400	2	.25	.25	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	5	842.32	.00	362.53	491.68	146.58	.00	.00
0 - 10	6	1356.94	737.65	619.93	516.17	212.37	.00	.00
10 - 20	6	1251.48	97.07	1158.71	151.93	559.92	.00	.00
20 - 30	6	250.30	.00	117.79	130.75	19.02	.00	.00
30 - 40	6	9.17	.00	2.75	1.30	9.04	.00	.00
40 - 50	6	7.23	.00	1.35	.00	7.69	1.88	.00
40 - 80	3	1.77	.99	3.02	.09	1.80	.00	.00
80 -120	3	1.45	1.02	.55	.00	.00	1.11	.00
120-160	3	.65	.65	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.13	.13	.00	.00	.00	.00	.00

Table 34. Anchovy egg age groups: Coefficients of variation; station 90.28, before the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	11	1.39	.00	1.86	.94	1.16	.00	.00
0 - 10	12	.77	3.39	.89	1.00	1.53	.00	.00
10 - 20	12	.77	2.54	.93	1.51	2.27	.00	.00
20 - 30	11	1.24	.00	1.22	2.24	1.43	.00	.00
30 - 40	12	.97	3.46	1.51	1.32	1.58	2.05	.00
40 - 50	12	1.03	.00	1.97	2.34	2.02	1.46	.00
40 - 80	6	.59	2.45	.64	1.10	1.84	1.90	.00
80 -120	6	.94	1.66	2.45	.00	.00	1.60	.00
120-160	6	1.47	1.47	.00	.00	.00	.00	.00
160-200	6	2.45	2.45	.00	.00	.00	.00	.00
200-400	4	.96	.96	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	1.13	.00	1.37	.92	.90	.00	.00
0 - 10	6	.67	.00	.72	1.10	.85	.00	.00
10 - 20	6	.78	.00	.90	1.44	1.22	.00	.00
20 - 30	5	.75	.00	.80	1.07	1.06	.00	.00
30 - 40	6	.82	2.45	1.56	.82	1.00	1.31	.00
40 - 50	6	.99	.00	1.55	1.55	2.45	1.04	.00
40 - 80	3	.98	.00	.88	.00	1.73	1.23	.00
80 -120	3	1.17	1.73	.00	.00	.00	1.73	.00
120-160	3	1.10	1.10	.00	.00	.00	.00	.00
160-200	3	1.73	1.73	.00	.00	.00	.00	.00
200-400	2	1.41	1.41	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	5	.96	.00	1.48	.93	1.47	.00	.00
0 - 10	6	.92	2.39	1.17	.99	1.78	.00	.00
10 - 20	6	.78	1.72	.95	1.48	2.38	.00	.00
20 - 30	6	1.55	.00	1.32	2.21	1.40	.00	.00
30 - 40	6	1.19	.00	1.26	2.45	1.81	.00	.00
40 - 50	6	1.12	.00	2.45	.00	1.64	1.55	.00
40 - 80	3	.21	1.73	.51	.10	1.73	.00	.00
80 -120	3	.94	1.73	1.73	.00	.00	1.73	.00
120-160	3	1.73	1.73	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.78	.78	.00	.00	.00	.00	.00

Table 35. Anchovy egg age groups: Proportions of positive catches (%); station 90.28, before the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	11	100.00	.00	90.91	100.00	72.73	.00	.00
0 - 10	12	100.00	25.00	100.00	91.67	75.00	.00	.00
10 - 20	12	100.00	16.67	100.00	100.00	83.33	.00	.00
20 - 30	11	100.00	.00	100.00	81.82	63.64	.00	.00
30 - 40	12	91.67	8.33	41.67	41.67	50.00	33.33	.00
40 - 50	12	83.33	.00	25.00	16.67	33.33	50.00	.00
40 - 80	6	100.00	16.67	83.33	50.00	33.33	50.00	.00
80 -120	6	66.67	33.33	16.67	.00	.00	33.33	.00
120-160	6	50.00	50.00	.00	.00	.00	.00	.00
160-200	6	16.67	16.67	.00	.00	.00	.00	.00
200-400	4	75.00	75.00	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	100.00	.00	100.00	100.00	83.33	.00	.00
0 - 10	6	100.00	.00	100.00	100.00	100.00	.00	.00
10 - 20	6	100.00	.00	100.00	100.00	100.00	.00	.00
20 - 30	5	100.00	.00	100.00	80.00	60.00	.00	.00
30 - 40	6	100.00	16.67	33.33	66.67	66.67	66.67	.00
40 - 50	6	83.33	.00	33.33	33.33	16.67	66.67	.00
40 - 80	3	100.00	.00	66.67	.00	33.33	100.00	.00
80 -120	3	66.67	33.33	.00	.00	.00	33.33	.00
120-160	3	66.67	66.67	.00	.00	.00	.00	.00
160-200	3	33.33	33.33	.00	.00	.00	.00	.00
200-400	2	50.00	50.00	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	5	100.00	.00	80.00	100.00	60.00	.00	.00
0 - 10	6	100.00	50.00	100.00	83.33	50.00	.00	.00
10 - 20	6	100.00	33.33	100.00	100.00	66.67	.00	.00
20 - 30	6	100.00	.00	100.00	83.33	66.67	.00	.00
30 - 40	6	83.33	.00	50.00	16.67	33.33	.00	.00
40 - 50	6	83.33	.00	16.67	.00	50.00	33.33	.00
40 - 80	3	100.00	33.33	100.00	100.00	33.33	.00	.00
80 -120	3	66.67	33.33	33.33	.00	.00	33.33	.00
120-160	3	33.33	33.33	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	100.00	100.00	.00	.00	.00	.00	.00

Table 36. Anchovy egg age groups: Minimum values (numbers per 100 m³); station 90.28, before the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	11	2.42	.00	.00	2.42	.00	.00	.00
0 - 10	12	14.28	.00	14.28	.00	.00	.00	.00
10 - 20	12	99.31	.00	19.22	2.05	.00	.00	.00
20 - 30	11	16.72	.00	2.06	.00	.00	.00	.00
30 - 40	12	.00	.00	.00	.00	.00	.00	.00
40 - 50	12	.00	.00	.00	.00	.00	.00	.00
40 - 80	6	1.09	.00	.00	.00	.00	.00	.00
80 -120	6	.00	.00	.00	.00	.00	.00	.00
120-160	6	.00	.00	.00	.00	.00	.00	.00
160-200	6	.00	.00	.00	.00	.00	.00	.00
200-400	4	.00	.00	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	151.26	.00	37.63	4.80	.00	.00	.00
0 - 10	6	459.02	.00	44.36	39.01	17.42	.00	.00
10 - 20	6	99.31	.00	19.22	35.78	11.85	.00	.00
20 - 30	5	16.72	.00	6.27	.00	.00	.00	.00
30 - 40	6	3.84	.00	.00	.00	.00	.00	.00
40 - 50	6	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	1.09	.00	.00	.00	.00	.78	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.00	.00	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	5	2.42	.00	.00	2.42	.00	.00	.00
0 - 10	6	14.28	.00	14.28	.00	.00	.00	.00
10 - 20	6	284.95	.00	45.67	2.05	.00	.00	.00
20 - 30	6	17.62	.00	2.06	.00	.00	.00	.00
30 - 40	6	.00	.00	.00	.00	.00	.00	.00
40 - 50	6	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	6.86	.00	4.16	.86	.00	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.07	.07	.00	.00	.00	.00	.00

Table 37. Anchovy egg age groups: Maximum values (numbers per 100 m³); station 90.28, before the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	11	11022.94	.00	10040.49	2104.59	341.19	.00	.00
0 - 10	12	3792.66	1814.22	1685.91	1368.07	527.85	.00	.00
10 - 20	12	3124.29	235.75	2941.80	833.74	1378.19	.00	.00
20 - 30	11	666.19	.00	311.60	325.93	137.59	.00	.00
30 - 40	12	33.72	1.68	5.89	3.20	22.37	31.47	.00
40 - 50	12	25.07	.00	3.30	2.04	19.46	17.24	.00
40 - 80	6	14.57	1.72	9.45	1.04	3.12	7.77	.00
80 -120	6	2.99	1.77	.96	.00	.00	2.99	.00
120-160	6	5.01	5.01	.00	.00	.00	.00	.00
160-200	6	1.05	1.05	.00	.00	.00	.00	.00
200-400	4	.36	.36	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	11022.94	.00	10040.49	2104.59	194.23	.00	.00
0 - 10	6	2756.29	.00	1619.56	1311.27	179.86	.00	.00
10 - 20	6	2206.88	.00	2005.43	833.74	363.75	.00	.00
20 - 30	5	257.35	.00	124.38	54.72	137.59	.00	.00
30 - 40	6	33.72	1.68	2.08	2.25	7.87	31.47	.00
40 - 50	6	25.07	.00	1.60	2.04	6.27	17.24	.00
40 - 80	3	14.57	.00	5.83	.00	.97	7.77	.00
80 -120	3	2.99	.92	.00	.00	.00	2.99	.00
120-160	3	5.01	5.01	.00	.00	.00	.00	.00
160-200	3	1.05	1.05	.00	.00	.00	.00	.00
200-400	2	.36	.36	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	5	2009.17	.00	873.79	1031.10	341.19	.00	.00
0 - 10	6	3792.66	1814.22	1685.91	1368.07	527.85	.00	.00
10 - 20	6	3124.29	235.75	2941.80	406.89	1378.19	.00	.00
20 - 30	6	666.19	.00	311.60	325.93	45.39	.00	.00
30 - 40	6	25.56	.00	5.89	3.20	22.37	.00	.00
40 - 50	6	19.46	.00	3.30	.00	19.46	3.88	.00
40 - 80	3	10.39	1.72	9.45	1.04	3.12	.00	.00
80 -120	3	2.87	1.77	.96	.00	.00	1.91	.00
120-160	3	1.12	1.12	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	2	.25	.25	.00	.00	.00	.00	.00

Table 39. Continued*.

Day + Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	11	2.40	.00	.00	2.35	.00	.00	.00	2.00	.00	.00
0 - 10	12	4.35	2.62	3.27	1.19	.00	.00	.00	.00	.00	.00
10 - 20	12	12.53	10.93	6.07	1.87	.00	1.97	.00	.00	.00	.00
20 - 30	12	19.52	30.10	10.36	18.47	3.55	6.25	1.99	2.83	.00	.94
30 - 40	12	21.88	16.62	7.05	12.76	4.98	8.69	1.64	2.44	.00	.00
40 - 50	12	.80	4.88	3.72	5.23	1.62	2.21	.00	.00	.00	.00
40 - 80	6	1.04	3.18	1.83	6.46	.97	2.50	.47	.78	.00	.00
80 -120	6	.00	.48	.00	.00	.00	.00	.00	.00	.00	.00
120-160	6	.48	.98	.48	.99	.00	.00	.00	.00	.00	.00
160-200	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Day											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	6	13.13	26.05	21.54	36.18	21.71	15.65	2.20	10.53	2.00	1.00
0 - 10	6	10.04	3.88	11.35	3.73	2.61	.00	.00	.00	.00	.00
10 - 20	6	4.57	8.61	5.56	.99	.00	.00	.00	.00	.00	.00
20 - 30	6	7.53	13.35	5.22	2.71	1.85	1.86	.00	.00	.00	.00
30 - 40	6	6.18	9.70	3.21	6.40	2.17	1.68	.00	2.17	.00	.00
40 - 50	6	7.91	8.50	4.06	2.62	2.03	.00	.00	.00	.00	.00
40 - 80	3	.00	.78	.97	3.26	1.09	2.17	.00	1.55	.00	.00
80 -120	3	.00	.00	.92	.92	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.95	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	6	3.27	2.41	1.28	1.19	.00	.00	.00	.00	1.19	.00
10 - 20	6	14.55	12.48	10.20	1.91	1.62	4.13	1.92	2.12	.00	.88
20 - 30	6	39.74	60.12	18.88	29.27	9.08	21.82	3.58	7.11	1.79	3.58
30 - 40	6	29.29	29.49	35.49	22.99	12.87	15.28	3.80	6.64	.95	2.85
40 - 50	6	.00	3.38	3.72	7.76	1.62	4.37	.00	.83	.00	.81
40 - 80	3	3.78	4.29	2.83	8.50	.86	2.83	.94	.00	.00	.94
80 -120	3	.00	.96	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	1.12	2.24	1.90	2.85	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

* Medians other than .00 for the larvae larger than 11 mm:
 Day: 12 mm (0-0.16 m: 1.00). Night: 11.5 mm (30-40 m: 1.83); 12 mm (10-20 m: 1.69).

Table 43. Continued*.

Day + Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	12	1.99	.00	.00	.00	.00	.00	.00	.00	.00	.00
20 - 30	12	2.38	2.38	.00	.00	.00	.00	.00	.00	.00	.00
30 - 40	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 80	6	.00	.00	.00	1.55	.00	.00	.00	.00	.00	.00
80 -120	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Day											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	6	2.40	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	6	.00	2.55	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	6	1.99	.00	.00	.00	.00	.00	.00	.00	.00	.00
20 - 30	6	2.38	2.38	.00	.00	.00	.00	.00	.00	.00	.00
30 - 40	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	.00	.00	.00	1.55	.78	.00	.00	.00	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10 - 20	6	5.72	1.91	3.53	.00	.00	.00	.00	.00	.00	.00
20 - 30	6	7.05	30.95	12.54	16.96	3.52	9.42	.00	4.13	.00	.00
30 - 40	6	.00	1.90	5.69	5.69	5.69	8.83	1.47	.00	.00	.00
40 - 50	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	2.08	2.08	2.57	5.15	.00	1.72	.00	.00	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	1.96	.00	.98	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

* The minimum values for the size categories larger than 11 mm are all = .00 .

Table 45. Statistical summary of depth strata (m) sampled April 3 - 6, 1980 (after the storm) on station 90.28, including mean values, standard deviations, and coefficients of variation of the minimum, maximum, and mean depth values obtained.

Day + Night										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	13	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	12	.00	9.99	5.73	.00	.53	.29	.000	.053	.050
10 - 20	12	9.06	20.15	14.63	.49	.46	.28	.054	.023	.019
20 - 30	12	19.46	30.24	24.74	.56	.52	.33	.029	.017	.013
30 - 40	11	29.29	39.97	34.64	.87	1.01	.46	.030	.025	.013
40 - 50	12	39.25	50.69	44.84	.83	.33	.36	.021	.007	.008
40 - 80	6	39.42	80.39	60.03	.27	.48	.29	.007	.006	.005
80 -120	6	78.84	121.21	99.86	.88	.97	.36	.011	.008	.004
120-160	6	119.16	162.26	140.28	.80	1.15	.58	.007	.007	.004
160-200	6	159.41	200.95	180.63	.74	.59	.35	.005	.003	.002
200-400	6	192.20	384.40	288.30	12.01	24.02	18.02	.062	.062	.062

Day										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	7	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	6	.00	9.95	5.71	.00	.59	.36	.000	.060	.063
10 - 20	6	9.14	20.07	14.63	.40	.54	.24	.044	.027	.017
20 - 30	6	19.50	30.28	24.70	.57	.65	.39	.029	.022	.016
30 - 40	6	29.14	40.23	34.65	1.15	.57	.35	.039	.014	.010
40 - 50	6	39.42	50.52	44.99	.27	.20	.07	.007	.004	.002
40 - 80	3	39.66	80.31	60.05	.00	.49	.09	.000	.006	.001
80 -120	3	79.00	121.12	99.74	1.23	.57	.07	.016	.005	.001
120-160	3	119.16	162.75	140.12	.75	1.13	.58	.006	.007	.004
160-200	3	159.16	201.12	180.57	.49	.75	.37	.003	.004	.002
200-400	3	197.40	394.80	296.10	12.49	24.97	18.73	.063	.063	.063

Night										
Approximate depth	N	Means			Standard deviations			Coeff. of variation		
		Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.	Mean
0 -0.16	6	.00	.16	.08	.00	.00	.00	.000	.000	.000
0 - 10	6	.00	10.04	5.75	.00	.51	.23	.000	.051	.041
10 - 20	6	8.97	20.23	14.62	.59	.40	.33	.066	.020	.023
20 - 30	6	19.42	30.20	24.77	.59	.40	.30	.031	.013	.012
30 - 40	5	29.48	39.66	34.64	.41	1.39	.62	.014	.035	.018
40 - 50	6	39.09	50.85	44.68	1.17	.37	.47	.030	.007	.011
40 - 80	3	39.17	80.47	60.00	.00	.57	.44	.000	.007	.007
80 -120	3	78.68	121.29	99.97	.57	1.41	.52	.007	.012	.005
120-160	3	119.16	161.77	140.44	1.02	1.13	.65	.009	.007	.005
160-200	3	159.65	200.79	180.68	.98	.49	.40	.006	.002	.002
200-400	3	187.00	374.00	280.50	11.12	22.24	16.68	.059	.059	.059

Table 46. Anchovy egg age groups: Means (numbers per 100 m³); station 90.28, after the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	13	1906.51	.00	1147.55	413.27	345.69	.00	.00
0 - 10	12	633.24	.46	311.02	239.23	82.52	.00	.00
10 - 20	12	352.10	1.44	164.67	108.17	77.82	.00	.00
20 - 30	12	84.91	.00	48.43	11.91	20.27	4.30	.00
30 - 40	11	13.53	.00	1.77	3.34	5.40	3.02	.00
40 - 50	12	9.65	.00	2.75	2.76	2.27	1.87	.00
40 - 80	6	58.00	.00	4.62	9.47	27.50	16.41	.00
80 -120	6	3.60	3.50	.10	.00	.00	.00	.00
120-160	6	2.41	2.41	.00	.00	.00	.00	.00
160-200	6	.64	.64	.00	.00	.00	.00	.00
200-400	6	.19	.19	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	1769.93	.00	1307.18	303.12	159.63	.00	.00
0 - 10	6	555.32	.00	275.95	171.75	107.62	.00	.00
10 - 20	6	328.53	.00	196.54	56.31	75.68	.00	.00
20 - 30	6	115.62	.00	80.71	9.49	19.24	6.18	.00
30 - 40	6	10.45	.00	.53	4.76	.54	4.62	.00
40 - 50	6	5.78	.00	1.26	.77	1.84	1.91	.00
40 - 80	3	104.75	.00	4.35	16.01	51.56	32.82	.00
80 -120	3	4.53	4.33	.20	.00	.00	.00	.00
120-160	3	2.46	2.46	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	3	.33	.33	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	2065.86	.00	961.32	541.77	562.76	.00	.00
0 - 10	6	711.15	.93	346.08	306.71	57.43	.00	.00
10 - 20	6	375.67	2.87	132.81	160.02	79.97	.00	.00
20 - 30	6	54.19	.00	16.14	14.33	21.30	2.42	.00
30 - 40	5	17.24	.00	3.26	1.64	11.23	1.11	.00
40 - 50	6	13.51	.00	4.23	4.75	2.70	1.82	.00
40 - 80	3	11.26	.00	4.88	2.94	3.44	.00	.00
80 -120	3	2.67	2.67	.00	.00	.00	.00	.00
120-160	3	2.35	2.35	.00	.00	.00	.00	.00
160-200	3	1.28	1.28	.00	.00	.00	.00	.00
200-400	3	.05	.05	.00	.00	.00	.00	.00

Table 47. Anchovy egg age groups: Medians (numbers per 100 m³); station 90.28, after the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	13	1333.87	.00	299.60	263.22	58.28	.00	.00
0 - 10	12	483.42	.00	178.84	89.06	58.89	.00	.00
10 - 20	12	305.87	.00	81.51	39.33	51.45	.00	.00
20 - 30	12	50.59	.00	9.06	15.33	16.94	.00	.00
30 - 40	11	8.19	.00	.00	1.72	1.46	1.79	.00
40 - 50	12	7.15	.00	.65	1.39	.82	1.48	.00
40 - 80	6	9.52	.00	3.39	2.00	1.70	.32	.00
80 -120	6	2.16	2.16	.00	.00	.00	.00	.00
120-160	6	2.08	2.08	.00	.00	.00	.00	.00
160-200	6	.00	.00	.00	.00	.00	.00	.00
200-400	6	.11	.11	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	1333.87	.00	307.19	141.14	54.76	.00	.00
0 - 10	6	488.69	.00	158.47	126.20	103.57	.00	.00
10 - 20	6	290.93	.00	71.45	39.33	45.78	.00	.00
20 - 30	6	44.00	.00	8.08	8.83	17.73	.00	.00
30 - 40	6	7.89	.00	.00	4.30	.00	3.03	.00
40 - 50	6	4.75	.00	.65	.65	1.49	1.69	.00
40 - 80	3	7.10	.00	2.67	2.58	1.29	2.67	.00
80 -120	3	1.39	1.39	.00	.00	.00	.00	.00
120-160	3	2.45	2.45	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	3	.29	.29	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	1430.30	.00	118.86	321.32	91.94	.00	.00
0 - 10	6	483.42	.00	255.63	89.06	51.69	.00	.00
10 - 20	6	305.87	.00	110.48	41.72	52.81	.00	.00
20 - 30	6	56.29	.00	11.84	16.14	16.94	.00	.00
30 - 40	5	17.84	.00	1.63	1.63	8.11	1.62	.00
40 - 50	6	13.97	.00	1.30	1.57	.82	.74	.00
40 - 80	3	11.94	.00	4.11	1.42	2.11	.00	.00
80 -120	3	2.94	2.94	.00	.00	.00	.00	.00
120-160	3	1.72	1.72	.00	.00	.00	.00	.00
160-200	3	1.07	1.07	.00	.00	.00	.00	.00
200-400	3	.07	.07	.00	.00	.00	.00	.00

Table 48. Anchovy egg age groups: Standard deviations (numbers per 100 m³); station 90.28, after the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	13	1934.27	.00	1921.91	509.13	706.71	.00	.00
0 - 10	12	489.20	1.61	384.13	311.11	72.65	.00	.00
10 - 20	12	236.67	4.98	180.73	147.94	87.78	.00	.00
20 - 30	12	126.34	.00	119.04	8.76	14.96	8.01	.00
30 - 40	11	9.93	.00	3.38	3.83	10.32	3.29	.00
40 - 50	12	8.03	.00	5.54	4.86	2.86	2.21	.00
40 - 80	6	119.59	.00	3.49	17.83	61.75	38.59	.00
80 -120	6	4.32	4.41	.25	.00	.00	.00	.00
120-160	6	1.72	1.72	.00	.00	.00	.00	.00
160-200	6	1.12	1.12	.00	.00	.00	.00	.00
200-400	6	.20	.20	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	2024.12	.00	1941.35	348.19	254.93	.00	.00
0 - 10	6	393.08	.00	392.94	162.97	76.47	.00	.00
10 - 20	6	203.41	.00	238.40	57.43	76.02	.00	.00
20 - 30	6	179.86	.00	168.75	9.90	14.96	10.35	.00
30 - 40	6	6.07	.00	.83	4.56	.84	3.74	.00
40 - 50	6	3.29	.00	1.75	.86	2.06	2.03	.00
40 - 80	3	170.66	.00	2.99	25.53	88.19	53.99	.00
80 -120	3	6.13	6.33	.35	.00	.00	.00	.00
120-160	3	2.47	2.47	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	3	.20	.20	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	2001.58	.00	2065.22	663.20	1007.80	.00	.00
0 - 10	6	597.83	2.27	408.99	418.86	65.21	.00	.00
10 - 20	6	283.77	7.04	112.21	195.96	105.65	.00	.00
20 - 30	6	22.41	.00	14.02	7.53	16.31	5.05	.00
30 - 40	5	13.01	.00	4.75	1.99	13.70	1.03	.00
40 - 50	6	9.76	.00	7.69	6.46	3.64	2.57	.00
40 - 80	3	8.81	.00	4.61	3.92	4.26	.00	.00
80 -120	3	2.55	2.55	.00	.00	.00	.00	.00
120-160	3	1.15	1.15	.00	.00	.00	.00	.00
160-200	3	1.39	1.39	.00	.00	.00	.00	.00
200-400	3	.04	.04	.00	.00	.00	.00	.00

Table 49. Anchovy egg age groups: Coefficients of variation; station 90.28, after the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	13	1.01	.00	1.67	1.23	2.04	.00	.00
0 - 10	12	.77	3.46	1.24	1.30	.88	.00	.00
10 - 20	12	.67	3.46	1.10	1.37	1.13	.00	.00
20 - 30	12	1.49	.00	2.46	.74	.74	1.86	.00
30 - 40	11	.73	.00	1.91	1.14	1.91	1.09	.00
40 - 50	12	.83	.00	2.01	1.76	1.26	1.18	.00
40 - 80	6	2.06	.00	.76	1.88	2.25	2.35	.00
80 -120	6	1.20	1.26	2.45	.00	.00	.00	.00
120-160	6	.72	.72	.00	.00	.00	.00	.00
160-200	6	1.76	1.76	.00	.00	.00	.00	.00
200-400	6	1.08	1.08	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	1.14	.00	1.49	1.15	1.60	.00	.00
0 - 10	6	.71	.00	1.42	.95	.71	.00	.00
10 - 20	6	.62	.00	1.21	1.02	1.00	.00	.00
20 - 30	6	1.56	.00	2.09	1.04	.78	1.68	.00
30 - 40	6	.58	.00	1.57	.96	1.56	.81	.00
40 - 50	6	.57	.00	1.39	1.12	1.12	1.06	.00
40 - 80	3	1.63	.00	.69	1.59	1.71	1.64	.00
80 -120	3	1.35	1.46	1.73	.00	.00	.00	.00
120-160	3	1.00	1.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	3	.62	.62	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	.97	.00	2.15	1.22	1.79	.00	.00
0 - 10	6	.84	2.45	1.18	1.37	1.14	.00	.00
10 - 20	6	.76	2.45	.84	1.22	1.32	.00	.00
20 - 30	6	.41	.00	.87	.53	.77	2.09	.00
30 - 40	5	.75	.00	1.46	1.21	1.22	.93	.00
40 - 50	6	.72	.00	1.82	1.36	1.35	1.41	.00
40 - 80	3	.78	.00	.94	1.33	1.24	.00	.00
80 -120	3	.95	.95	.00	.00	.00	.00	.00
120-160	3	.49	.49	.00	.00	.00	.00	.00
160-200	3	1.09	1.09	.00	.00	.00	.00	.00
200-400	3	.87	.87	.00	.00	.00	.00	.00

Table 50. Anchovy egg age groups: Proportions of positive catches (%); station 90.28, after the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	13	100.00	.00	100.00	100.00	92.31	.00	.00
0 - 10	12	100.00	8.33	100.00	100.00	91.67	.00	.00
10 - 20	12	100.00	8.33	100.00	100.00	100.00	.00	.00
20 - 30	12	100.00	.00	83.33	83.33	91.67	33.33	.00
30 - 40	11	100.00	.00	45.45	63.64	54.55	81.82	.00
40 - 50	12	100.00	.00	50.00	58.33	50.00	58.33	.00
40 - 80	6	100.00	.00	100.00	66.67	66.67	50.00	.00
80 -120	6	83.33	66.67	16.67	.00	.00	.00	.00
120-160	6	83.33	83.33	.00	.00	.00	.00	.00
160-200	6	33.33	33.33	.00	.00	.00	.00	.00
200-400	6	83.33	83.33	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	100.00	.00	100.00	100.00	100.00	.00	.00
0 - 10	6	100.00	.00	100.00	100.00	100.00	.00	.00
10 - 20	6	100.00	.00	100.00	100.00	100.00	.00	.00
20 - 30	6	100.00	.00	66.67	66.67	100.00	33.33	.00
30 - 40	6	100.00	.00	33.33	66.67	33.33	100.00	.00
40 - 50	6	100.00	.00	50.00	50.00	50.00	66.67	.00
40 - 80	3	100.00	.00	100.00	66.67	66.67	100.00	.00
80 -120	3	100.00	66.67	33.33	.00	.00	.00	.00
120-160	3	66.67	66.67	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	3	100.00	100.00	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	100.00	.00	100.00	100.00	83.33	.00	.00
0 - 10	6	100.00	16.67	100.00	100.00	83.33	.00	.00
10 - 20	6	100.00	16.67	100.00	100.00	100.00	.00	.00
20 - 30	6	100.00	.00	100.00	100.00	83.33	33.33	.00
30 - 40	5	100.00	.00	60.00	60.00	80.00	60.00	.00
40 - 50	6	100.00	.00	50.00	66.67	50.00	50.00	.00
40 - 80	3	100.00	.00	100.00	66.67	66.67	.00	.00
80 -120	3	66.67	66.67	.00	.00	.00	.00	.00
120-160	3	100.00	100.00	.00	.00	.00	.00	.00
160-200	3	66.67	66.67	.00	.00	.00	.00	.00
200-400	3	66.67	66.67	.00	.00	.00	.00	.00

Table 52. Anchovy egg age groups: Maximum values (numbers per 100 m³); station 90.28, after the storm.

Day + Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	13	5965.56	.00	5525.22	1884.06	2576.56	.00	.00
0 - 10	12	1608.03	5.57	1113.75	1084.85	213.54	.00	.00
10 - 20	12	794.30	17.25	533.57	416.58	291.39	.00	.00
20 - 30	12	477.48	.00	423.50	23.03	46.85	24.76	.00
30 - 40	11	37.19	.00	11.41	10.24	35.00	10.24	.00
40 - 50	12	24.21	.00	19.66	15.67	8.07	6.45	.00
40 - 80	6	301.80	.00	9.83	45.45	153.39	95.16	.00
80 -120	6	11.59	11.59	.61	.00	.00	.00	.00
120-160	6	4.94	4.94	.00	.00	.00	.00	.00
160-200	6	2.76	2.76	.00	.00	.00	.00	.00
200-400	6	.55	.55	.00	.00	.00	.00	.00

Day								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	7	5965.56	.00	5525.22	1002.43	725.73	.00	.00
0 - 10	6	1192.36	.00	1063.14	417.85	213.54	.00	.00
10 - 20	6	562.67	.00	533.57	165.64	221.75	.00	.00
20 - 30	6	477.48	.00	423.50	20.76	36.66	24.76	.00
30 - 40	6	20.48	.00	1.79	10.24	1.79	10.24	.00
40 - 50	6	10.42	.00	4.46	1.82	4.31	5.46	.00
40 - 80	3	301.80	.00	7.81	45.45	153.39	95.16	.00
80 -120	3	11.59	11.59	.61	.00	.00	.00	.00
120-160	3	4.94	4.94	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00
200-400	3	.55	.55	.00	.00	.00	.00	.00

Night								
Depth (m)	N	All ages	S	A	B	C	D	E
0 -0.16	6	5477.71	.00	5171.29	1884.06	2576.56	.00	.00
0 - 10	6	1608.03	5.57	1113.75	1084.85	179.15	.00	.00
10 - 20	6	794.30	17.25	339.48	416.58	291.39	.00	.00
20 - 30	6	79.59	.00	41.69	23.03	46.85	12.62	.00
30 - 40	5	37.19	.00	11.41	4.86	35.00	2.19	.00
40 - 50	6	24.21	.00	19.66	15.67	8.07	6.45	.00
40 - 80	3	19.70	.00	9.83	7.39	8.21	.00	.00
80 -120	3	5.07	5.07	.00	.00	.00	.00	.00
120-160	3	3.68	3.68	.00	.00	.00	.00	.00
160-200	3	2.76	2.76	.00	.00	.00	.00	.00
200-400	3	.07	.07	.00	.00	.00	.00	.00

Table 58. Continued*.

Day + Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	12	3.40	2.47	.00	2.30	.00	.00	.00	.00	.00	.00
10 - 20	12	.00	4.23	1.72	2.12	.00	.00	.00	.00	.00	.00
20 - 30	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30 - 40	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 80	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
80 -120	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Day											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
0 - 10	6	3.40	8.43	.00	2.30	.00	.00	.00	.00	.00	.00
10 - 20	6	.00	4.23	2.03	2.12	.00	.00	.00	.00	.00	.00
20 - 30	6	1.65	.00	.00	.00	.00	.00	.00	.00	.00	.00
30 - 40	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	.00	.00	.00	.65	.00	.00	.00	.00	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Night											
Depth (m)	N	6.5 mm	7 mm	7.5 mm	8 mm	8.5 mm	9 mm	9.5 mm	10 mm	10.5 mm	11 mm
0 -0.16	6	.00	.00	.00	.00	.00	.00	.00	2.75	.00	.00
0 - 10	6	4.32	2.47	2.47	2.47	.00	.00	.00	.00	.00	.00
10 - 20	6	5.17	10.35	1.72	6.90	1.72	1.72	.00	1.72	.00	.00
20 - 30	6	.00	1.85	1.65	.00	.00	.00	.00	.00	.00	.00
30 - 40	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 50	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
40 - 80	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
80 -120	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
120-160	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
160-200	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200-400	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

* The minimum values for the size categories larger than 11 mm are all = .00 .

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