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ICHTHYOPLANKTON AND STATION DATA FOR CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS SURVEY CRUISES IN 1993

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

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ABSTRACT

This report provides ichthyoplankton data and associated station and tow data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) cruises conducted in the Southern California Bight region in 1993. It is the 33rd report in a series that presents these data for all biological-oceanographic CalCOFI surveys from 1951 to the present. A total of 263 stations was occupied during quarterly cruises over the survey area which extended from Avila Beach to San Diego, California. Transects extended seaward in a southwesterly direction to a maximum of approximately 330 n. mi. The most seaward station, 90.0 120.0 was approximately 400 n. mi. west of Punta Baja, Baja California, Mexico. The data are listed in a series of four tables; the background, methodology, and information necessary for interpretation of the data are presented in an accompanying text. All pertinent station and tow data, including volumes of water strained and standard haul factors, are listed in the first table. Another table lists, by station and month, standardized counts of each of the 150 larval fish categories identified from survey samples. This series of reports makes the CalCOFI ichthyoplankton and station data available to all investigators and serves as a guide to the computer data base.

INTRODUCTION

This report, the 33rd in the series, provides ichthyoplankton and associated station and tow data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) joint biological-oceanographic survey cruises conducted in 1993. This program was initiated in 1949, under the sponsorship of the Marine Research Committee of the State of California, to study the population fluctuations of the Pacific sardine (*Sardinops sagax*) and the environmental factors that may play a role in these fluctuations. CalCOFI is a partnership among the Southwest Fisheries Science Center of the National Marine Fisheries Service (NMFS), the Scripps Institution of Oceanography (SIO), and the California Department of Fish and Game (CDFG). NMFS and SIO supply ships and personnel to conduct the sea surveys, NMFS processes the plankton samples and analyzes the ichthyoplankton from them. SIO processes and analyzes hydrographic and biological samples and analyzes invertebrate groups from the plankton samples.

The boundaries, station placement, and sampling frequency for the CalCOFI surveys were based on the results of joint biological-oceanographic cruises conducted by NMFS and SIO during 1939–41. Originally, CalCOFI cruises were designed to collect sardine eggs and larvae and associated hydrographic data over the entire areal and seasonal spawning range of the species. From 1951 to 1960 the surveys were annual with cruises conducted monthly. The survey area was occupied quarterly during 1961–1965 and in 1966 the surveys became triennial with monthly cruises. Beginning in 1985 annual surveys were resumed, with quarterly cruises occupying only the Southern California Bight region (see Hewitt 1988 and Moser et al. 1993, 1994 for summaries of historical CalCOFI sampling effort).

Hydrographic and biological data from the 1993 CalCOFI survey have been published by the Scripps Institution of Oceanography (Univ. of Calif., SIO 1993, 1994). All available records for the 1993 CalCOFI surveys were verified and edited to produce this ichthyoplankton data report. These reports make the CalCOFI ichthyoplankton and station data available to all investigators and serve as guides to the ichthyoplankton computer data base. They are the basic documents against which changes in the data base can be compared as it is modified to correct errors and update earlier identifications. Citations for previous reports in this series are:

Survey	Report	Survey	Report
1951	Ambrose et al. 1987a	1967	Ambrose et al. 1988b
1952	Sandknop et al. 1987a	1968	Sandknop et al. 1988c
1953	Stevens et al. 1987a	1969	Stevens et al. 1988b
1954	Sumida et al. 1987a	1972	Sumida et al. 1988c
1955	Ambrose et al. 1987b	1975	Ambrose et al. 1988c
1956	Stevens et al. 1987b	1978	Sandknop et al. 1988d
1957	Sumida et al. 1987b	1981	Ambrose et al. 1988d
1958	Sandknop et al. 1987b	1984	Stevens et al. 1990
1959	Stevens et al. 1987c	1985	Ambrose et al. 1999a
1960	Ambrose et al. 1987c	1986	Charter et al. 1999a
1961	Sandknop et al. 1988a	1987	Sandknop et al. 1999a
1962	Sumida et al. 1988a	1988	Watson et al. 1999a
1963	Ambrose et al. 1988a	1989	Ambrose et al. 1999b
1964	Sandknop et al. 1988a	1990	Charter et al. 1999b
1965	Stevens et al. 1988a	1991	Sandknop et al. 1999b
1966	Sumida et al. 1988b	1992	Watson et al. 1999b

SAMPLING AREA AND PATTERN

A total of 263 standard CalCOFI survey stations was occupied on four cruises in 1993, employing two research vessels:

9301, RV *David Starr Jordan*, 66 stations, January 12–27;

9304, RV *David Starr Jordan*, 66 stations, March 30–April 15;

9308, RV *New Horizon*, 65 stations, August 11–27;

9310, RV *New Horizon*, 66 stations, October 8–26.

The core survey area extended from Avila Beach to San Diego, California and seaward on six survey lines to approximately 120–330 n. mi. (Figures 1and 2)[1]. The most seaward station, 90.0 120.0 was approximately 400 n. mi. west of Punta Baja, Baja California, Mexico. On all cruises CalCOFI lines 76.7 and 80.0 extended

[1] Beginning in 1981 we changed our designation of ordinal survey lines (those ending in "3" and "7") to an exact decimal notation. Thus, lines 77, 83, 87, 93, etc. were changed to 76.7, 83.3, 86.7, 93.3, etc. to indicate equidistant spacing between cardinal lines (those ending in "0"). Scripps Institution of Oceanography continues to use the original designation for ordinal lines (Figures 1 and 2 and see Univ. of Calif., SIO 1993, 1994).

seaward to station 100.0, lines 83.3 and 86.7 extended to station 110.0, and lines 90.0 and 93.3 extended to station 120.0 (Figures 1and 2).

SAMPLING GEAR AND METHODS

In 1978, the standard 1-m ring net with towing bridle was replaced by a bridle-free "bongo" net. The bongo frame (McGowan and Brown 1966; Smith and Richardson 1977) consists of a pair of circular frames connected to a central axle. The axle is free to rotate so that the mouth openings are vertical during the tow. The standard CalCOFI net has 71 cm diameter frames and net material constructed of nylon mesh. Each net consists of a cylindrical section ~146 cm long, a truncated conical section ~161 cm long, and a detachable cod end. The starboard net, from which the standard sample is taken, is constructed of 0.505 mm mesh. The sample from the port side is used for other purposes; the mesh size is either 0.505 mm or 0.333 mm depending on requirements. The cod end of each net is constructed of 0.333 mm mesh.

The standard tow in 1993 was a double oblique haul to 210 m depth (to 15 m from the bottom in shallow areas) designed to filter a constant amount of water per depth interval (~2 m^3/m of depth) over the vertical range of most ichthyoplankters. Hauls were made at a ship speed of 1.5–2.0 knots and initiated by clamping the net to the towing cable above a 34 kg weight suspended below the surface. The net was lowered to ~210m depth by paying out 300 m of wire at 50 m/minute (35 m of depth/minute). After fishing at depth for 30 seconds, the net was retrieved at 20 m/minute (14 m of depth/minute). The angle of stray was recorded every 30 seconds and maintained at 45° (±3°) by adjusting ship speed and course. After reaching the surface, the nets were washed down and the samples preserved in 5% formalin buffered with sodium borate. At the beginning and end of each tow, readings were made from a flow meter suspended in the mouth of the starboard net. Detailed descriptions of gear and methods are given by Kramer et al. (1972) and Smith and Richardson (1977); Ohman and Smith (1995) provided summaries of historical CalCOFI zooplankton methods and calibration factors for the various gear types.

LABORATORY PROCEDURES

We determined a zooplankton displacement volume for each sample (methods described in Staff, SPFI 1953 and Kramer et al. 1972). Samples containing >25 ml of plankton were fractioned to ~50% of their original volume. Aliquot percentages for fractioned samples are listed in Table 1 under the "Percent Sorted" column. Sorting involved the removal of ichthyoplankton from the samples and identification and separation of: eggs and larvae of Pacific sardine, northern anchovy, and Pacific saury and larvae of Pacific hake. Body lengths of sardine, anchovy, and hake larvae were measured to the nearest 0.5 mm.

A standard haul factor (SHF) was calculated for each tow to make them comparable and to allow estimation of areal abundance. The SHF is calculated by the formula:

$$SHF = \frac{10\,D}{V}$$

where D = depth of haul = cosine of the average angle of stray of the towing cable multiplied by cable length (m)

V = total volume of water (m^3) strained during the haul

$$V = R \cdot a \cdot p$$

where R = total number of revolutions of the current meter during the haul

a = area (m^2) of the mouth of the net

p = length of the column of water needed produce one revolution of the current meter

Tow depth, volume of water strained, and standard haul factor are listed in Table 1 for each tow taken during 1993. Detailed descriptions of factors involved in calculating these values are presented in Ahlstrom (1948), Kramer et al. (1972), and Smith and Richardson (1977).

IDENTIFICATION

Identification of ichthyoplankton species beyond those separated during the sorting process was done by a separate group of specialists. Early ontogenetic stages of fishes are inherently difficult to identify and this is further complicated by the large number and diversity of species which contribute to the ichthyoplankton of the California Current region. Most identifications were accomplished by establishing ontogenetic series on the basis of morphology, meristics, and pigmentation, and then linking these series through overlapping features to known metamorphic, juvenile, or adult stages (Powles and Markle 1984). Our ability to identify larvae in the California Current region improved greatly during 1988–1995 as a result of an intensive research project aimed at producing a taxonomic monograph on the ontogenetic stages of fishes of this region (Moser 1996). Except for damaged specimens, most larvae in the 1993 surveys could be identified to species. A total of 149 categories (including "unidentified" and "disintegrated") was identified for 1993: 120 to species, 20 to genus, 5 to family or subfamily, and 2 to order. Identifications were done in the Ichthyoplankton Ecology Laboratory of the Coastal Fisheries Resources Division by William Isham and Ernesto Calix (MEC Analytical Systems), working closely with larval fish identification experts in the laboratory who checked each sample.

With few exceptions, taxonomic categories above species represent small specimens which were damaged and partly disintegrated during capture. The following taxonomic categories in Tables 2–4 require special explanation:

Cyclothone spp. – small or damaged larvae, almost entirely *C. acclinidens* and/or *C. pseudopallida* lacking diagnostic characters.

Cyclothone acclinidens – larger larvae (primarily postflexion stage) having diagnostic characters.

Diaphus spp. – *Diaphus theta* is the dominant *Diaphus* species in the survey area and most, if not all, of the larvae from the Southern California Bight region are this species; the generic category is used because a small proportion of the *Diaphus* larvae captured at the outer margin of the survey pattern may represent other species whose larvae are identical to those of *D. theta*.

Disintegrated fish larvae – larvae that could not be identified because of their poor condition; separated from the "unidentified" category to monitor the general condition of the ichthyoplankton samples through the time series.

Howella spp. – larvae represent a single species, either *H. brodiei* or *H. sherborni*; taxonomy of the adult is unresolved.

Lampanyctus spp. – primarily small (< 5.0 mm) larvae of *L. ritteri* and *L. regalis*; Zahuranec (In

Press) has placed 17 species of *Lampanyctus* with small or absent pectoral fins in the genus *Nannobrachium*; four of these species occur in the current CalCOFI survey area (*L. regalis*, *L. ritteri*, and two undescribed species designated here by the descriptive names *Lampanyctus* "no pectorals" and *Lampanyctus* "niger").

Lyopsetta exilis – see comment for Pleuronectidae.

Microstoma spp. – larvae of a distinct but undescribed microstomatid species.

Paralepididae – small or damaged larvae, probably *Lestidiops ringens* lacking diagnostic characters.

Parophrys vetulus – see comment for Pleuronectidae.

Pleuronectidae – Sakamoto (1984) changed pleuronectid generic designations for species in the CalCOFI area as follows: 1) *Glyptocephalus zachirus* was changed to *Errex zachirus*; 2) *Isopsetta isolepis*, *Lepidopsetta bilineata*, and *Parophrys vetulus* were transferred into *Pleuronectes* and 3) *Lyopsetta exilis* was changed to *Eopsetta exilis*; although these changes were incorporated in the lists of Robins et al. (1991) and Eschmeyer (1998) we follow Nelson (1994) in retaining the older nomenclature because Sakamoto's (1984) changes were based on a phenetic study; also, the older names are used in the major identification guides to fishes of our region (Miller and Lea 1972, Eschmeyer et al. 1983, Matarese et al. 1989, and Moser 1996).

Sebastolobus spp. – larvae of this genus <10 mm in length are not identifiable to species; larvae >10 mm are identified as *S. alascanus* or *S. altivelis*.

Unidentified fish larvae – larvae that were generally in good condition but could not be identified because of their small size or early stage of development.

Vinciguerria lucetia – *V. lucetia*, an eastern tropical Pacific species, is common in the present CalCOFI region whereas the central water mass species *V. poweriae* is rarely encountered; a small percentage of *V. poweriae* larvae may have been included in the *V. lucetia* category because of the difficulty in separating early larvae of the two species.

SPECIES SUMMARY

Of the five most abundant larvae in 1993, the northern anchovy (*Engraulis mordax*) ranked first in abundance with 27.8% of the total larvae and ranked second in occurrence with 36.9% positive stations (Tables 2 and 3). The Panama lightfish (Vinciguerria lucetia) ranked second in abundance with 19.1% of the total larvae but was first in occurrence (41.4% of the samples). The Pacific hake (*Merluccius productus*) ranked third with 7.0% of the larvae and ranked 15th in occurrence (19.4% of the stations). The rockfish genus *Sebastes* was the fourth most abundant taxon with 6.3% of the total larvae and ranked third in frequency of occurrence (36.5% of the samples). The California smoothtongue (*Leuroglossus stilbius*) ranked fifth in abundance (5.9% of total larvae) and ninth in occurrence (25.1% of the samples). The next six most abundant taxa were the myctophid *Stenobrachius leucopsarus* (5.6% of the total larvae), the Pacific sardine *Sardinops sagax* (4.1%), the shortbelly rockfish *Sebastes jordani* (2.5%), the popeye blacksmelt *Bathylagus ochotensis* (1.9%), and the showy bristlemouth *Cyclothone signata* and the sanddab genus *Citharichthys* (both 1.5%). These taxa ranked 6th, 19th, 22nd, 10th, 5th, and 20th in frequency of occurrence, respectively. The 11 most abundant taxa comprised 83.2% of all the larvae collected on CalCOFI cruises in 1993. The remaining 16.8% was distributed among 139 other taxa (including the "disintegrated" and "unidentified"

categories). Of the eleven most abundant taxa, four are coastal demersal taxa, five are midwater species, and two are coastal pelagic species.

EXPLANATION OF TABLES

Table 1. This table lists for each tow the pertinent station and tow data, the volume of water filtered, the standard haul factor, the plankton volume, the percentage of sample sorted, and the total number of fish eggs and larvae. CalCOFI cruises are designated by four digits; the first two indicate the year and second two the month. Within each cruise the data are listed in order of increasing line and station number (southerly and seaward directions); the order of station occupancy is shown on the station charts (Figures 1 and 2). Stations are designated by two groups of numbers; the first set indicates the line and decimal fraction and the second set indicates the station and decimal fraction. Time is listed as Pacific Standard Time at the start of each tow in 24-hour designation. Plankton displacement volumes were determined after removal of large organisms (those with individual displacement volumes >5 ml) and expressed as ml per 1000 m^3 of water filtered. The values for total fish eggs and larvae are raw counts (unadjusted for percent of sample sorted or standard haul factor). Ship codes are as follows: JD, *David Starr Jordan*; NH, *New Horizon*. The listings for station latitude and longitude in this table may differ from values given for the same station in the SIO data reports, reflecting the slight difference in position of the net tow and hydrocast. Dates given here and in Figures 1and 2 for the beginning and end of each cruise are based on Pacific Standard time at the first and last net tow station of the cruise and do not include transit time from port to the first station and to port after the last station. Thus, our cruise dates may differ slightly from those in SIO reports which are based on GMT prior to 1990 and include transit time to the first station and from the last station.

Table 2. Pooled occurrences of all larval fish taxa taken on CalCOFI survey cruises in 1993 listed in rank order.

Table 3. Pooled counts of all larval fish taxa taken on CalCOFI survey cruises in 1993 listed in rank order. Numbers are adjusted for percent sorted and standard haul factors.

Table 4. Numbers of fish larvae for each taxon, listed by station and calendar month of the tow. Counts are adjusted for percentage of sample sorted and standard haul factor. Orders and families are listed in phylogenetic sequence (Eschmeyer 1998); genera and species are listed alphabetically.

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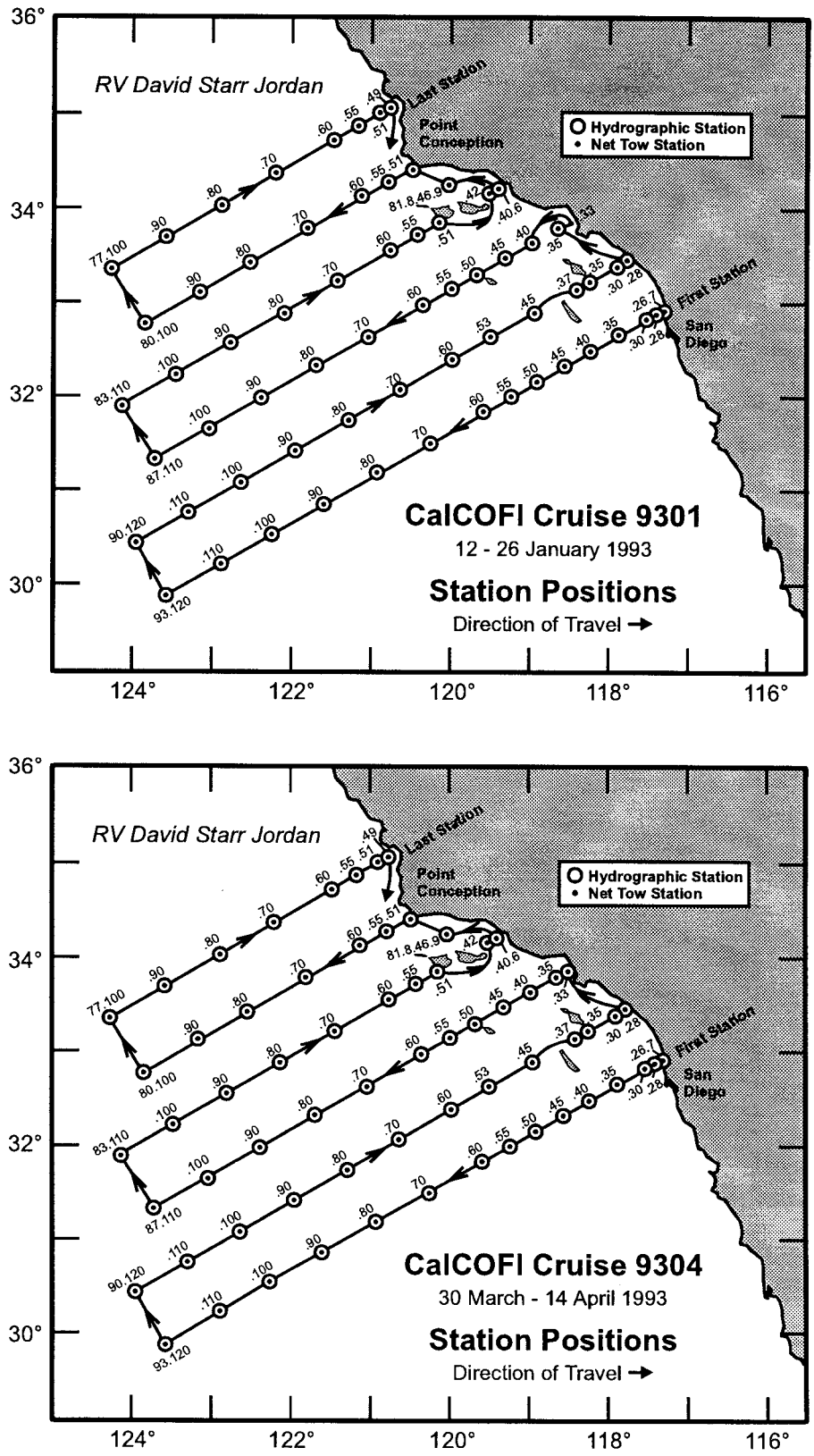

Figure 1. Stations and cruise tracks for CalCOFI cruises 9301 (above) and 9304 (below). Circles indicate hydrographic stations; dots indicate net tow stations.

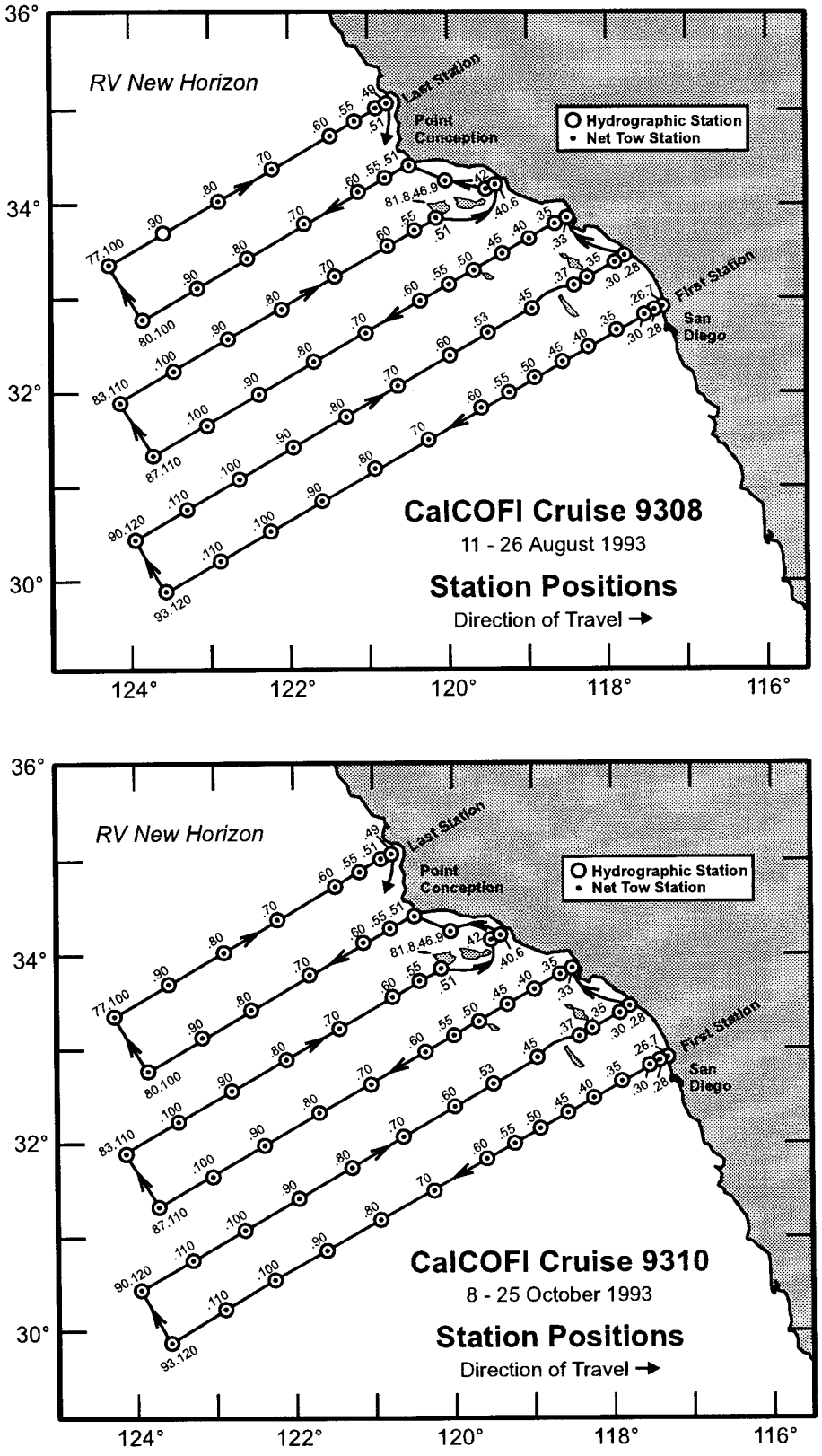

Figure 2. Stations and cruise tracks for CalCOFI cruises 9308 (above) and 9310 (below). Symbols as in Figure 1.

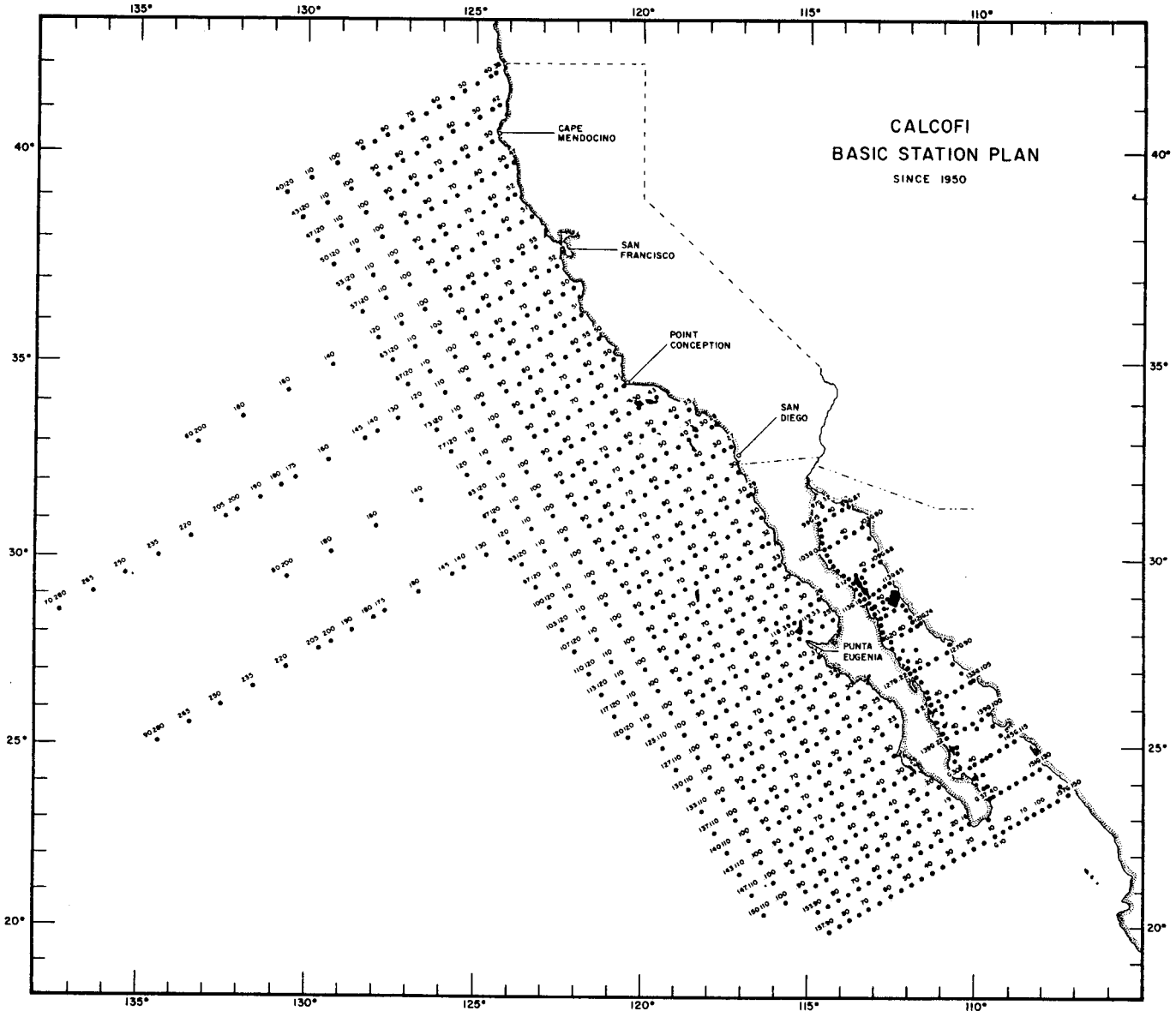

Figure 3. Basic station plan for CalCOFI Cruises.

TABLE 1. Station and plankton tow data for CalCOFI cruises in 1993. Counts for fish eggs and larvae are not adjusted for standard haul factor or percent of sample sorted. Plankton volume given as milliliters per 1000 cubic meters of water strained.

CalCOFI Cruise 9301

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
76.7	49.0	35	05.3	120	46.6	JD	93	01	26	0647	62	146	4.25	62	100.0	139	23
76.7	51.0	35	01.3	120	55.2	JD	93	01	26	0406	213	440	4.84	102	46.7	123	1
76.7	55.0	34	53.3	121	11.9	JD	93	01	26	0026	215	439	4.89	125	50.9	288	345
76.7	60.0	34	43.3	121	33.0	JD	93	01	25	2007	216	431	5.01	107	47.8	48	775
76.7	70.0	34	23.4	122	14.8	JD	93	01	25	1221	216	443	4.86	54	100.0	115	51
76.7	80.0	34	03.3	122	56.5	JD	93	01	25	0517	209	445	4.69	45	100.0	13	45
76.7	90.0	33	43.3	123	38.0	JD	93	01	24	2334	211	448	4.70	234	48.6	0	1
76.7	100.0	33	23.3	124	19.3	JD	93	01	24	1752	214	425	5.04	212	100.0	4	11
80.0	51.0	34	27.0	120	31.3	JD	93	01	23	0314	64	146	4.36	55	100.0	80	375
80.0	55.0	34	19.0	120	48.2	JD	93	01	23	0637	210	462	4.56	394	26.4	19	202
80.0	60.0	34	09.0	121	09.1	JD	93	01	23	1035	210	450	4.66	51	100.0	42	219
80.0	70.0	33	49.0	121	50.6	JD	93	01	23	1755	212	431	4.92	58	100.0	236	56
80.0	80.0	33	29.0	122	32.1	JD	93	01	23	2316	215	443	4.85	221	46.9	2	2
80.0	90.0	33	09.0	123	13.3	JD	93	01	24	0448	220	426	5.15	493	52.4	2	4
80.0	100.0	32	49.0	123	54.5	JD	93	01	24	1022	214	446	4.79	25	100.0	7	18
81.8	46.9	34	16.5	120	01.5	JD	93	01	22	2323	210	440	4.77	61	100.0	64	889
83.3	40.6	34	13.5	119	24.7	JD	93	01	22	1851	28	69	4.13	29	100.0	7	430
83.3	42.0	34	10.7	119	30.5	JD	93	01	22	1700	133	285	4.66	21	100.0	13	98
83.3	51.0	33	52.7	120	08.0	JD	93	01	22	0959	88	197	4.45	15	100.0	40	199
83.3	55.0	33	44.7	120	24.6	JD	93	01	22	0649	203	446	4.56	43	100.0	36	484
83.3	60.0	33	34.7	120	45.4	JD	93	01	22	0305	217	450	4.82	71	50.0	41	138
83.3	70.0	33	14.7	121	26.6	JD	93	01	21	2135	216	434	4.97	62	100.0	16	10
83.3	80.0	32	54.7	122	07.8	JD	93	01	21	1620	215	442	4.87	11	100.0	7	28
83.3	90.0	32	34.8	122	48.6	JD	93	01	21	0920	216	464	4.66	302	100.0	1	7
83.3	100.0	32	14.7	123	29.5	JD	93	01	21	0358	212	456	4.64	24	100.0	27	5
83.3	110.0	31	54.7	124	10.1	JD	93	01	20	2203	214	452	4.73	18	100.0	23	17
86.7	33.0	33	53.4	118	29.4	JD	93	01	18	1430	40	102	3.96	20	100.0	20	348
86.7	35.0	33	49.4	118	37.7	JD	93	01	18	1231	208	480	4.34	12	100.0	9	34
86.7	40.0	33	39.3	118	58.5	JD	93	01	18	1840	212	444	4.77	47	100.0	537	415

Table 1. (cont.)

CalCOFI Cruise 9301

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
86.7	45.0	33	29.4	119	19.1	JD	93	01	18	2205	211	436	4.84	60	100.0	262	716
86.7	50.0	33	19.4	119	39.8	JD	93	01	19	0136	69	166	4.16	54	100.0	397	333
86.7	55.0	33	09.4	120	00.5	JD	93	01	19	0530	216	447	4.84	45	100.0	47	196
86.7	60.0	32	59.4	120	21.0	JD	93	01	19	0913	220	452	4.87	33	100.0	27	58
86.7	70.0	32	39.4	121	02.0	JD	93	01	19	1652	209	467	4.49	34	100.0	18	35
86.7	80.0	32	19.4	121	43.0	JD	93	01	19	2240	215	431	4.98	26	100.0	29	86
86.7	90.0	31	59.3	122	23.6	JD	93	01	20	0410	215	433	4.96	30	100.0	47	18
86.7	100.0	31	39.4	123	04.2	JD	93	01	20	0941	213	439	4.85	11	100.0	17	32
86.7	110.0	31	19.5	123	44.6	JD	93	01	20	1618	215	433	4.96	7	100.0	13	17
90.0	28.0	33	29.1	117	46.1	JD	93	01	18	0546	44	103	4.26	29	100.0	6	34
90.0	30.0	33	25.1	117	54.3	JD	93	01	18	0313	215	443	4.86	41	100.0	7	82
90.0	35.0	33	15.0	118	15.0	JD	93	01	17	2327	214	460	4.66	15	100.0	5	53
90.0	37.0	33	11.1	118	23.2	JD	93	01	17	2109	216	439	4.92	43	100.0	4	168
90.0	45.0	32	55.0	118	56.1	JD	93	01	17	1638	217	424	5.11	9	100.0	10	223
90.0	53.0	32	39.1	119	28.9	JD	93	01	17	1147	224	429	5.22	23	100.0	12	182
90.0	60.0	32	25.1	119	57.6	JD	93	01	17	0632	219	441	4.97	43	100.0	19	50
90.0	70.0	32	05.1	120	38.3	JD	93	01	17	0100	220	441	4.99	111	49.0	24	3
90.0	80.0	31	45.1	121	18.9	JD	93	01	16	1919	217	430	5.06	23	100.0	5	8
90.0	90.0	31	25.1	121	59.5	JD	93	01	16	1325	205	460	4.47	17	100.0	21	15
90.0	100.0	31	05.2	122	39.7	JD	93	01	16	0641	210	453	4.64	18	100.0	17	45
90.0	110.0	30	45.1	123	19.9	JD	93	01	16	0058	211	458	4.61	33	100.0	20	39
90.0	120.0	30	25.1	123	59.9	JD	93	01	15	1921	208	480	4.33	17	100.0	17	5
93.3	26.7	32	57.4	117	17.7	JD	93	01	12	1324	25	75	3.35	40	100.0	1	20
93.3	28.0	32	54.8	117	23.5	JD	93	01	12	1755	212	455	4.68	359	50.3	0	0
93.3	30.0	32	50.9	117	31.6	JD	93	01	12	2107	215	445	4.83	29	100.0	0	7
93.3	35.0	32	40.8	117	52.4	JD	93	01	13	0135	205	461	4.45	35	100.0	2	7
93.3	40.0	32	30.8	118	12.8	JD	93	01	13	0541	219	438	5.01	48	100.0	11	7
93.3	45.0	32	20.8	118	33.2	JD	93	01	13	0922	215	431	5.00	32	100.0	3	20
93.3	50.0	32	10.7	118	53.5	JD	93	01	13	1500	198	482	4.12	46	100.0	10	29
93.3	55.0	32	00.8	119	14.0	JD	93	01	13	1910	216	457	4.73	50	100.0	6	46
93.3	60.0	31	50.8	119	34.2	JD	93	01	13	2317	216	454	4.75	66	100.0	6	12
93.3	70.0	31	30.8	120	14.8	JD	93	01	14	0543	218	394	5.55	28	100.0	0	9

Table 1. (cont.)

CalCOFI Cruise 9301

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
93.3	80.0	31	10.8	120	55.1	JD	93	01	14	1230	219	420	5.21	26	100.0	4	29
93.3	90.0	30	50.8	121	35.4	JD	93	01	14	1852	219	426	5.13	33	100.0	4	48
93.3	100.0	30	30.8	122	15.4	JD	93	01	15	0045	222	444	5.01	29	100.0	3	66
93.3	110.0	30	10.8	122	55.4	JD	93	01	15	0651	217	463	4.69	11	100.0	6	54
93.3	120.0	29	50.8	123	35.2	JD	93	01	15	1331	220	431	5.11	19	100.0	1	11

Table 1. (cont.)

CalCOFI Cruise 9304

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
76.7	49.0	35	05.4	120	46.6	JD	93	04	14	1721	62	129	4.85	39	100.0	11	13
76.7	51.0	35	01.3	120	55.1	JD	93	04	14	1436	193	442	4.37	52	100.0	16	16
76.7	55.0	34	53.3	121	11.9	JD	93	04	14	0952	201	433	4.64	78	100.0	66	19
76.7	60.0	34	43.3	121	32.9	JD	93	04	14	0557	197	417	4.74	84	100.0	82	27
76.7	70.0	34	23.3	122	14.8	JD	93	04	13	2324	203	420	4.84	148	100.0	41	129
76.7	80.0	34	03.2	122	56.6	JD	93	04	13	1640	204	435	4.70	23	100.0	31	372
76.7	90.0	33	43.3	123	38.0	JD	93	04	13	0700	209	440	4.76	18	100.0	13	75
76.7	100.0	33	23.3	124	19.4	JD	93	04	13	0047	209	448	4.66	16	100.0	19	46
80.0	51.0	34	27.0	120	31.3	JD	93	04	11	0447	67	163	4.13	43	100.0	3	7
80.0	55.0	34	19.0	120	48.2	JD	93	04	11	0820	206	451	4.55	24	100.0	19	14
80.0	60.0	34	09.0	121	08.9	JD	93	04	11	1440	196	520	3.76	23	100.0	42	41
80.0	70.0	33	49.0	121	50.6	JD	93	04	11	2100	206	444	4.64	27	100.0	22	63
80.0	80.0	33	29.0	122	32.1	JD	93	04	12	0258	226	436	5.19	21	100.0	32	20
80.0	90.0	33	09.0	123	13.3	JD	93	04	12	0956	215	464	4.65	17	100.0	19	29
80.0	100.0	32	49.0	123	54.3	JD	93	04	12	1731	209	431	4.84	14	100.0	16	50
81.8	46.9	34	16.5	120	01.5	JD	93	04	11	0023	223	432	5.17	60	100.0	11	10
83.3	40.6	34	13.5	119	24.7	JD	93	04	10	1910	28	67	4.17	60	100.0	35	71
83.3	42.0	34	10.7	119	30.5	JD	93	04	10	1650	165	326	5.06	28	100.0	9	79
83.3	51.0	33	52.7	120	08.1	JD	93	04	10	0812	70	153	4.54	117	100.0	28	9
83.3	55.0	33	44.7	120	24.5	JD	93	04	10	0458	212	432	4.91	56	100.0	39	44
83.3	60.0	33	34.7	120	45.3	JD	93	04	10	0028	201	496	4.06	32	100.0	30	427
83.3	70.0	33	14.7	121	26.7	JD	93	04	09	1742	217	408	5.32	12	100.0	6	11
83.3	80.0	32	54.7	122	07.7	JD	93	04	09	1012	213	440	4.84	16	100.0	10	25
83.3	90.0	32	34.7	122	48.8	JD	93	04	09	0415	213	409	5.21	17	100.0	29	39
83.3	100.0	32	14.7	123	29.5	JD	93	04	08	2241	209	411	5.09	15	100.0	36	61
83.3	110.0	31	54.7	124	10.2	JD	93	04	08	1711	220	426	5.17	14	100.0	5	30
86.7	33.0	33	53.4	118	29.4	JD	93	04	05	2314	48	102	4.68	59	100.0	39	191
86.7	35.0	33	49.4	118	37.8	JD	93	04	06	0136	209	408	5.12	56	100.0	209	43
86.7	40.0	33	39.4	118	58.6	JD	93	04	06	0531	204	431	4.74	35	100.0	338	578
86.7	45.0	33	29.4	119	19.1	JD	93	04	06	0928	210	406	5.18	44	100.0	246	306
86.7	50.0	33	19.4	119	39.8	JD	93	04	06	1900	54	126	4.28	253	100.0	844	127
86.7	55.0	33	09.4	120	00.4	JD	93	04	06	2258	212	404	5.25	30	100.0	25	72
86.7	60.0	33	00.0	120	20.8	JD	93	04	07	0324	212	409	5.19	61	100.0	108	173

Table 1. (cont.)

CalCOFI Cruise 9304

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
86.7	70.0	32	39.4	121	02.0	JD	93	04	07	0938	208	405	5.13	22	100.0	68	286
86.7	80.0	32	19.4	121	42.9	JD	93	04	07	1645	210	422	4.98	36	100.0	31	47
86.7	90.0	31	59.4	122	23.7	JD	93	04	07	2214	210	425	4.93	26	100.0	20	8
86.7	100.0	31	39.5	123	04.2	JD	93	04	08	0343	213	418	5.08	14	100.0	29	25
86.7	110.0	31	19.4	123	44.7	JD	93	04	08	0913	209	419	4.98	12	100.0	28	155
90.0	28.0	33	29.1	117	46.1	JD	93	04	05	1637	57	118	4.87	85	100.0	69	63
90.0	30.0	33	25.1	117	54.3	JD	93	04	05	1345	216	405	5.34	32	100.0	293	81
90.0	35.0	33	15.1	118	15.0	JD	93	04	05	0848	207	429	4.82	33	100.0	106	70
90.0	37.0	33	11.1	118	23.2	JD	93	04	05	0552	209	427	4.91	33	100.0	76	63
90.0	45.0	32	55.1	118	56.0	JD	93	04	05	0017	212	447	4.75	56	100.0	257	475
90.0	53.0	32	39.1	119	29.0	JD	93	04	04	1810	219	420	5.21	10	100.0	28	28
90.0	60.0	32	25.1	119	57.6	JD	93	04	04	1235	205	466	4.39	6	100.0	9	19
90.0	70.0	32	05.1	120	38.3	JD	93	04	04	0600	222	451	4.91	22	100.0	23	26
90.0	80.0	31	45.1	121	18.9	JD	93	04	03	2322	217	419	5.18	36	100.0	26	47
90.0	90.0	31	25.1	121	59.4	JD	93	04	03	1705	217	423	5.14	28	100.0	27	433
90.0	100.0	31	05.1	122	39.8	JD	93	04	03	0827	210	444	4.74	9	100.0	7	145
90.0	110.0	30	45.1	123	19.9	JD	93	04	03	0224	218	448	4.88	13	100.0	0	26
90.0	120.0	30	25.0	123	59.8	JD	93	04	02	2007	213	461	4.61	9	100.0	1	36
93.3	26.7	32	57.4	117	18.3	JD	93	03	30	1323	77	157	4.94	153	100.0	15	17
93.3	28.0	32	54.8	117	23.8	JD	93	03	30	1858	211	415	5.09	51	100.0	37	0
93.3	30.0	32	50.8	117	31.9	JD	93	03	30	2133	214	396	5.41	53	100.0	174	21
93.3	35.0	32	40.8	117	52.5	JD	93	03	31	0120	216	390	5.55	49	100.0	157	136
93.3	40.0	32	30.8	118	12.9	JD	93	03	31	0506	211	410	5.14	41	100.0	148	272
93.3	45.0	32	20.8	118	33.3	JD	93	03	31	1019	210	403	5.22	62	100.0	547	661
93.3	50.0	32	10.9	118	53.6	JD	93	03	31	1505	218	409	5.32	20	100.0	56	297
93.3	55.0	32	00.7	119	14.1	JD	93	03	31	1913	210	421	5.00	24	100.0	128	151
93.3	60.0	31	50.8	119	34.3	JD	93	03	31	2319	215	418	5.15	14	100.0	22	25
93.3	70.0	31	30.8	120	14.8	JD	93	04	01	0531	211	426	4.96	14	100.0	19	69
93.3	80.0	31	10.8	120	55.2	JD	93	04	01	1220	232	431	5.38	32	100.0	37	48
93.3	90.0	30	50.8	121	35.4	JD	93	04	01	1902	223	445	5.02	11	100.0	12	43
93.3	100.0	30	30.8	122	15.5	JD	93	04	02	0108	222	458	4.85	13	100.0	6	10
93.3	110.0	30	10.8	122	55.4	JD	93	04	02	0659	209	478	4.38	4	100.0	2	5
93.3	120.0	29	50.8	123	35.3	JD	93	04	02	1323	223	457	4.88	7	100.0	0	16

Table 1. (cont.)

CalCOFI Cruise 9308

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
76.7	49.0	35	05.3	120	47.0	NH	93	08	26	0332	66	173	3.80	423	49.3	23	109
76.7	51.0	35	01.4	120	55.3	NH	93	08	26	0040	194	479	4.05	171	50.0	59	386
76.7	55.0	34	53.1	121	11.9	NH	93	08	25	2057	213	441	4.84	136	50.0	8	0
76.7	60.0	34	43.4	121	32.9	NH	93	08	25	1713	216	453	4.76	46	100.0	15	2
76.7	70.0	34	22.9	122	14.7	NH	93	08	25	0935	213	454	4.70	53	100.0	18	4
76.7	80.0	34	03.4	122	56.4	NH	93	08	25	0350	202	484	4.18	72	100.0	140	4
76.7	100.0	33	23.4	124	19.3	NH	93	08	24	1200	206	516	3.99	14	100.0	143	9
80.0	51.0	34	26.9	120	32.0	NH	93	08	22	2015	79	183	4.32	66	100.0	105	127
80.0	55.0	34	19.0	120	48.1	NH	93	08	22	2323	197	454	4.35	115	46.2	30	31
80.0	60.0	34	09.0	121	09.1	NH	93	08	23	0316	205	457	4.48	131	48.3	15	0
80.0	70.0	33	48.9	121	50.5	NH	93	08	23	0843	204	466	4.39	62	51.7	10	2
80.0	80.0	33	29.0	122	32.1	NH	93	08	23	1640	212	448	4.72	36	100.0	4	4
80.0	90.0	33	08.9	123	13.3	NH	93	08	23	2223	204	517	3.95	21	100.0	94	64
80.0	100.0	32	49.1	123	54.4	NH	93	08	24	0436	210	466	4.51	11	100.0	161	19
81.8	46.9	34	16.5	120	01.4	NH	93	08	22	1601	207	426	4.85	59	100.0	348	7
83.3	40.6	34	13.4	119	24.8	NH	93	08	22	0811	21	65	3.16	77	100.0	178	361
83.3	42.0	34	10.8	119	24.8	NH	93	08	22	0940	129	293	4.39	44	100.0	419	468
83.3	51.0	33	52.7	120	08.2	NH	93	08	22	0113	200	460	4.35	39	100.0	53	189
83.3	55.0	33	44.6	120	24.6	NH	93	08	21	2142	195	490	3.98	98	50.0	102	0
83.3	60.0	33	34.7	120	45.3	NH	93	08	21	1738	207	479	4.33	244	47.9	16	0
83.3	70.0	33	14.5	121	26.5	NH	93	08	21	0953	209	495	4.22	152	49.3	8	25
83.3	80.0	32	54.9	122	07.7	NH	93	08	21	0504	216	476	4.55	50	100.0	28	1297
83.3	90.0	32	34.5	122	48.7	NH	93	08	20	2250	211	462	4.58	15	100.0	125	30
83.3	100.0	32	14.8	123	29.6	NH	93	08	20	1654	208	465	4.47	9	100.0	113	7
83.3	110.0	31	54.3	124	10.2	NH	93	08	20	0829	197	479	4.10	8	100.0	129	42
86.7	33.0	33	53.3	118	29.5	NH	93	08	17	1855	40	103	3.90	127	100.0	305	502
86.7	35.0	33	49.4	118	37.5	NH	93	08	17	2128	201	454	4.43	117	47.2	40	7
86.7	40.0	33	39.4	118	54.4	NH	93	08	18	0116	201	448	4.50	58	100.0	34	0
86.7	45.0	33	29.5	119	19.1	NH	93	08	18	0528	214	426	5.01	47	100.0	19	0
86.7	50.0	33	19.4	119	39.8	NH	93	08	18	0942	75	160	4.67	50	100.0	1	15
86.7	55.0	33	09.5	120	00.4	NH	93	08	18	1506	217	483	4.49	21	100.0	3	1
86.7	60.0	32	59.6	120	21.2	NH	93	08	18	2035	227	450	5.06	91	46.3	9	1

Table 1. (cont.)

CalCOFI Cruise 9308

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
86.7	70.0	32	39.4	121	02.3	NH	93	08	19	0236	211	472	4.48	100	48.9	8	8
86.7	80.0	32	18.9	121	42.7	NH	93	08	19	0837	224	450	4.98	38	100.0	21	17
86.7	90.0	31	59.4	122	23.6	NH	93	08	19	1633	212	466	4.55	39	100.0	107	68
86.7	100.0	31	39.2	123	04.2	NH	93	08	19	2147	209	463	4.50	39	100.0	131	85
86.7	110.0	31	19.6	123	44.7	NH	93	08	20	0324	205	450	4.55	24	100.0	244	82
90.0	28.0	33	28.9	117	46.1	NH	93	08	17	1230	77	175	4.38	86	100.0	231	86
90.0	30.0	33	25.1	117	54.3	NH	93	08	17	0940	194	448	4.34	29	100.0	31	1
90.0	35.0	33	15.1	118	15.2	NH	93	08	17	0525	198	437	4.52	87	50.0	5	13
90.0	37.0	33	10.9	118	22.9	NH	93	08	17	0214	203	420	4.84	76	46.9	9	8
90.0	45.0	32	54.9	118	55.9	NH	93	08	16	2100	208	414	5.02	65	100.0	10	1
90.0	53.0	32	39.2	119	28.9	NH	93	08	16	1544	217	437	4.96	23	100.0	16	6
90.0	60.0	32	24.9	119	57.5	NH	93	08	16	0854	204	424	4.82	118	50.0	5	0
90.0	70.0	32	05.1	120	38.4	NH	93	08	16	0408	211	444	4.75	41	100.0	55	91
90.0	80.0	31	44.8	121	18.8	NH	93	08	15	2214	210	452	4.64	33	100.0	61	299
90.0	90.0	31	25.1	121	59.5	NH	93	08	15	1650	206	451	4.58	29	100.0	123	283
90.0	100.0	31	04.6	122	39.7	NH	93	08	15	0903	204	439	4.65	16	100.0	2	41
90.0	110.0	30	45.0	123	19.9	NH	93	08	15	0427	212	441	4.82	39	100.0	135	123
90.0	120.0	30	25.0	123	59.8	NH	93	08	14	2236	209	447	4.67	31	100.0	192	337
93.3	26.7	32	57.3	117	18.2	NH	93	08	11	1300	68	169	4.04	53	100.0	38	61
93.3	28.0	32	54.4	117	23.6	NH	93	08	11	1845	214	446	4.81	34	100.0	14	6
93.3	30.0	32	50.8	117	31.8	NH	93	08	11	2305	204	437	4.68	71	100.0	31	1
93.3	35.0	32	41.2	117	52.6	NH	93	08	12	0330	205	425	4.83	42	100.0	16	1
93.3	40.0	32	30.7	118	12.9	NH	93	08	12	0804	219	423	5.17	21	100.0	35	4
93.3	45.0	32	21.0	118	33.3	NH	93	08	12	1315	212	436	4.85	32	100.0	7	2
93.3	50.0	32	10.9	118	54.4	NH	93	08	12	1825	198	471	4.21	47	100.0	14	13
93.3	55.0	32	00.9	119	13.7	NH	93	08	12	2233	210	480	4.37	56	100.0	3	5
93.3	60.0	31	51.0	119	34.4	NH	93	08	13	0245	214	529	4.05	74	53.8	3	3
93.3	70.0	31	30.6	120	14.8	NH	93	08	13	0735	207	455	4.55	26	100.0	30	22
93.3	80.0	31	10.9	120	55.2	NH	93	08	13	1642	207	479	4.31	35	100.0	166	82
93.3	90.0	30	50.9	121	35.2	NH	93	08	13	2220	238	485	4.91	31	100.0	108	130
93.3	100.0	30	31.1	122	15.4	NH	93	08	14	0420	212	631	3.35	22	100.0	135	380
93.3	110.0	30	10.6	122	55.1	NH	93	08	14	0900	253	347	7.28	32	100.0	71	123
93.3	120.0	29	51.0	123	35.1	NH	93	08	14	1707	209	470	4.44	13	100.0	107	13

Table 1. (cont.)

CalCOFI Cruise 9310

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
76.7	49.0	35	05.3	120	46.6	NH	93	10	25	0925	58	133	4.36	15	100.0	5	105
76.7	51.0	35	01.3	120	55.0	NH	93	10	25	0700	188	497	3.79	34	100.0	128	219
76.7	55.0	34	53.3	121	12.0	NH	93	10	25	0337	211	460	4.59	174	50.0	6	0
76.7	60.0	34	43.1	121	32.9	NH	93	10	24	2338	212	459	4.61	74	100.0	9	2
76.7	70.0	34	23.3	122	14.8	NH	93	10	24	1808	214	442	4.85	52	100.0	5	5
76.7	80.0	34	03.1	122	56.4	NH	93	10	24	1153	210	470	4.47	17	100.0	2	0
76.7	90.0	33	43.2	123	38.1	NH	93	10	24	0532	207	471	4.40	206	48.5	2	0
76.7	100.0	33	23.1	124	19.3	NH	93	10	23	2345	209	422	4.96	66	100.0	3	5
80.0	51.0	34	26.9	120	31.2	NH	93	10	22	1120	48	115	4.13	52	100.0	136	85
80.0	55.0	34	19.3	120	48.0	NH	93	10	22	1521	203	444	4.58	56	100.0	133	26
80.0	60.0	34	09.0	121	09.1	NH	93	10	22	1901	203	445	4.57	1021	48.9	14	0
80.0	70.0	33	49.1	121	50.4	NH	93	10	23	0013	212	439	4.84	112	49.0	9	1
80.0	80.0	33	29.1	122	32.0	NH	93	10	23	0552	210	439	4.78	78	100.0	6	4
80.0	90.0	33	09.0	123	13.1	NH	93	10	23	1152	206	425	4.85	31	100.0	2	2
80.0	100.0	32	49.0	123	54.2	NH	93	10	23	1753	213	422	5.04	76	100.0	27	5
81.8	46.9	34	16.7	120	01.6	NH	93	10	22	0700	221	411	5.39	58	100.0	405	2047
83.3	40.6	34	13.5	119	24.7	NH	93	10	22	0130	21	51	4.14	158	100.0	87	33
83.3	42.0	34	10.6	119	30.4	NH	93	10	21	2309	161	331	4.85	18	100.0	96	301
83.3	51.0	33	52.8	120	08.2	NH	93	10	21	1559	199	464	4.28	19	100.0	13	117
83.3	55.0	33	44.7	120	24.7	NH	93	10	21	1223	212	452	4.69	27	100.0	4	7
83.3	60.0	33	34.7	120	45.2	NH	93	10	21	0802	205	475	4.32	38	100.0	11	8
83.3	70.0	33	14.8	121	26.6	NH	93	10	21	0245	209	439	4.76	77	100.0	1	6
83.3	80.0	32	54.5	122	07.8	NH	93	10	20	2120	214	425	5.03	63	100.0	20	6
83.3	90.0	32	34.7	122	48.6	NH	93	10	20	1607	210	434	4.84	30	100.0	8	9
83.3	100.0	32	14.6	123	29.4	NH	93	10	20	0820	208	451	4.61	24	100.0	22	18
83.3	110.0	31	54.6	124	10.2	NH	93	10	20	0255	211	464	4.55	37	100.0	83	7
86.7	33.0	33	53.4	118	29.6	NH	93	10	17	1816	43	102	4.20	68	100.0	51	33
86.7	35.0	33	49.3	118	37.5	NH	93	10	17	2033	206	439	4.69	50	100.0	79	10
86.7	40.0	33	39.5	118	58.3	NH	93	10	18	0001	207	437	4.74	64	100.0	16	45
86.7	45.0	33	29.4	119	19.1	NH	93	10	18	0340	214	414	5.16	80	100.0	9	1
86.7	50.0	33	19.4	119	39.8	NH	93	10	18	0705	59	140	4.26	29	100.0	2	22
86.7	55.0	33	09.3	119	59.8	NH	93	10	18	1105	218	426	5.10	31	100.0	0	1
86.7	60.0	32	59.4	120	20.9	NH	93	10	18	1540	214	422	5.06	28	100.0	3	6

Table 1. (cont.)

CalCOFI Cruise 9310

Line	Station	Latitude (N) deg.	min.	Longitude (W) deg.	min.	Ship Code	Tow Date yr.	mo.	day	Time (PST)	Tow Depth (m)	Volume Water Strained	Standard Haul Factor	Plankton Volume	Percent Sorted	Total Larvae	Total Eggs
86.7	70.0	32	39.4	121	01.8	NH	93	10	18	2121	214	468	4.56	56	100.0	11	17
86.7	80.0	32	19.4	121	43.0	NH	93	10	19	0310	209	472	4.43	42	100.0	61	58
86.7	90.0	31	59.2	122	23.6	NH	93	10	19	0820	207	457	4.54	48	100.0	5	19
86.7	100.0	31	39.4	123	04.2	NH	93	10	19	1622	205	442	4.65	20	100.0	87	9
86.7	110.0	31	19.6	123	44.4	NH	93	10	19	2133	207	461	4.51	50	100.0	37	18
90.0	28.0	33	29.1	117	46.0	NH	93	10	17	1025	74	152	4.86	59	100.0	36	25
90.0	30.0	33	25.1	117	54.5	NH	93	10	17	0648	209	442	4.72	14	100.0	3	1
90.0	35.0	33	15.1	118	15.2	NH	93	10	17	0238	215	425	5.06	59	100.0	12	0
90.0	37.0	33	11.0	118	23.3	NH	93	10	16	2300	209	425	4.93	56	100.0	11	2
90.0	45.0	32	55.1	118	55.9	NH	93	10	16	1758	219	406	5.41	32	100.0	13	1
90.0	53.0	32	39.1	119	29.1	NH	93	10	16	1000	209	451	4.64	22	100.0	9	1
90.0	60.0	32	25.0	119	57.8	NH	93	10	15	0950	211	434	4.87	23	100.0	16	7
90.0	70.0	32	05.0	120	38.5	NH	93	10	14	2326	209	446	4.69	38	100.0	30	11
90.0	80.0	31	44.9	121	19.0	NH	93	10	14	0859	211	433	4.86	42	100.0	20	15
90.0	90.0	31	25.1	121	59.4	NH	93	10	14	0004	202	461	4.39	46	100.0	224	6
90.0	100.0	31	05.1	122	39.7	NH	93	10	13	1100	210	434	4.84	37	100.0	82	69
90.0	110.0	30	45.1	123	19.9	NH	93	10	13	0530	211	445	4.74	65	100.0	52	17
90.0	120.0	30	25.0	123	59.8	NH	93	10	12	1629	196	466	4.20	21	100.0	36	6
93.3	26.7	32	57.6	117	18.3	NH	93	10	08	1247	39	112	3.45	45	100.0	16	78
93.3	28.0	32	54.8	117	23.5	NH	93	10	08	1623	203	427	4.75	30	100.0	11	43
93.3	30.0	32	50.8	117	31.9	NH	93	10	08	1903	204	432	4.72	42	100.0	29	0
93.3	35.0	32	40.8	117	52.4	NH	93	10	08	2242	217	413	5.25	68	100.0	8	8
93.3	40.0	32	30.7	118	12.8	NH	93	10	09	0303	202	449	4.50	49	100.0	11	2
93.3	45.0	32	21.0	118	33.3	NH	93	10	09	0724	202	447	4.53	27	100.0	5	1
93.3	50.0	32	10.9	118	53.5	NH	93	10	09	1140	198	451	4.38	31	100.0	27	2
93.3	55.0	32	01.1	119	13.9	NH	93	10	09	2020	210	438	4.80	57	100.0	22	1
93.3	60.0	31	50.9	119	34.3	NH	93	10	10	0245	215	435	4.95	62	100.0	3	9
93.3	70.0	31	30.9	120	14.7	NH	93	10	10	1215	199	455	4.37	48	100.0	1	3
93.3	80.0	31	10.7	120	55.1	NH	93	10	10	2136	213	413	5.17	68	100.0	7	2
93.3	90.0	30	50.9	121	35.2	NH	93	10	11	0302	203	473	4.30	38	100.0	94	35
93.3	100.0	30	30.8	122	15.6	NH	93	10	11	1128	211	455	4.63	13	100.0	88	38
93.3	110.0	30	10.7	122	55.2	NH	93	10	12	0120	207	463	4.48	43	100.0	171	12
93.3	120.0	29	50.9	123	35.2	NH	93	10	12	0959	208	449	4.64	29	100.0	127	10

TABLE 2. Pooled occurrences of fish larvae taken on CalCOFI cruises in 1993.

Rank	Taxon	Occurrences
1	*Vinciguerria lucetia*	109
2	*Engraulis mordax*	97
3	*Sebastes* spp.	96
4	*Protomyctophum crockeri*	85
5	*Cyclothone signata*	82
6	*Stenobrachius leucopsarus*	78
7	*Triphoturus mexicanus*	77
8	*Diogenichthys atlanticus*	71
9	*Leuroglossus stilbius*	66
10	*Ceratoscopelus townsendi*	65
10	*Bathylagus ochotensis*	65
12	*Bathylagus wesethi*	63
13	*Symbolophorus californiensis*	61
14	*Lampanyctus* spp.	57
15	*Merluccius productus*	51
16	*Citharichthys sordidus*	39
17	*Argyropelecus sladeni*	35
18	*Lampanyctus ritteri*	33
19	*Sardinops sagax*	32
20	*Citharichthys* spp.	30
21	*Lestidiops ringens*	29
22	*Sebastes jordani*	27
22	*Sternoptyx* spp.	27
24	*Citharichthys stigmaeus*	26
25	Disintegrated fish larvae	25
26	*Melamphaes lugubris*	20
27	*Argyropelecus affinis*	19
28	*Argentina sialis*	18
28	*Chauliodus macouni*	18
30	*Chromis punctipinnis*	17
30	*Danaphos oculatus*	17
30	*Trachurus symmetricus*	17
30	*Idiacanthus antrostomus*	17
30	*Tarletonbeania crenularis*	17
35	*Sebastes diploproa*	16
36	Myctophidae	15
36	*Oxyjulis californica*	15
38	*Diaphus* spp.	13
38	*Coryphopterus nicholsii*	13
38	*Tetragonurus cuvieri*	13
41	*Scomber japonicus*	12
42	*Bathylagus pacificus*	10
43	*Stomias atriventer*	9
43	*Genyonemus lineatus*	9
43	*Hygophum reinhardtii*	9
43	*Scopelogadus bispinosus*	9
47	*Poromitra crassiceps*	8
47	*Sphyraena argentea*	8
47	*Paralabrax* spp.	8
50	*Lampanyctus regalis*	7

TABLE 2. (cont.)

Rank	Taxon	Occurrences
50	*Microstoma* spp.	7
50	*Paralichthys californicus*	7
50	*Vinciguerria poweriae*	7
50	*Hippoglossina stomata*	7
50	*Argyropelecus hemigymnus*	7
56	*Pleuronichthys verticalis*	6
56	*Myctophum nitidulum*	6
56	*Electrona risso*	6
56	*Seriphus politus*	6
56	*Cyclothone* spp.	6
56	*Chiasmodon niger*	6
62	*Cyclothone pseudopallida*	5
62	*Notoscopelus resplendens*	5
62	*Cyclothone acclinidens*	5
62	*Lepidogobius lepidus*	5
62	*Scopelosaurus harryi*	5
67	*Howella* spp.	4
67	*Symphurus atricaudus*	4
67	*Trachipterus altivelis*	4
67	*Benthalbella dentata*	4
67	*Microstomus pacificus*	4
67	*Lyopsetta exilis*	4
67	*Hypsoblennius jenkinsi*	4
67	*Arctozenus risso*	4
67	*Sebastes paucispinis*	4
67	*Xeneretmus latifrons*	4
77	*Lampanyctus* "no pectorals"	3
77	*Lampadena urophaos*	3
77	*Argyropelecus lychnus*	3
77	*Scopelarchus analis*	3
77	*Notolychnus valdiviae*	3
77	*Ichthyococcus irregularis*	3
77	*Argyropelecus* spp.	3
77	*Atherinopsis californiensis*	3
77	Unidentified fish larvae	3
77	*Zaniolepis latipinnis*	3
77	*Ophidion scrippsae*	3
77	*Zaniolepis frenata*	3
77	*Xystreurys liolepis*	3
77	*Macroramphosus gracilis*	3
77	*Gigantactis* spp.	3
92	*Synodus lucioceps*	2
92	*Scopelarchus guentheri*	2
92	*Rosenblattichthys volucris*	2
92	*Aristostomias scintillans*	2
92	*Cololabis saira*	2
92	Melanostomiinae	2
92	*Artedius creaseri*	2
92	*Halichoeres semicinctus*	2
92	*Scorpaenichthys marmoratus*	2
92	*Plectobranchus evides*	2

TABLE 2. (cont.)

Rank	Taxon	Occurrences
92	Sternoptychidae	2
92	Stomiiformes	2
92	*Bathylagus milleri*	2
92	*Eopsetta jordani*	2
92	*Pleuronichthys ritteri*	2
92	*Xenistius californiensis*	2
92	*Chilara taylori*	2
92	*Sebastes aurora*	2
92	*Loweina rara*	2
92	*Oneirodes* spp.	2
112	*Icichthys lockingtoni*	1
112	Stichaeidae	1
112	*Diogenichthys* spp.	1
112	Anguilliformes	1
112	*Hypsoblennius* spp.	1
112	*Ilypnus gilberti*	1
112	*Lythrypnus dalli*	1
112	*Lythrypnus zebra*	1
112	*Bathyagonus pentacanthus*	1
112	*Nealotus tripes*	1
112	*Parvilux ingens*	1
112	*Cataetyx rubrirostris*	1
112	*Myctophum lychnobium*	1
112	*Parophrys vetulus*	1
112	*Pleuronichthys coenosus*	1
112	*Etrumeus teres*	1
112	*Typhlogobius californiensis*	1
112	*Scopeloberyx robustus*	1
112	Cottidae	1
112	*Artedius harringtoni*	1
112	*Hemilepidotus spinosus*	1
112	*Lampanyctus* "niger"	1
112	*Icelinus* spp.	1
112	*Eutaeniophorus festivus*	1
112	*Desmodema lorum*	1
112	*Eutaeniophorus* spp.	1
112	*Rathbunella* spp.	1
112	*Bathophilus flemingi*	1
112	*Semicossyphus pulcher*	1
112	*Odontopyxis trispinosa*	1
112	*Liparis* spp.	1
112	*Anisotremus davidsoni*	1
112	*Melamphaes* spp.	1
112	*Cheilotrema saturnum*	1
112	*Girella nigricans*	1
112	*Hermosilla azurea*	1
112	*Artedius* spp.	1
112	*Lampanyctus steinbecki*	1
	Total	2019

TABLE 3. Pooled counts of fish larvae taken on CalCOFI cruises in 1993. Counts are adjusted for percent of sample sorted and standard haul factor (see text).

Rank	Taxon	Count
1	*Engraulis mordax*	21571
2	*Vinciguerria lucetia*	14782
3	*Merluccius productus*	5391
4	*Sebastes* spp.	4881
5	*Leuroglossus stilbius*	4537
6	*Stenobrachius leucopsarus*	4323
7	*Sardinops sagax*	3186
8	*Sebastes jordani*	1922
9	*Bathylagus ochotensis*	1488
10	*Cyclothone signata*	1155
10	*Citharichthys* spp.	1155
12	*Triphoturus mexicanus*	1113
13	*Ceratoscopelus townsendi*	993
14	*Citharichthys sordidus*	742
15	*Diogenichthys atlanticus*	703
16	*Protomyctophum crockeri*	653
17	*Bathylagus wesethi*	635
18	Unidentified fish larvae	581
19	*Lampanyctus* spp.	567
20	*Symbolophorus californiensis*	548
21	*Trachurus symmetricus*	466
22	*Sphyraena argentea*	321
23	*Citharichthys stigmaeus*	318
24	*Paralabrax* spp.	305
25	*Oxyjulis californica*	271
26	*Lampanyctus ritteri*	247
27	*Scomber japonicus*	245
28	*Argyropelecus sladeni*	218
29	Disintegrated fish larvae	205
30	*Genyonemus lineatus*	195
31	*Lestidiops ringens*	178
32	*Sternoptyx* spp.	170
33	*Argentina sialis*	155
34	*Chromis punctipinnis*	146
35	*Sebastes diploproa*	124
36	*Danaphos oculatus*	123
37	*Vinciguerria poweriae*	114
38	*Idiacanthus antrostomus*	109
38	*Argyropelecus affinis*	109
40	*Chauliodus macouni*	106
41	*Tarletonbeania crenularis*	102
42	*Diaphus* spp.	100
42	*Melamphaes lugubris*	100
44	*Tetragonurus cuvieri*	98
45	Myctophidae	91
46	*Seriphus politus*	88
47	*Coryphopterus nicholsii*	81
48	*Stomias atriventer*	73

TABLE 3. (cont.)

Rank	Taxon	Count
49	*Sebastes paucispinis*	58
49	*Paralichthys californicus*	58
51	*Bathylagus pacificus*	57
52	*Scopelogadus bispinosus*	52
53	*Microstoma* spp.	49
54	*Lepidogobius lepidus*	46
54	*Hygophum reinhardtii*	46
56	*Pleuronichthys verticalis*	45
57	*Lampanyctus regalis*	42
58	*Artedius creaseri*	41
59	*Poromitra crassiceps*	39
60	*Argyropelecus hemigymnus*	37
60	*Cyclothone* spp.	37
62	*Hippoglossina stomata*	35
63	*Cyclothone acclinidens*	32
64	*Xystreurys liolepis*	30
64	*Myctophum nitidulum*	30
66	*Chiasmodon niger*	28
66	*Symphurus atricaudus*	28
68	*Lyopsetta exilis*	27
68	*Ophidion scrippsae*	27
68	*Cyclothone pseudopallida*	27
71	*Electrona risso*	26
72	*Trachipterus altivelis*	25
72	*Benthalbella dentata*	25
72	*Scopelosaurus harryi*	25
75	*Microstomus pacificus*	24
75	*Notoscopelus resplendens*	24
77	*Arctozenus risso*	23
78	*Hypsoblennius jenkinsi*	21
79	*Notolychnus valdiviae*	19
79	*Xeneretmus latifrons*	19
79	*Macroramphosus gracilis*	19
79	*Argyropelecus lychnus*	19
83	*Gigantactis* spp.	18
84	*Howella* spp.	17
85	*Atherinopsis californiensis*	16
85	Sternoptychidae	16
85	*Scopelarchus analis*	16
88	*Ichthyococcus irregularis*	15
88	*Cololabis saira*	15
88	*Sebastes aurora*	15
91	*Lampadena urophaos*	14
91	*Argyropelecus* spp.	14
91	*Lampanyctus* "no pectorals"	14
91	*Chilara taylori*	14
91	*Artedius harringtoni*	14
96	*Zaniolepis latipinnis*	13
97	*Scopelarchus guentheri*	12
97	*Zaniolepis frenata*	12
97	*Xenistius californiensis*	12

TABLE 3. (cont.)

Rank	Taxon	Count
100	*Scorpaenichthys marmoratus*	11
100	*Lythrypnus dalli*	11
102	*Synodus lucioceps*	10
102	Melanostomiinae	10
102	*Eopsetta jordani*	10
102	Stomiiformes	10
102	*Loweina rara*	10
102	*Plectobranchus evides*	10
102	*Aristostomias scintillans*	10
102	*Bathylagus milleri*	10
110	*Oneirodes* spp.	9
110	*Artedius* spp.	9
110	*Halichoeres semicinctus*	9
110	*Liparis* spp.	9
110	*Rosenblattichthys volucris*	9
115	Anguilliformes	8
115	*Hermosilla azurea*	8
115	*Pleuronichthys ritteri*	8
115	*Cheilotrema saturnum*	8
119	*Cataetyx rubrirostris*	5
119	*Odontopyxis trispinosa*	5
119	*Bathyagonus pentacanthus*	5
119	*Typhlogobius californiensis*	5
119	*Desmodema lorum*	5
119	*Rathbunella* spp.	5
119	*Lythrypnus zebra*	5
119	*Icichthys lockingtoni*	5
119	*Girella nigricans*	5
119	*Melamphaes* spp.	5
119	*Eutaeniophorus festivus*	5
119	*Eutaeniophorus* spp.	5
119	*Parvilux ingens*	5
119	*Myctophum lychnobium*	5
119	*Parophrys vetulus*	5
119	*Nealotus tripes*	5
135	*Hypsoblennius* spp.	4
135	Stichaeidae	4
135	*Ilypnus gilberti*	4
135	*Etrumeus teres*	4
135	*Pleuronichthys coenosus*	4
135	*Icelinus* spp.	4
135	Cottidae	4
135	*Bathophilus flemingi*	4
135	*Semicossyphus pulcher*	4
135	*Anisotremus davidsoni*	4
135	*Scopeloberyx robustus*	4
135	*Lampanyctus* "niger"	4
135	*Lampanyctus steinbecki*	4
135	*Diogenichthys* spp.	4
135	*Hemilepidotus spinosus*	4
	Total	77490

TABLE 4. Number of fish larvae taken at stations occupied on CalCOFI cruises in 1993. Counts are adjusted for percent of sample sorted and standard haul factor (see text). Unoccupied stations are indicated by a dash.

Anguilliformes

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 33.0	0.0	-	-	0.0	-	-	-	0.0	-	8.4	-	-

Etrumeus teres

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 26.7	0.0	-	0.0	-	-	-	-	4.0	-	0.0	-	-

Sardinops sagax

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 70.0	0.0	-	-	14.5	-	-	-	0.0	-	0.0	-	-
80.0 60.0	0.0	-	-	3.8	-	-	-	0.0	-	0.0	-	-
83.3 40.6	0.0	-	-	0.0	-	-	-	44.2	-	0.0	-	-
83.3 42.0	0.0	-	-	0.0	-	-	-	342.4	-	0.0	-	-
83.3 55.0	0.0	-	-	0.0	-	-	-	23.9	-	0.0	-	-
83.3 60.0	0.0	-	-	4.1	-	-	-	0.0	-	0.0	-	-
86.7 33.0	0.0	-	-	4.7	-	-	-	42.9	-	4.2	-	-
86.7 35.0	0.0	-	-	0.0	-	-	-	46.9	-	4.7	-	-
86.7 40.0	0.0	-	-	0.0	-	-	-	9.0	-	0.0	-	-
86.7 45.0	0.0	-	-	0.0	-	-	-	10.0	-	0.0	-	-
86.7 60.0	0.0	-	-	103.8	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	107.7	-	-	-	0.0	-	0.0	-	-
90.0 28.0	0.0	-	-	68.2	-	-	-	652.6	-	14.6	-	-
90.0 35.0	0.0	-	-	19.3	-	-	-	27.1	-	0.0	-	-
90.0 45.0	0.0	-	-	85.5	-	-	-	0.0	-	0.0	-	-
90.0 80.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0 90.0	0.0	-	-	10.3	-	-	-	0.0	-	0.0	-	-
93.3 26.7	0.0	-	0.0	-	-	-	-	20.2	-	0.0	-	-
93.3 28.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3 30.0	0.0	-	16.2	-	-	-	-	4.7	-	0.0	-	-
93.3 35.0	0.0	-	155.4	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Sardinops sagax (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3	40.0	0.0	-	159.3	-	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	1085.8	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	85.1	-	-	-	-	0.0	-	0.0	-	-
93.3	80.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-

Engraulis mordax

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	17.0	-	-	4.8	-	-	-	92.5	-	8.7	-	-
76.7	51.0	279.8	-	-	0.0	-	-	-	178.2	-	223.6	-	-
76.7	55.0	297.8	-	-	13.9	-	-	-	58.1	-	0.0	-	-
76.7	60.0	21.0	-	-	28.4	-	-	-	4.8	-	0.0	-	-
76.7	70.0	0.0	-	-	14.5	-	-	-	56.4	-	0.0	-	-
80.0	51.0	174.4	-	-	4.1	-	-	-	375.8	-	474.9	-	-
80.0	55.0	69.1	-	-	36.4	-	-	-	84.7	-	325.2	-	-
80.0	60.0	9.3	-	-	0.0	-	-	-	55.7	-	121.5	-	-
80.0	70.0	19.7	-	-	0.0	-	-	-	17.0	-	69.1	-	-
81.8	46.9	4.8	-	-	5.2	-	-	-	1144.6	-	1924.2	-	-
83.3	40.6	4.1	-	-	125.1	-	-	-	379.2	-	248.4	-	-
83.3	42.0	28.0	-	-	0.0	-	-	-	1040.4	-	378.3	-	-
83.3	51.0	17.8	-	-	18.2	-	-	-	195.7	-	12.8	-	-
83.3	55.0	0.0	-	-	0.0	-	-	-	644.8	-	0.0	-	-
83.3	60.0	9.6	-	-	0.0	-	-	-	81.4	-	25.9	-	-
86.7	33.0	0.0	-	-	145.1	-	-	-	822.9	-	184.8	-	-
86.7	35.0	0.0	-	-	455.7	-	-	-	262.8	-	323.6	-	-
86.7	40.0	591.5	-	-	1303.5	-	-	-	27.0	-	56.9	-	-
86.7	45.0	237.2	-	-	885.8	-	-	-	60.1	-	0.0	-	-
86.7	50.0	216.3	-	-	2277.0	-	-	-	0.0	-	4.3	-	-
86.7	55.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	57.1	-	-	-	43.7	-	10.1	-	-
86.7	70.0	0.0	-	-	0.0	-	-	-	9.2	-	0.0	-	-
86.7	80.0	0.0	-	-	10.0	-	-	-	0.0	-	8.9	-	-
90.0	28.0	8.5	-	-	199.7	-	-	-	17.5	-	102.1	-	-

TABLE 4. (cont.)

Engraulis mordax (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0	30.0	4.9	-	-	907.8	-	-	-	0.0	-	0.0	-	-
90.0	35.0	0.0	-	-	178.3	-	-	-	0.0	-	0.0	-	-
90.0	37.0	0.0	-	-	34.4	-	-	-	10.3	-	0.0	-	-
90.0	45.0	0.0	-	-	593.8	-	-	-	0.0	-	0.0	-	-
90.0	70.0	40.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	90.0	0.0	-	-	10.3	-	-	-	0.0	-	0.0	-	-
93.3	26.7	0.0	-	44.5	-	-	-	-	92.9	-	6.9	-	-
93.3	28.0	0.0	-	81.4	-	-	-	-	4.8	-	33.3	-	-
93.3	30.0	0.0	-	773.6	-	-	-	-	0.0	-	61.4	-	-
93.3	35.0	0.0	-	133.2	-	-	-	-	0.0	-	0.0	-	-
93.3	40.0	0.0	-	20.6	-	-	-	-	0.0	-	4.5	-	-
93.3	45.0	0.0	-	767.3	-	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	10.0	-	-	-	-	0.0	-	0.0	-	-
93.3	80.0	0.0	-	-	5.4	-	-	-	0.0	-	0.0	-	-

Argentina sialis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	4.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	51.0	10.4	-	-	0.0	-	-	-	0.0	-	7.6	-	-
76.7	60.0	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
80.0	51.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
80.0	55.0	0.0	-	-	0.0	-	-	-	0.0	-	22.9	-	-
80.0	70.0	0.0	-	-	0.0	-	-	-	8.5	-	0.0	-	-
81.8	46.9	4.8	-	-	0.0	-	-	-	19.4	-	26.9	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-
83.3	60.0	0.0	-	-	0.0	-	-	-	0.0	-	4.3	-	-
86.7	35.0	0.0	-	-	0.0	-	-	-	9.4	-	0.0	-	-
86.7	40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	30.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
90.0	35.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0	45.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
93.3	30.0	0.0	-	5.4	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

***Microstoma* spp.**

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	80.0	0.0	-	-	0.0	-	-	-	4.2	-	0.0	-	-
83.3	60.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	0.0	-	-	-	10.9	-	0.0	-	-
90.0	70.0	10.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	50.0	4.1	-	0.0	-	-	-	-	0.0	-	0.0	-	-
93.3	80.0	0.0	-	-	0.0	-	-	-	0.0	-	5.2	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

Bathylagus milleri

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	60.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	80.0	0.0	-	-	0.0	-	-	-	0.0	-	5.0	-	-

Bathylagus ochotensis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
76.7	55.0	105.7	-	-	18.6	-	-	-	0.0	-	0.0	-	-
76.7	60.0	21.0	-	-	28.4	-	-	-	0.0	-	0.0	-	-
76.7	70.0	0.0	-	-	9.7	-	-	-	0.0	-	0.0	-	-
76.7	80.0	9.4	-	-	61.1	-	-	-	0.0	-	0.0	-	-
76.7	90.0	0.0	-	-	4.8	-	-	-	-	-	0.0	-	-
80.0	51.0	4.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	55.0	17.3	-	-	4.5	-	-	-	0.0	-	0.0	-	-
80.0	60.0	69.9	-	-	3.8	-	-	-	0.0	-	0.0	-	-
80.0	70.0	4.9	-	-	41.8	-	-	-	0.0	-	0.0	-	-
80.0	80.0	0.0	-	-	41.5	-	-	-	0.0	-	0.0	-	-
83.3	51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-
83.3	55.0	59.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	60.0	106.0	-	-	4.1	-	-	-	0.0	-	0.0	-	-
83.3	70.0	5.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
83.3	80.0	0.0	-	-	9.7	-	-	-	0.0	-	0.0	-	-
86.7	35.0	0.0	-	-	10.2	-	-	-	0.0	-	0.0	-	-
86.7	40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Bathylagus ochotensis (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 45.0	19.4	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7 50.0	8.3	-	-	8.6	-	-	-	0.0	-	0.0	-	-
86.7 55.0	4.8	-	-	26.3	-	-	-	0.0	-	0.0	-	-
86.7 60.0	48.7	-	-	57.1	-	-	-	0.0	-	0.0	-	-
86.7 70.0	13.5	-	-	35.9	-	-	-	0.0	-	0.0	-	-
86.7 80.0	0.0	-	-	44.8	-	-	-	0.0	-	0.0	-	-
86.7 90.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0 28.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0 30.0	4.9	-	-	64.1	-	-	-	0.0	-	0.0	-	-
90.0 35.0	0.0	-	-	57.8	-	-	-	0.0	-	0.0	-	-
90.0 37.0	0.0	-	-	49.1	-	-	-	0.0	-	0.0	-	-
90.0 53.0	5.2	-	-	10.4	-	-	-	0.0	-	0.0	-	-
90.0 60.0	14.9	-	-	4.4	-	-	-	0.0	-	0.0	-	-
90.0 70.0	10.2	-	-	34.4	-	-	-	0.0	-	0.0	-	-
90.0 80.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
90.0 90.0	0.0	-	-	15.4	-	-	-	0.0	-	0.0	-	-
93.3 28.0	0.0	-	35.6	-	-	-	-	0.0	-	0.0	-	-
93.3 30.0	0.0	-	10.8	-	-	-	-	0.0	-	0.0	-	-
93.3 35.0	0.0	-	44.4	-	-	-	-	0.0	-	0.0	-	-
93.3 40.0	10.0	-	56.5	-	-	-	-	0.0	-	0.0	-	-
93.3 45.0	0.0	-	10.4	-	-	-	-	0.0	-	0.0	-	-
93.3 50.0	0.0	-	5.3	-	-	-	-	0.0	-	0.0	-	-
93.3 55.0	14.2	-	10.0	-	-	-	-	0.0	-	0.0	-	-
93.3 60.0	4.8	-	5.2	-	-	-	-	7.5	-	0.0	-	-
93.3 80.0	0.0	-	-	43.0	-	-	-	0.0	-	0.0	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	7.3	-	0.0	-	-

Bathylagus pacificus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 55.0	9.6	-	-	4.6	-	-	-	0.0	-	0.0	-	-
76.7 70.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0 60.0	0.0	-	-	3.8	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Bathylagus pacificus (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-
83.3	60.0	0.0	-	-	8.1	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0	53.0	5.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	40.0	0.0	-	5.1	-	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	0.0	-	-	-	-	0.0	-	4.8	-	-

Bathylagus wesethi

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	90.0	0.0	-	-	4.8	-	-	-	-	-	0.0	-	-
80.0	70.0	0.0	-	-	9.3	-	-	-	8.5	-	0.0	-	-
80.0	80.0	0.0	-	-	5.2	-	-	-	0.0	-	4.8	-	-
80.0	90.0	0.0	-	-	0.0	-	-	-	4.0	-	4.8	-	-
80.0	100.0	4.8	-	-	4.8	-	-	-	9.0	-	0.0	-	-
83.3	70.0	0.0	-	-	0.0	-	-	-	8.6	-	0.0	-	-
83.3	80.0	0.0	-	-	0.0	-	-	-	27.3	-	5.0	-	-
83.3	90.0	0.0	-	-	0.0	-	-	-	0.0	-	9.7	-	-
83.3	100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
86.7	35.0	0.0	-	-	0.0	-	-	-	9.4	-	0.0	-	-
86.7	45.0	0.0	-	-	0.0	-	-	-	0.0	-	5.2	-	-
86.7	50.0	0.0	-	-	8.6	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	70.0	0.0	-	-	10.3	-	-	-	36.6	-	4.6	-	-
86.7	80.0	0.0	-	-	0.0	-	-	-	10.0	-	13.3	-	-
86.7	90.0	0.0	-	-	0.0	-	-	-	22.8	-	0.0	-	-
86.7	100.0	0.0	-	-	5.1	-	-	-	13.5	-	0.0	-	-
86.7	110.0	0.0	-	-	5.0	-	-	-	18.2	-	9.0	-	-
90.0	45.0	0.0	-	-	0.0	-	-	-	20.1	-	0.0	-	-
90.0	53.0	0.0	-	-	10.4	-	-	-	9.9	-	0.0	-	-
90.0	60.0	0.0	-	-	0.0	-	-	-	9.6	-	0.0	-	-
90.0	70.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Bathylagus wesethi (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0	80.0	0.0	-	-	0.0	-	-	-	9.3	-	9.7	-	-
90.0	90.0	0.0	-	-	0.0	-	-	-	50.4	-	4.4	-	-
90.0	100.0	4.6	-	-	4.7	-	-	-	0.0	-	0.0	-	-
90.0	110.0	4.6	-	-	0.0	-	-	-	19.3	-	4.7	-	-
90.0	120.0	0.0	-	-	0.0	-	-	-	9.3	-	0.0	-	-
93.3	35.0	0.0	-	0.0	-	-	-	-	0.0	-	5.3	-	-
93.3	40.0	5.0	-	0.0	-	-	-	-	25.9	-	0.0	-	-
93.3	45.0	0.0	-	0.0	-	-	-	-	0.0	-	4.5	-	-
93.3	50.0	0.0	-	0.0	-	-	-	-	12.6	-	0.0	-	-
93.3	55.0	0.0	-	5.0	-	-	-	-	0.0	-	4.8	-	-
93.3	60.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3	70.0	0.0	-	-	14.9	-	-	-	9.1	-	0.0	-	-
93.3	80.0	0.0	-	-	5.4	-	-	-	4.3	-	0.0	-	-
93.3	90.0	0.0	-	-	5.0	-	-	-	19.6	-	4.3	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	26.8	-	0.0	-	-
93.3	120.0	0.0	-	-	0.0	-	-	-	4.4	-	4.6	-	-

Leuroglossus stilbius

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	51.0	10.4	-	-	26.2	-	-	-	0.0	-	18.9	-	-
76.7	55.0	259.4	-	-	65.0	-	-	-	0.0	-	0.0	-	-
76.7	60.0	41.9	-	-	37.9	-	-	-	4.8	-	0.0	-	-
76.7	70.0	0.0	-	-	33.9	-	-	-	0.0	-	0.0	-	-
76.7	80.0	0.0	-	-	18.8	-	-	-	0.0	-	0.0	-	-
76.7	90.0	0.0	-	-	4.8	-	-	-	-	-	0.0	-	-
80.0	51.0	17.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	55.0	86.4	-	-	13.6	-	-	-	0.0	-	27.5	-	-
80.0	60.0	9.3	-	-	26.3	-	-	-	0.0	-	0.0	-	-
80.0	70.0	0.0	-	-	9.3	-	-	-	0.0	-	0.0	-	-
80.0	80.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
81.8	46.9	190.8	-	-	31.0	-	-	-	0.0	-	97.0	-	-
83.3	42.0	4.7	-	-	15.2	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Leuroglossus stilbius (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	51.0	0.0	-	-	9.1	-	-	-	0.0	-	0.0	-	-
83.3	55.0	9.1	-	-	34.4	-	-	-	0.0	-	0.0	-	-
83.3	60.0	19.3	-	-	4.1	-	-	-	9.0	-	0.0	-	-
83.3	70.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7	35.0	0.0	-	-	363.5	-	-	-	0.0	-	0.0	-	-
86.7	40.0	205.1	-	-	123.2	-	-	-	0.0	-	0.0	-	-
86.7	45.0	382.4	-	-	103.6	-	-	-	0.0	-	0.0	-	-
86.7	50.0	170.6	-	-	218.3	-	-	-	0.0	-	0.0	-	-
86.7	55.0	9.7	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7	60.0	9.7	-	-	41.5	-	-	-	0.0	-	0.0	-	-
86.7	70.0	18.0	-	-	10.3	-	-	-	0.0	-	0.0	-	-
86.7	80.0	0.0	-	-	10.0	-	-	-	0.0	-	0.0	-	-
86.7	100.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
90.0	28.0	0.0	-	-	9.7	-	-	-	0.0	-	0.0	-	-
90.0	30.0	0.0	-	-	272.3	-	-	-	0.0	-	0.0	-	-
90.0	35.0	0.0	-	-	77.1	-	-	-	0.0	-	0.0	-	-
90.0	37.0	0.0	-	-	196.4	-	-	-	0.0	-	0.0	-	-
90.0	45.0	10.2	-	-	256.5	-	-	-	0.0	-	0.0	-	-
90.0	53.0	10.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	60.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	70.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0	80.0	0.0	-	-	15.5	-	-	-	0.0	-	0.0	-	-
90.0	90.0	0.0	-	-	10.3	-	-	-	0.0	-	0.0	-	-
93.3	26.7	0.0	-	9.9	-	-	-	-	0.0	-	0.0	-	-
93.3	28.0	0.0	-	45.8	-	-	-	-	0.0	-	0.0	-	-
93.3	30.0	0.0	-	32.5	-	-	-	-	0.0	-	0.0	-	-
93.3	35.0	0.0	-	122.1	-	-	-	-	0.0	-	0.0	-	-
93.3	40.0	0.0	-	179.9	-	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	401.9	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	21.3	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Leuroglossus stilbius (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 55.0	0.0	-	20.0	-	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	10.8	-	-	-	0.0	-	0.0	-	-

Stomiiformes

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0 30.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
93.3 70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-

***Cyclothone* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 80.0	0.0	-	-	0.0	-	-	-	4.2	-	0.0	-	-
86.7 80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.4	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	0.0	-	9.3	-	-
86.7 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-
90.0 110.0	0.0	-	-	0.0	-	-	-	9.6	-	0.0	-	-
93.3 120.0	5.1	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Cyclothone acclinidens

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 100.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0 70.0	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	0.0	-	8.4	-	-
93.3 55.0	0.0	-	0.0	-	-	-	-	0.0	-	4.8	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	9.0	-	-

Cyclothone pseudopallida

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 80.0	0.0	-	-	0.0	-	-	-	4.2	-	0.0	-	-
80.0 100.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.2	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	9.0	-	-

Cyclothone signata

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 80.0	0.0	-	-	4.7	-	-	-	4.2	-	0.0	-	-

TABLE 4. (cont.)

Station		*Cyclothone signata* (cont.)											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	100.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
80.0	55.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-
80.0	90.0	0.0	-	-	0.0	-	-	-	11.9	-	4.8	-	-
80.0	100.0	0.0	-	-	14.5	-	-	-	18.0	-	10.1	-	-
83.3	60.0	0.0	-	-	4.1	-	-	-	0.0	-	0.0	-	-
83.3	70.0	0.0	-	-	0.0	-	-	-	17.1	-	4.8	-	-
83.3	80.0	0.0	-	-	9.7	-	-	-	18.2	-	10.1	-	-
83.3	90.0	0.0	-	-	31.3	-	-	-	13.7	-	4.8	-	-
83.3	100.0	32.5	-	-	40.7	-	-	-	4.5	-	13.8	-	-
83.3	110.0	33.1	-	-	0.0	-	-	-	12.3	-	22.8	-	-
86.7	45.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	50.0	4.2	-	-	4.3	-	-	-	0.0	-	0.0	-	-
86.7	70.0	4.5	-	-	10.3	-	-	-	0.0	-	4.6	-	-
86.7	80.0	24.9	-	-	5.0	-	-	-	0.0	-	39.9	-	-
86.7	90.0	59.5	-	-	24.6	-	-	-	13.6	-	0.0	-	-
86.7	100.0	0.0	-	-	20.3	-	-	-	9.0	-	32.6	-	-
86.7	110.0	19.8	-	-	29.9	-	-	-	0.0	-	0.0	-	-
90.0	30.0	0.0	-	-	0.0	-	-	-	8.7	-	0.0	-	-
90.0	37.0	0.0	-	-	4.9	-	-	-	10.3	-	0.0	-	-
90.0	53.0	5.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	60.0	0.0	-	-	4.4	-	-	-	0.0	-	0.0	-	-
90.0	70.0	0.0	-	-	0.0	-	-	-	9.5	-	0.0	-	-
90.0	80.0	5.1	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0	90.0	17.9	-	-	10.3	-	-	-	4.6	-	39.5	-	-
90.0	100.0	13.9	-	-	9.5	-	-	-	0.0	-	29.0	-	-
90.0	110.0	9.2	-	-	0.0	-	-	-	9.6	-	19.0	-	-
90.0	120.0	26.0	-	-	0.0	-	-	-	18.7	-	8.4	-	-
93.3	30.0	0.0	-	0.0	-	-	-	-	0.0	-	4.7	-	-
93.3	40.0	5.0	-	0.0	-	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-

TABLE 4. (cont.)

Cyclothone signata (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 50.0	0.0	-	0.0	-	-	-	-	4.2	-	8.8	-	-
93.3 55.0	0.0	-	20.0	-	-	-	-	0.0	-	0.0	-	-
93.3 60.0	0.0	-	10.3	-	-	-	-	0.0	-	0.0	-	-
93.3 70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	0.0	-	-	-	8.6	-	0.0	-	-
93.3 90.0	0.0	-	-	5.0	-	-	-	19.6	-	4.3	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	13.4	-	9.3	-	-
93.3 110.0	0.0	-	-	4.4	-	-	-	36.4	-	44.8	-	-
93.3 120.0	0.0	-	-	0.0	-	-	-	4.4	-	9.3	-	-

Sternoptychidae

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 60.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3 30.0	0.0	-	10.8	-	-	-	-	0.0	-	0.0	-	-

***Argyropelecus* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 110.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
93.3 80.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-

Argyropelecus affinis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 70.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0 80.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
83.3 70.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
90.0 30.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
90.0 60.0	0.0	-	-	0.0	-	-	-	9.6	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0 90.0	0.0	-	-	0.0	-	-	-	4.6	-	4.4	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
93.3 30.0	0.0	-	5.4	-	-	-	-	0.0	-	0.0	-	-
93.3 35.0	0.0	-	5.5	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Argyropelecus affinis (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3	40.0	0.0	-	0.0	-	-	-	-	5.2	-	0.0	-	-
93.3	60.0	0.0	-	0.0	-	-	-	-	7.5	-	0.0	-	-
93.3	70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3	90.0	0.0	-	-	0.0	-	-	-	9.8	-	0.0	-	-
93.3	110.0	0.0	-	-	4.4	-	-	-	7.3	-	0.0	-	-
93.3	120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

Argyropelecus hemigymnus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	90.0	0.0	-	-	9.3	-	-	-	0.0	-	0.0	-	-
86.7	70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
86.7	80.0	0.0	-	-	5.0	-	-	-	0.0	-	4.4	-	-
86.7	90.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0	80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
93.3	50.0	0.0	-	0.0	-	-	-	-	0.0	-	4.4	-	-

Argyropelecus lychnus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	80.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
80.0	90.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
86.7	110.0	0.0	-	-	0.0	-	-	-	9.1	-	0.0	-	-

Argyropelecus sladeni

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	51.0	10.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	70.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
76.7	100.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
80.0	70.0	0.0	-	-	0.0	-	-	-	8.5	-	0.0	-	-
80.0	100.0	0.0	-	-	0.0	-	-	-	0.0	-	5.0	-	-
83.3	55.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
83.3	80.0	4.9	-	-	0.0	-	-	-	0.0	-	5.0	-	-
83.3	90.0	4.7	-	-	0.0	-	-	-	4.6	-	0.0	-	-
83.3	100.0	0.0	-	-	5.1	-	-	-	0.0	-	4.6	-	-
83.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-

TABLE 4. (cont.)

Argyropelecus sladeni (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	45.0	4.8	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	60.0	9.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
86.7	90.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0	30.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
90.0	35.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0	45.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0	70.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0	90.0	4.5	-	-	5.1	-	-	-	0.0	-	0.0	-	-
90.0	100.0	13.9	-	-	0.0	-	-	-	0.0	-	4.8	-	-
90.0	110.0	4.6	-	-	0.0	-	-	-	0.0	-	19.0	-	-
90.0	120.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
93.3	40.0	0.0	-	0.0	-	-	-	-	0.0	-	4.5	-	-
93.3	55.0	0.0	-	0.0	-	-	-	-	0.0	-	4.8	-	-
93.3	90.0	10.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	0.0	-	9.3	-	-
93.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-

Danaphos oculatus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	55.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	70.0	0.0	-	-	4.8	-	-	-	0.0	-	4.8	-	-
80.0	60.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	90.0	9.8	-	-	18.6	-	-	-	0.0	-	0.0	-	-
80.0	100.0	0.0	-	-	0.0	-	-	-	0.0	-	5.0	-	-
83.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	9.1	-	-
86.7	70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
86.7	90.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	100.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-

TABLE 4. (cont.)

Danaphos oculatus (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
93.3 30.0	0.0	-	5.4	-	-	-	-	0.0	-	0.0	-	-
93.3 40.0	0.0	-	5.1	-	-	-	-	0.0	-	0.0	-	-
93.3 55.0	0.0	-	15.0	-	-	-	-	0.0	-	0.0	-	-
93.3 80.0	5.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-

***Sternoptyx* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 90.0	0.0	-	-	4.7	-	-	-	4.0	-	0.0	-	-
80.0 100.0	9.6	-	-	4.8	-	-	-	4.5	-	0.0	-	-
83.3 60.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3 100.0	4.6	-	-	20.4	-	-	-	4.5	-	0.0	-	-
86.7 40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 45.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7 50.0	4.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	0.0	-	-	-	0.0	-	9.1	-	-
86.7 100.0	0.0	-	-	5.1	-	-	-	4.5	-	0.0	-	-
86.7 110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0 30.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
90.0 35.0	0.0	-	-	14.5	-	-	-	0.0	-	0.0	-	-
90.0 60.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0 90.0	0.0	-	-	0.0	-	-	-	4.6	-	4.4	-	-
90.0 120.0	4.3	-	-	0.0	-	-	-	4.7	-	0.0	-	-
93.3 28.0	0.0	-	5.1	-	-	-	-	0.0	-	0.0	-	-
93.3 45.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3 55.0	0.0	-	5.0	-	-	-	-	0.0	-	0.0	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	7.3	-	0.0	-	-

Ichthyococcus irregularis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 90.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-

TABLE 4. (cont.)

Vinciguerria lucetia

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	70.0	0.0	-	-	9.7	-	-	-	0.0	-	0.0	-	-
76.7	80.0	0.0	-	-	0.0	-	-	-	484.9	-	0.0	-	-
76.7	100.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
80.0	90.0	0.0	-	-	0.0	-	-	-	308.1	-	0.0	-	-
80.0	100.0	0.0	-	-	4.8	-	-	-	644.9	-	70.6	-	-
83.3	51.0	0.0	-	-	0.0	-	-	-	0.0	-	4.3	-	-
83.3	55.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
83.3	60.0	0.0	-	-	0.0	-	-	-	9.0	-	0.0	-	-
83.3	70.0	0.0	-	-	0.0	-	-	-	34.2	-	0.0	-	-
83.3	80.0	0.0	-	-	0.0	-	-	-	54.6	-	45.3	-	-
83.3	90.0	0.0	-	-	10.4	-	-	-	522.1	-	9.7	-	-
83.3	100.0	18.6	-	-	30.5	-	-	-	393.4	-	36.9	-	-
83.3	110.0	37.8	-	-	10.3	-	-	-	483.8	-	213.8	-	-
86.7	35.0	8.7	-	-	0.0	-	-	-	9.4	-	0.0	-	-
86.7	40.0	0.0	-	-	0.0	-	-	-	27.0	-	0.0	-	-
86.7	45.0	0.0	-	-	5.2	-	-	-	10.0	-	10.3	-	-
86.7	60.0	9.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	80.0	39.8	-	-	0.0	-	-	-	84.7	-	110.8	-	-
86.7	90.0	89.3	-	-	0.0	-	-	-	386.8	-	9.1	-	-
86.7	100.0	29.1	-	-	10.2	-	-	-	513.0	-	306.9	-	-
86.7	110.0	29.8	-	-	10.0	-	-	-	960.0	-	135.3	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	35.0	-	0.0	-	-
90.0	30.0	9.7	-	-	0.0	-	-	-	60.8	-	4.7	-	-
90.0	35.0	0.0	-	-	0.0	-	-	-	0.0	-	5.1	-	-
90.0	37.0	0.0	-	-	0.0	-	-	-	10.3	-	9.9	-	-
90.0	45.0	0.0	-	-	0.0	-	-	-	5.0	-	32.5	-	-
90.0	53.0	5.2	-	-	5.2	-	-	-	34.7	-	18.6	-	-
90.0	60.0	0.0	-	-	8.8	-	-	-	0.0	-	39.0	-	-
90.0	70.0	0.0	-	-	0.0	-	-	-	223.3	-	112.6	-	-

TABLE 4. (cont.)

Vinciguerria lucetia (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0	80.0	0.0	-	-	0.0	-	-	-	236.6	-	34.0	-	-
90.0	90.0	13.4	-	-	0.0	-	-	-	384.7	-	834.1	-	-
90.0	100.0	23.2	-	-	4.7	-	-	-	4.7	-	295.2	-	-
90.0	110.0	41.5	-	-	0.0	-	-	-	563.9	-	156.4	-	-
90.0	120.0	17.3	-	-	4.6	-	-	-	779.9	-	71.4	-	-
93.3	28.0	0.0	-	0.0	-	-	-	-	4.8	-	4.8	-	-
93.3	35.0	4.5	-	0.0	-	-	-	-	29.0	-	21.0	-	-
93.3	40.0	5.0	-	0.0	-	-	-	-	118.9	-	0.0	-	-
93.3	45.0	0.0	-	0.0	-	-	-	-	14.5	-	4.5	-	-
93.3	50.0	0.0	-	0.0	-	-	-	-	16.8	-	87.6	-	-
93.3	55.0	0.0	-	5.0	-	-	-	-	0.0	-	48.0	-	-
93.3	60.0	0.0	-	0.0	-	-	-	-	0.0	-	5.0	-	-
93.3	70.0	0.0	-	-	5.0	-	-	-	91.0	-	0.0	-	-
93.3	80.0	5.2	-	-	0.0	-	-	-	637.9	-	20.7	-	-
93.3	90.0	5.1	-	-	0.0	-	-	-	451.7	-	356.9	-	-
93.3	100.0	0.0	-	-	9.7	-	-	-	355.1	-	333.4	-	-
93.3	110.0	14.1	-	-	0.0	-	-	-	364.0	-	542.1	-	-
93.3	120.0	0.0	-	-	0.0	-	-	-	355.2	-	529.0	-	-

Vinciguerria poweriae

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	100.0	0.0	-	-	0.0	-	-	-	8.9	-	0.0	-	-
86.7	110.0	0.0	-	-	5.0	-	-	-	40.9	-	0.0	-	-
90.0	120.0	0.0	-	-	0.0	-	-	-	37.4	-	0.0	-	-
93.3	80.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
93.3	90.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	13.4	-	-

Chauliodus macouni

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	60.0	10.5	-	-	0.0	-	-	-	4.8	-	0.0	-	-
76.7	70.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
80.0	70.0	0.0	-	-	0.0	-	-	-	8.5	-	0.0	-	-

TABLE 4. (cont.)

Chauliodus macouni (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	80.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
80.0	100.0	0.0	-	-	0.0	-	-	-	0.0	-	10.1	-	-
83.3	60.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	80.0	0.0	-	-	0.0	-	-	-	0.0	-	5.0	-	-
86.7	55.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	70.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	90.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0	37.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0	80.0	5.1	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	110.0	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
90.0	120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.2	-	-
93.3	40.0	0.0	-	0.0	-	-	-	-	0.0	-	4.5	-	-
93.3	50.0	0.0	-	0.0	-	-	-	-	4.2	-	0.0	-	-
93.3	60.0	4.8	-	0.0	-	-	-	-	0.0	-	0.0	-	-

Stomias atriventer

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	80.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
86.7	40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
90.0	53.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
90.0	90.0	8.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	20.0	-	-	-	-	0.0	-	0.0	-	-
93.3	60.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3	70.0	0.0	-	-	9.9	-	-	-	0.0	-	0.0	-	-
93.3	120.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-

Melanostomiinae

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0	90.0	0.0	-	-	0.0	-	-	-	4.6	-	0.0	-	-

TABLE 4. (cont.)

Bathophilus flemingi

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-

Aristostomias scintillans

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 90.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7 110.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-

Idiacanthus antrostomus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 100.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0 100.0	0.0	-	-	0.0	-	-	-	0.0	-	10.1	-	-
83.3 80.0	0.0	-	-	0.0	-	-	-	9.1	-	0.0	-	-
86.7 70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	13.5	-	0.0	-	-
86.7 110.0	0.0	-	-	0.0	-	-	-	4.5	-	4.5	-	-
90.0 70.0	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	-	9.3	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
93.3 35.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3 45.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3 55.0	0.0	-	0.0	-	-	-	-	0.0	-	4.8	-	-
93.3 70.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
93.3 80.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
93.3 90.0	0.0	-	-	0.0	-	-	-	9.8	-	0.0	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	3.4	-	0.0	-	-

Benthalbella dentata

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 80.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 80.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
90.0 37.0	0.0	-	-	0.0	-	-	-	10.3	-	0.0	-	-
93.3 45.0	5.0	-	0.0	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Rosenblattichthys volucris

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
90.0 90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.4	-	-

Scopelarchus analis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
93.3 90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.3	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	7.3	-	0.0	-	-

Scopelarchus guentheri

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0 80.0	0.0	-	-	0.0	-	-	-	4.6	-	0.0	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	7.3	-	0.0	-	-

Scopelosaurus harryi

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 90.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0 45.0	0.0	-	-	0.0	-	-	-	0.0	-	5.4	-	-
90.0 90.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
93.3 70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	5.4	-	-	-	0.0	-	0.0	-	-

Synodus lucioceps

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 55.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
86.7 35.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-

Arctozenus risso

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 70.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	0.0	-	9.3	-	-
90.0 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-

Lestidiops ringens

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 70.0	0.0	-	-	0.0	-	-	-	8.5	-	0.0	-	-

TABLE 4. (cont.)

Lestidiops ringens (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	80.0	0.0	-	-	0.0	-	-	-	0.0	-	5.0	-	-
86.7	40.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
86.7	50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-
86.7	70.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	80.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	90.0	0.0	-	-	9.9	-	-	-	9.1	-	0.0	-	-
86.7	110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-
90.0	30.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
90.0	37.0	0.0	-	-	0.0	-	-	-	10.3	-	0.0	-	-
90.0	45.0	0.0	-	-	0.0	-	-	-	5.0	-	0.0	-	-
90.0	53.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
90.0	70.0	0.0	-	-	0.0	-	-	-	9.5	-	0.0	-	-
90.0	90.0	0.0	-	-	0.0	-	-	-	4.6	-	8.8	-	-
90.0	100.0	0.0	-	-	9.5	-	-	-	0.0	-	0.0	-	-
90.0	110.0	4.6	-	-	0.0	-	-	-	0.0	-	9.5	-	-
90.0	120.0	0.0	-	-	0.0	-	-	-	4.7	-	4.2	-	-
93.3	28.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3	40.0	0.0	-	5.1	-	-	-	-	0.0	-	4.5	-	-
93.3	50.0	0.0	-	0.0	-	-	-	-	0.0	-	4.4	-	-
93.3	55.0	4.7	-	5.0	-	-	-	-	0.0	-	0.0	-	-
93.3	80.0	0.0	-	-	0.0	-	-	-	8.6	-	0.0	-	-
93.3	90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.3	-	-

Myctophidae

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	60.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
80.0	60.0	0.0	-	-	0.0	-	-	-	9.3	-	0.0	-	-
80.0	70.0	0.0	-	-	4.6	-	-	-	0.0	-	0.0	-	-
80.0	100.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
83.3	60.0	0.0	-	-	12.2	-	-	-	0.0	-	0.0	-	-
83.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-
86.7	50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Myctophidae (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	80.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	90.0	0.0	-	-	0.0	-	-	-	9.1	-	0.0	-	-
86.7	100.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0	70.0	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
90.0	90.0	0.0	-	-	0.0	-	-	-	4.6	-	0.0	-	-
93.3	45.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	6.7	-	0.0	-	-

Ceratoscopelus townsendi

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	80.0	0.0	-	-	0.0	-	-	-	37.6	-	0.0	-	-
76.7	100.0	0.0	-	-	9.3	-	-	-	0.0	-	9.9	-	-
80.0	90.0	0.0	-	-	4.7	-	-	-	27.7	-	0.0	-	-
80.0	100.0	0.0	-	-	0.0	-	-	-	31.6	-	15.1	-	-
83.3	80.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
83.3	90.0	0.0	-	-	41.7	-	-	-	18.3	-	0.0	-	-
83.3	100.0	23.2	-	-	5.1	-	-	-	40.2	-	4.6	-	-
83.3	110.0	9.5	-	-	5.2	-	-	-	12.3	-	63.7	-	-
86.7	80.0	14.9	-	-	0.0	-	-	-	5.0	-	48.7	-	-
86.7	90.0	0.0	-	-	4.9	-	-	-	9.1	-	4.5	-	-
86.7	100.0	4.8	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	110.0	5.0	-	-	5.0	-	-	-	18.2	-	4.5	-	-
90.0	30.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
90.0	35.0	0.0	-	-	0.0	-	-	-	0.0	-	5.1	-	-
90.0	37.0	0.0	-	-	0.0	-	-	-	10.3	-	0.0	-	-
90.0	60.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0	70.0	0.0	-	-	9.8	-	-	-	4.8	-	4.7	-	-
90.0	80.0	5.1	-	-	0.0	-	-	-	4.6	-	0.0	-	-
90.0	90.0	0.0	-	-	0.0	-	-	-	41.2	-	21.9	-	-
90.0	100.0	4.6	-	-	0.0	-	-	-	0.0	-	29.0	-	-
90.0	110.0	4.6	-	-	0.0	-	-	-	4.8	-	9.5	-	-

TABLE 4. (cont.)

Ceratoscopelus townsendi (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0 120.0	4.3	-	-	0.0	-	-	-	0.0	-	12.6	-	-
93.3 55.0	0.0	-	10.0	-	-	-	-	0.0	-	0.0	-	-
93.3 60.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3 70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	0.0	-	-	-	4.3	-	5.2	-	-
93.3 90.0	0.0	-	-	10.0	-	-	-	4.9	-	8.6	-	-
93.3 100.0	5.0	-	-	9.7	-	-	-	10.1	-	13.9	-	-
93.3 110.0	4.7	-	-	0.0	-	-	-	29.1	-	94.1	-	-
93.3 120.0	0.0	-	-	0.0	-	-	-	71.0	-	18.6	-	-

***Diaphus* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 90.0	0.0	-	-	0.0	-	-	-	7.9	-	0.0	-	-
83.3 80.0	0.0	-	-	0.0	-	-	-	0.0	-	10.1	-	-
83.3 110.0	0.0	-	-	0.0	-	-	-	8.2	-	0.0	-	-
86.7 45.0	0.0	-	-	0.0	-	-	-	0.0	-	5.2	-	-
86.7 70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
86.7 80.0	0.0	-	-	0.0	-	-	-	0.0	-	8.9	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0 45.0	0.0	-	-	0.0	-	-	-	0.0	-	5.4	-	-
90.0 80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
93.3 30.0	0.0	-	0.0	-	-	-	-	4.7	-	0.0	-	-
93.3 50.0	0.0	-	0.0	-	-	-	-	4.2	-	0.0	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	21.8	-	0.0	-	-
93.3 120.0	0.0	-	-	0.0	-	-	-	8.9	-	0.0	-	-

Lampadena urophaos

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-
90.0 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.2	-	-

TABLE 4. (cont.)

Station		*Lampanyctus* spp.											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	80.0	18.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	100.0	0.0	-	-	14.0	-	-	-	0.0	-	0.0	-	-
80.0	60.0	14.0	-	-	3.8	-	-	-	0.0	-	0.0	-	-
80.0	70.0	14.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	80.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
83.3	55.0	22.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	60.0	19.3	-	-	4.1	-	-	-	0.0	-	0.0	-	-
83.3	80.0	4.9	-	-	14.5	-	-	-	4.5	-	0.0	-	-
83.3	90.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
83.3	100.0	4.6	-	-	25.4	-	-	-	0.0	-	0.0	-	-
86.7	50.0	12.5	-	-	4.3	-	-	-	0.0	-	0.0	-	-
86.7	55.0	4.8	-	-	10.5	-	-	-	0.0	-	0.0	-	-
86.7	60.0	4.9	-	-	10.4	-	-	-	0.0	-	0.0	-	-
86.7	70.0	4.5	-	-	10.3	-	-	-	0.0	-	0.0	-	-
86.7	80.0	14.9	-	-	5.0	-	-	-	0.0	-	0.0	-	-
86.7	90.0	14.9	-	-	4.9	-	-	-	4.5	-	0.0	-	-
86.7	100.0	29.1	-	-	10.2	-	-	-	0.0	-	0.0	-	-
86.7	110.0	0.0	-	-	14.9	-	-	-	0.0	-	0.0	-	-
90.0	37.0	9.8	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0	53.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0	60.0	24.8	-	-	13.2	-	-	-	0.0	-	4.9	-	-
90.0	70.0	0.0	-	-	14.7	-	-	-	0.0	-	0.0	-	-
90.0	80.0	5.1	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0	90.0	4.5	-	-	10.3	-	-	-	4.6	-	0.0	-	-
90.0	100.0	0.0	-	-	4.7	-	-	-	4.7	-	4.8	-	-
93.3	40.0	5.0	-	10.3	-	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	10.4	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	5.3	-	-	-	-	0.0	-	0.0	-	-
93.3	60.0	0.0	-	20.6	-	-	-	-	0.0	-	0.0	-	-
93.3	70.0	0.0	-	-	9.9	-	-	-	0.0	-	0.0	-	-
93.3	80.0	0.0	-	-	21.5	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

***Lampanyctus* spp.** (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 90.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	3.4	-	0.0	-	-
93.3 110.0	4.7	-	-	0.0	-	-	-	7.3	-	0.0	-	-

***Lampanyctus* "niger"**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-

***Lampanyctus* "no pectorals"**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
93.3 120.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-

Lampanyctus regalis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 60.0	0.0	-	-	0.0	-	-	-	9.3	-	0.0	-	-
86.7 50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	0.0	-	-	-	9.2	-	0.0	-	-
86.7 110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
93.3 30.0	0.0	-	0.0	-	-	-	-	4.7	-	0.0	-	-
93.3 70.0	0.0	-	-	5.0	-	-	-	4.5	-	0.0	-	-

Lampanyctus ritteri

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 51.0	0.0	-	-	0.0	-	-	-	0.0	-	3.8	-	-
76.7 55.0	9.6	-	-	0.0	-	-	-	9.7	-	0.0	-	-
76.7 60.0	10.5	-	-	4.7	-	-	-	0.0	-	0.0	-	-
76.7 80.0	0.0	-	-	14.1	-	-	-	0.0	-	0.0	-	-
76.7 90.0	0.0	-	-	4.8	-	-	-	-	-	0.0	-	-
80.0 70.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
81.8 46.9	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
83.3 60.0	0.0	-	-	4.1	-	-	-	0.0	-	0.0	-	-
83.3 90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
83.3 100.0	4.6	-	-	10.2	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Lampanyctus ritteri (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 45.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 55.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7 60.0	0.0	-	-	15.6	-	-	-	0.0	-	0.0	-	-
86.7 90.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 110.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
90.0 45.0	0.0	-	-	0.0	-	-	-	0.0	-	5.4	-	-
90.0 53.0	0.0	-	-	5.2	-	-	-	5.0	-	0.0	-	-
90.0 70.0	0.0	-	-	9.8	-	-	-	0.0	-	0.0	-	-
90.0 90.0	0.0	-	-	10.3	-	-	-	0.0	-	4.4	-	-
93.3 30.0	0.0	-	0.0	-	-	-	-	4.7	-	0.0	-	-
93.3 40.0	5.0	-	0.0	-	-	-	-	0.0	-	4.5	-	-
93.3 45.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3 55.0	0.0	-	25.0	-	-	-	-	4.4	-	0.0	-	-
93.3 60.0	0.0	-	20.6	-	-	-	-	0.0	-	0.0	-	-
93.3 70.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-

Lampanyctus steinbecki

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 120.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-

Notolychnus valdiviae

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 90.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
83.3 100.0	0.0	-	-	0.0	-	-	-	0.0	-	9.2	-	-
93.3 120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

Notoscopelus resplendens

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 100.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
90.0 110.0	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.2	-	-

TABLE 4. (cont.)

Parvilux ingens

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	80.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-

Stenobrachius leucopsarus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	12.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	51.0	10.4	-	-	13.1	-	-	-	0.0	-	0.0	-	-
76.7	55.0	566.8	-	-	97.4	-	-	-	0.0	-	0.0	-	-
76.7	60.0	52.4	-	-	184.9	-	-	-	0.0	-	0.0	-	-
76.7	70.0	97.2	-	-	72.6	-	-	-	0.0	-	0.0	-	-
76.7	80.0	14.1	-	-	18.8	-	-	-	12.5	-	0.0	-	-
76.7	90.0	0.0	-	-	28.6	-	-	-	-	-	0.0	-	-
76.7	100.0	10.1	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	51.0	21.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	55.0	120.9	-	-	9.1	-	-	-	0.0	-	0.0	-	-
80.0	60.0	46.6	-	-	63.9	-	-	-	0.0	-	0.0	-	-
80.0	70.0	132.8	-	-	13.9	-	-	-	0.0	-	0.0	-	-
80.0	80.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
80.0	100.0	4.8	-	-	4.8	-	-	-	0.0	-	5.0	-	-
81.8	46.9	19.1	-	-	20.7	-	-	-	0.0	-	0.0	-	-
83.3	40.6	0.0	-	-	8.3	-	-	-	0.0	-	0.0	-	-
83.3	42.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
83.3	55.0	54.7	-	-	127.7	-	-	-	0.0	-	0.0	-	-
83.3	60.0	144.6	-	-	52.8	-	-	-	0.0	-	0.0	-	-
83.3	70.0	34.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	80.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	90.0	0.0	-	-	0.0	-	-	-	4.6	-	0.0	-	-
83.3	100.0	0.0	-	-	5.1	-	-	-	4.5	-	0.0	-	-
83.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	9.1	-	-
86.7	33.0	0.0	-	-	23.4	-	-	-	0.0	-	0.0	-	-
86.7	35.0	8.7	-	-	128.0	-	-	-	0.0	-	0.0	-	-
86.7	40.0	114.5	-	-	47.4	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Stenobrachius leucopsarus (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	45.0	62.9	-	-	72.5	-	-	-	0.0	-	0.0	-	-
86.7	50.0	58.2	-	-	291.0	-	-	-	4.7	-	0.0	-	-
86.7	60.0	9.7	-	-	88.2	-	-	-	0.0	-	0.0	-	-
86.7	80.0	0.0	-	-	34.9	-	-	-	0.0	-	0.0	-	-
90.0	28.0	0.0	-	-	19.5	-	-	-	0.0	-	0.0	-	-
90.0	30.0	0.0	-	-	229.6	-	-	-	0.0	-	0.0	-	-
90.0	35.0	14.0	-	-	19.3	-	-	-	0.0	-	0.0	-	-
90.0	37.0	4.9	-	-	34.4	-	-	-	0.0	-	0.0	-	-
90.0	45.0	10.2	-	-	166.3	-	-	-	0.0	-	0.0	-	-
90.0	53.0	5.2	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0	60.0	29.8	-	-	4.4	-	-	-	0.0	-	0.0	-	-
90.0	70.0	10.2	-	-	19.6	-	-	-	0.0	-	0.0	-	-
90.0	80.0	0.0	-	-	15.5	-	-	-	0.0	-	0.0	-	-
90.0	90.0	0.0	-	-	15.4	-	-	-	0.0	-	0.0	-	-
90.0	110.0	4.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	30.0	0.0	-	16.2	-	-	-	-	0.0	-	0.0	-	-
93.3	35.0	0.0	-	155.4	-	-	-	-	0.0	-	0.0	-	-
93.3	40.0	0.0	-	190.2	-	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	214.0	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	16.0	-	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	5.0	-	-	-	-	0.0	-	0.0	-	-
93.3	70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3	80.0	0.0	-	-	43.0	-	-	-	0.0	-	0.0	-	-
93.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-

Triphoturus mexicanus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	60.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
76.7	70.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
80.0	60.0	0.0	-	-	0.0	-	-	-	9.3	-	0.0	-	-
80.0	70.0	0.0	-	-	0.0	-	-	-	0.0	-	9.9	-	-
80.0	80.0	0.0	-	-	0.0	-	-	-	9.4	-	0.0	-	-

TABLE 4. (cont.)

Station		*Triphoturus mexicanus* (cont.)											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
81.8	46.9	0.0	-	-	0.0	-	-	-	0.0	-	5.4	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	0.0	-	29.1	-	-
83.3	51.0	0.0	-	-	0.0	-	-	-	8.7	-	12.8	-	-
83.3	60.0	0.0	-	-	0.0	-	-	-	9.0	-	0.0	-	-
83.3	90.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
83.3	100.0	0.0	-	-	15.3	-	-	-	0.0	-	0.0	-	-
83.3	110.0	0.0	-	-	0.0	-	-	-	8.2	-	4.5	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	3.9	-	0.0	-	-
86.7	35.0	0.0	-	-	0.0	-	-	-	9.4	-	14.1	-	-
86.7	40.0	0.0	-	-	4.7	-	-	-	67.5	-	0.0	-	-
86.7	45.0	0.0	-	-	0.0	-	-	-	5.0	-	15.5	-	-
86.7	50.0	0.0	-	-	0.0	-	-	-	0.0	-	4.3	-	-
86.7	55.0	0.0	-	-	5.3	-	-	-	4.5	-	0.0	-	-
86.7	60.0	0.0	-	-	26.0	-	-	-	32.8	-	0.0	-	-
86.7	90.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
86.7	100.0	0.0	-	-	10.2	-	-	-	0.0	-	9.3	-	-
86.7	110.0	0.0	-	-	14.9	-	-	-	13.6	-	0.0	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	21.9	-	4.9	-	-
90.0	30.0	0.0	-	-	0.0	-	-	-	47.7	-	9.4	-	-
90.0	35.0	0.0	-	-	4.8	-	-	-	18.1	-	25.3	-	-
90.0	37.0	0.0	-	-	4.9	-	-	-	0.0	-	19.7	-	-
90.0	45.0	0.0	-	-	0.0	-	-	-	10.0	-	10.8	-	-
90.0	53.0	0.0	-	-	0.0	-	-	-	24.8	-	4.6	-	-
90.0	60.0	0.0	-	-	4.4	-	-	-	9.6	-	9.7	-	-
90.0	70.0	0.0	-	-	0.0	-	-	-	0.0	-	9.4	-	-
90.0	80.0	0.0	-	-	0.0	-	-	-	18.6	-	0.0	-	-
90.0	100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
90.0	110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
90.0	120.0	0.0	-	-	0.0	-	-	-	14.0	-	8.4	-	-
93.3	26.7	0.0	-	0.0	-	-	-	-	24.2	-	0.0	-	-

TABLE 4. (cont.)

Triphoturus mexicanus (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 28.0	0.0	-	0.0	-	-	-	-	24.0	-	0.0	-	-
93.3 30.0	0.0	-	5.4	-	-	-	-	107.6	-	61.4	-	-
93.3 35.0	0.0	-	11.1	-	-	-	-	29.0	-	5.3	-	-
93.3 40.0	0.0	-	0.0	-	-	-	-	20.7	-	4.5	-	-
93.3 50.0	0.0	-	5.3	-	-	-	-	12.6	-	4.4	-	-
93.3 55.0	0.0	-	20.0	-	-	-	-	8.7	-	9.6	-	-
93.3 60.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3 70.0	0.0	-	-	0.0	-	-	-	18.2	-	4.4	-	-
93.3 80.0	0.0	-	-	0.0	-	-	-	30.2	-	5.2	-	-
93.3 90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.3	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	10.1	-	0.0	-	-
93.3 120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

***Diogenichthys* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-

Diogenichthys atlanticus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 80.0	0.0	-	-	4.7	-	-	-	4.2	-	4.5	-	-
76.7 90.0	0.0	-	-	0.0	-	-	-	-	-	9.1	-	-
76.7 100.0	0.0	-	-	32.6	-	-	-	0.0	-	0.0	-	-
80.0 55.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
80.0 70.0	0.0	-	-	18.6	-	-	-	0.0	-	0.0	-	-
80.0 80.0	0.0	-	-	31.1	-	-	-	0.0	-	9.6	-	-
80.0 100.0	9.6	-	-	14.5	-	-	-	4.5	-	5.0	-	-
83.3 42.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
83.3 60.0	0.0	-	-	8.1	-	-	-	0.0	-	0.0	-	-
83.3 70.0	9.9	-	-	5.3	-	-	-	0.0	-	0.0	-	-
83.3 80.0	9.7	-	-	4.8	-	-	-	4.5	-	0.0	-	-
83.3 90.0	0.0	-	-	10.4	-	-	-	4.6	-	0.0	-	-
83.3 100.0	9.3	-	-	10.2	-	-	-	26.8	-	13.8	-	-
83.3 110.0	4.7	-	-	0.0	-	-	-	0.0	-	22.8	-	-

TABLE 4. (cont.)

Diogenichthys atlanticus (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	45.0	0.0	-	-	0.0	-	-	-	0.0	-	5.2	-	-
86.7	50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-
86.7	55.0	0.0	-	-	10.5	-	-	-	0.0	-	0.0	-	-
86.7	70.0	4.5	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	80.0	5.0	-	-	5.0	-	-	-	0.0	-	8.9	-	-
86.7	90.0	14.9	-	-	9.9	-	-	-	13.6	-	4.5	-	-
86.7	100.0	0.0	-	-	5.1	-	-	-	18.0	-	14.0	-	-
86.7	110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0	30.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	35.0	0.0	-	-	0.0	-	-	-	0.0	-	5.1	-	-
90.0	37.0	4.9	-	-	4.9	-	-	-	0.0	-	4.9	-	-
90.0	45.0	5.1	-	-	0.0	-	-	-	0.0	-	10.8	-	-
90.0	60.0	14.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	80.0	0.0	-	-	5.2	-	-	-	0.0	-	9.7	-	-
90.0	90.0	0.0	-	-	0.0	-	-	-	4.6	-	39.5	-	-
90.0	100.0	4.6	-	-	0.0	-	-	-	0.0	-	9.7	-	-
90.0	110.0	9.2	-	-	0.0	-	-	-	14.5	-	0.0	-	-
90.0	120.0	0.0	-	-	0.0	-	-	-	0.0	-	12.6	-	-
93.3	40.0	5.0	-	0.0	-	-	-	-	0.0	-	4.5	-	-
93.3	55.0	0.0	-	0.0	-	-	-	-	0.0	-	4.8	-	-
93.3	70.0	0.0	-	-	9.9	-	-	-	0.0	-	0.0	-	-
93.3	90.0	0.0	-	-	0.0	-	-	-	0.0	-	8.6	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	3.4	-	13.9	-	-
93.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	22.4	-	-
93.3	120.0	0.0	-	-	0.0	-	-	-	8.9	-	13.9	-	-

Electrona risso

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	90.0	0.0	-	-	0.0	-	-	-	4.0	-	0.0	-	-
80.0	100.0	0.0	-	-	4.8	-	-	-	4.5	-	0.0	-	-
86.7	110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0	90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.4	-	-

TABLE 4. (cont.)

Electrona risso (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 100.0	0.0	-	-	0.0	-	-	-	3.4	-	0.0	-	-

Hygophum reinhardtii

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 80.0	0.0	-	-	0.0	-	-	-	4.2	-	0.0	-	-
80.0 90.0	0.0	-	-	0.0	-	-	-	4.0	-	0.0	-	-
83.3 100.0	9.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3 110.0	4.7	-	-	0.0	-	-	-	0.0	-	4.5	-	-
86.7 100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0 53.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0 90.0	0.0	-	-	0.0	-	-	-	4.6	-	0.0	-	-
90.0 120.0	4.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Loweina rara

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 90.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
83.3 100.0	4.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Myctophum lychnobium

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 110.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Myctophum nitidulum

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 100.0	4.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3 110.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
93.3 55.0	0.0	-	0.0	-	-	-	-	0.0	-	4.8	-	-
93.3 90.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

Protomyctophum crockeri

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 51.0	0.0	-	-	0.0	-	-	-	0.0	-	3.8	-	-
76.7 55.0	9.6	-	-	4.6	-	-	-	0.0	-	0.0	-	-
76.7 60.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

TABLE 4. (cont.)

Protomyctophum crockeri (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	70.0	0.0	-	-	9.7	-	-	-	9.4	-	9.7	-	-
76.7	80.0	4.7	-	-	4.7	-	-	-	12.5	-	4.5	-	-
76.7	100.0	0.0	-	-	9.3	-	-	-	0.0	-	5.0	-	-
80.0	55.0	17.3	-	-	0.0	-	-	-	9.4	-	0.0	-	-
80.0	60.0	23.3	-	-	7.5	-	-	-	0.0	-	0.0	-	-
80.0	70.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	80.0	0.0	-	-	36.3	-	-	-	4.7	-	4.8	-	-
80.0	90.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
80.0	100.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	4.4	-	9.7	-	-
83.3	51.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
83.3	55.0	4.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	60.0	28.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	70.0	14.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	80.0	0.0	-	-	0.0	-	-	-	0.0	-	5.0	-	-
83.3	90.0	0.0	-	-	0.0	-	-	-	4.6	-	4.8	-	-
83.3	100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
83.3	110.0	4.7	-	-	10.3	-	-	-	0.0	-	0.0	-	-
86.7	35.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	55.0	0.0	-	-	5.3	-	-	-	4.5	-	0.0	-	-
86.7	60.0	19.5	-	-	15.6	-	-	-	0.0	-	0.0	-	-
86.7	70.0	4.5	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	80.0	0.0	-	-	10.0	-	-	-	0.0	-	8.9	-	-
86.7	90.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
86.7	100.0	4.8	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	110.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
90.0	35.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0	37.0	0.0	-	-	0.0	-	-	-	10.3	-	0.0	-	-
90.0	45.0	5.1	-	-	4.8	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Protomyctophum crockeri (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0	53.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
90.0	60.0	0.0	-	-	0.0	-	-	-	0.0	-	9.7	-	-
90.0	70.0	20.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0	90.0	8.9	-	-	0.0	-	-	-	4.6	-	4.4	-	-
90.0	100.0	4.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	110.0	0.0	-	-	0.0	-	-	-	4.8	-	4.7	-	-
93.3	30.0	0.0	-	0.0	-	-	-	-	4.7	-	0.0	-	-
93.3	35.0	4.5	-	0.0	-	-	-	-	0.0	-	10.5	-	-
93.3	40.0	5.0	-	5.1	-	-	-	-	0.0	-	0.0	-	-
93.3	45.0	5.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3	50.0	20.6	-	5.3	-	-	-	-	4.2	-	0.0	-	-
93.3	55.0	4.7	-	0.0	-	-	-	-	0.0	-	4.8	-	-
93.3	60.0	9.5	-	0.0	-	-	-	-	0.0	-	0.0	-	-
93.3	90.0	5.1	-	-	5.0	-	-	-	0.0	-	4.3	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	3.4	-	4.6	-	-
93.3	110.0	4.7	-	-	0.0	-	-	-	14.6	-	4.5	-	-
93.3	120.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-

Symbolophorus californiensis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	55.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	100.0	0.0	-	-	14.0	-	-	-	0.0	-	0.0	-	-
80.0	70.0	0.0	-	-	0.0	-	-	-	8.5	-	0.0	-	-
80.0	80.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
80.0	90.0	0.0	-	-	27.9	-	-	-	0.0	-	0.0	-	-
80.0	100.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
83.3	70.0	0.0	-	-	5.3	-	-	-	8.6	-	0.0	-	-
83.3	80.0	0.0	-	-	0.0	-	-	-	4.5	-	5.0	-	-
83.3	90.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
83.3	100.0	4.6	-	-	15.3	-	-	-	4.5	-	0.0	-	-

TABLE 4. (cont.)

Symbolophorus californiensis (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	110.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-
86.7	55.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7	70.0	4.5	-	-	5.1	-	-	-	9.2	-	0.0	-	-
86.7	80.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	90.0	34.7	-	-	9.9	-	-	-	9.1	-	0.0	-	-
86.7	100.0	9.7	-	-	30.5	-	-	-	0.0	-	4.7	-	-
86.7	110.0	5.0	-	-	19.9	-	-	-	4.5	-	0.0	-	-
90.0	30.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
90.0	45.0	5.1	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	53.0	0.0	-	-	10.4	-	-	-	0.0	-	4.6	-	-
90.0	80.0	5.1	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	90.0	13.4	-	-	10.3	-	-	-	27.5	-	4.4	-	-
90.0	100.0	9.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	110.0	9.2	-	-	0.0	-	-	-	4.8	-	4.7	-	-
90.0	120.0	13.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
93.3	35.0	0.0	-	5.5	-	-	-	-	0.0	-	0.0	-	-
93.3	40.0	5.0	-	0.0	-	-	-	-	10.3	-	4.5	-	-
93.3	45.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	5.0	-	-	-	-	0.0	-	9.6	-	-
93.3	60.0	0.0	-	10.3	-	-	-	-	7.5	-	0.0	-	-
93.3	70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3	80.0	10.4	-	-	16.1	-	-	-	0.0	-	0.0	-	-
93.3	90.0	0.0	-	-	10.0	-	-	-	9.8	-	0.0	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

Tarletonbeania crenularis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	51.0	0.0	-	-	4.4	-	-	-	0.0	-	0.0	-	-
76.7	55.0	9.6	-	-	4.6	-	-	-	9.7	-	0.0	-	-
76.7	60.0	0.0	-	-	9.5	-	-	-	0.0	-	0.0	-	-
76.7	70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-

TABLE 4. (cont.)

Tarletonbeania crenularis (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	90.0	0.0	-	-	4.8	-	-	-	-	-	0.0	-	-
80.0	70.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	60.0	9.6	-	-	0.0	-	-	-	9.0	-	0.0	-	-
83.3	100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
83.3	110.0	0.0	-	-	0.0	-	-	-	4.1	-	0.0	-	-
86.7	55.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7	70.0	4.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3	55.0	4.7	-	0.0	-	-	-	-	0.0	-	0.0	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	3.4	-	0.0	-	-

Desmodema lorum

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0	70.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-

Trachipterus altivelis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	60.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
86.7	60.0	9.7	-	-	0.0	-	-	-	0.0	-	5.1	-	-

Merluccius productus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	51.0	51.8	-	-	13.1	-	-	-	0.0	-	68.2	-	-
76.7	55.0	1124.0	-	-	9.3	-	-	-	0.0	-	0.0	-	-
76.7	60.0	220.1	-	-	4.7	-	-	-	0.0	-	0.0	-	-
76.7	70.0	427.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	80.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
76.7	90.0	0.0	-	-	4.8	-	-	-	-	-	0.0	-	-
80.0	51.0	4.4	-	-	4.1	-	-	-	0.0	-	16.5	-	-
80.0	55.0	0.0	-	-	13.6	-	-	-	0.0	-	4.6	-	-
80.0	60.0	0.0	-	-	7.5	-	-	-	0.0	-	0.0	-	-
80.0	70.0	910.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	80.0	10.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Merluccius productus (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
81.8	46.9	19.1	-	-	0.0	-	-	-	0.0	-	21.6	-	-
83.3	42.0	4.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	51.0	8.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	55.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
83.3	60.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	80.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	90.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	35.0	4.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	40.0	443.6	-	-	28.4	-	-	-	0.0	-	0.0	-	-
86.7	45.0	203.3	-	-	10.4	-	-	-	0.0	-	0.0	-	-
86.7	50.0	1048.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	55.0	193.6	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	70.0	18.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	80.0	10.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
90.0	30.0	0.0	-	-	10.7	-	-	-	0.0	-	0.0	-	-
90.0	35.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0	37.0	0.0	-	-	19.6	-	-	-	0.0	-	0.0	-	-
90.0	45.0	0.0	-	-	33.3	-	-	-	0.0	-	0.0	-	-
90.0	53.0	20.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	70.0	61.1	-	-	4.9	-	-	-	0.0	-	0.0	-	-
93.3	35.0	0.0	-	66.6	-	-	-	-	0.0	-	0.0	-	-
93.3	40.0	0.0	-	56.5	-	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	52.2	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	37.2	-	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	45.0	-	-	-	-	0.0	-	0.0	-	-
93.3	80.0	0.0	-	-	21.5	-	-	-	0.0	-	0.0	-	-

Chilara taylori

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	55.0	0.0	-	-	0.0	-	-	-	0.0	-	9.2	-	-
93.3	45.0	0.0	-	0.0	-	-	-	-	0.0	-	4.5	-	-

TABLE 4. (cont.)

Ophidion scrippsae

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 40.6	0.0	-	-	0.0	-	-	-	0.0	-	4.1	-	-
86.7 35.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
90.0 28.0	0.0	-	-	0.0	-	-	-	17.5	-	0.0	-	-

Cataetyx rubrirostris

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0 30.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-

***Oneirodes* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 80.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

***Gigantactis* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 90.0	0.0	-	-	0.0	-	-	-	-	-	9.1	-	-
80.0 100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.2	-	-

Atherinopsis californiensis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 40.6	4.1	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0 28.0	8.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3 26.7	3.4	-	0.0	-	-	-	-	0.0	-	0.0	-	-

Cololabis saira

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 55.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-

***Melamphaes* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 80.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-

Melamphaes lugubris

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 70.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
80.0 70.0	0.0	-	-	4.6	-	-	-	0.0	-	0.0	-	-
80.0 80.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Melamphaes lugubris (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 60.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3 90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
86.7 70.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7 80.0	0.0	-	-	0.0	-	-	-	5.0	-	0.0	-	-
86.7 100.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-
90.0 37.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0 53.0	0.0	-	-	0.0	-	-	-	5.0	-	0.0	-	-
90.0 90.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
90.0 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
93.3 40.0	5.0	-	5.1	-	-	-	-	0.0	-	0.0	-	-
93.3 50.0	0.0	-	0.0	-	-	-	-	0.0	-	4.4	-	-
93.3 60.0	4.8	-	0.0	-	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	5.4	-	-	-	0.0	-	0.0	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	3.4	-	0.0	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-

Poromitra crassiceps

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 55.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7 90.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-
86.7 110.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
90.0 80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
93.3 55.0	0.0	-	5.0	-	-	-	-	0.0	-	0.0	-	-
93.3 70.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-
93.3 90.0	0.0	-	-	5.0	-	-	-	0.0	-	4.3	-	-

Scopeloberyx robustus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 50.0	0.0	-	0.0	-	-	-	-	0.0	-	4.4	-	-

Scopelogadus bispinosus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 90.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Scopelogadus bispinosus (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
83.3	110.0	0.0	-	-	0.0	-	-	-	0.0	-	9.1	-	-
86.7	90.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-
90.0	80.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0	90.0	4.5	-	-	0.0	-	-	-	9.2	-	0.0	-	-
90.0	110.0	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
93.3	100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-

***Eutaeniophorus* spp.**

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0	100.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-

Eutaeniophorus festivus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	110.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-

Macroramphosus gracilis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	45.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	53.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
90.0	70.0	0.0	-	-	0.0	-	-	-	0.0	-	9.4	-	-

***Sebastes* spp.**

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	471.8	-	-	38.8	-	-	-	7.7	-	0.0	-	-
76.7	51.0	207.3	-	-	13.1	-	-	-	24.3	-	60.6	-	-
76.7	55.0	201.7	-	-	37.1	-	-	-	0.0	-	9.2	-	-
76.7	60.0	104.8	-	-	52.1	-	-	-	0.0	-	0.0	-	-
76.7	70.0	14.6	-	-	24.2	-	-	-	0.0	-	0.0	-	-
76.7	80.0	0.0	-	-	0.0	-	-	-	4.2	-	0.0	-	-
80.0	51.0	17.4	-	-	0.0	-	-	-	13.0	-	4.1	-	-
80.0	55.0	17.3	-	-	4.5	-	-	-	18.8	-	32.1	-	-
80.0	60.0	4.7	-	-	26.3	-	-	-	0.0	-	0.0	-	-
80.0	70.0	29.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
81.8	46.9	19.1	-	-	0.0	-	-	-	4.8	-	10.8	-	-

TABLE 4. (cont.)

Station		*Sebastes* spp. (cont.)											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	40.6	4.1	-	-	4.2	-	-	-	0.0	-	0.0	-	-
83.3	42.0	23.3	-	-	5.1	-	-	-	4.4	-	4.8	-	-
83.3	51.0	115.7	-	-	0.0	-	-	-	4.3	-	17.1	-	-
83.3	55.0	9.1	-	-	19.6	-	-	-	47.8	-	0.0	-	-
83.3	60.0	9.6	-	-	12.2	-	-	-	9.0	-	13.0	-	-
83.3	80.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	33.0	23.8	-	-	9.4	-	-	-	0.0	-	0.0	-	-
86.7	35.0	17.4	-	-	51.2	-	-	-	0.0	-	4.7	-	-
86.7	40.0	376.8	-	-	75.8	-	-	-	9.0	-	14.2	-	-
86.7	45.0	271.0	-	-	160.6	-	-	-	5.0	-	0.0	-	-
86.7	50.0	87.4	-	-	736.2	-	-	-	0.0	-	0.0	-	-
86.7	55.0	4.8	-	-	26.3	-	-	-	0.0	-	0.0	-	-
86.7	60.0	4.9	-	-	36.3	-	-	-	0.0	-	0.0	-	-
86.7	70.0	4.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	80.0	10.0	-	-	10.0	-	-	-	0.0	-	0.0	-	-
90.0	28.0	4.3	-	-	24.4	-	-	-	48.2	-	19.4	-	-
90.0	30.0	9.7	-	-	26.7	-	-	-	0.0	-	0.0	-	-
90.0	35.0	9.3	-	-	53.0	-	-	-	0.0	-	20.2	-	-
90.0	37.0	0.0	-	-	9.8	-	-	-	0.0	-	0.0	-	-
90.0	45.0	15.3	-	-	57.0	-	-	-	0.0	-	0.0	-	-
90.0	53.0	0.0	-	-	52.1	-	-	-	0.0	-	0.0	-	-
90.0	60.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	70.0	30.6	-	-	4.9	-	-	-	0.0	-	0.0	-	-
90.0	80.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0	90.0	0.0	-	-	10.3	-	-	-	0.0	-	0.0	-	-
93.3	26.7	0.0	-	0.0	-	-	-	-	8.1	-	3.5	-	-
93.3	28.0	0.0	-	10.2	-	-	-	-	0.0	-	4.8	-	-
93.3	30.0	0.0	-	37.9	-	-	-	-	0.0	-	0.0	-	-
93.3	35.0	0.0	-	105.5	-	-	-	-	4.8	-	0.0	-	-
93.3	45.0	5.0	-	140.9	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

***Sebastes* spp.** (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3	50.0	16.5	-	90.4	-	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	330.0	-	-	-	-	0.0	-	0.0	-	-

Sebastes aurora

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	55.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	55.0	0.0	-	5.0	-	-	-	-	0.0	-	0.0	-	-

Sebastes diploproa

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	51.0	0.0	-	-	0.0	-	-	-	8.1	-	3.8	-	-
76.7	60.0	10.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0	55.0	0.0	-	-	0.0	-	-	-	0.0	-	13.7	-	-
80.0	60.0	0.0	-	-	0.0	-	-	-	0.0	-	9.3	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	0.0	-	10.8	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	3.9	-	0.0	-	-
86.7	55.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	0.0	-	9.7	-	-
90.0	53.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
93.3	28.0	0.0	-	0.0	-	-	-	-	0.0	-	4.8	-	-
93.3	30.0	0.0	-	0.0	-	-	-	-	0.0	-	4.7	-	-
93.3	40.0	0.0	-	0.0	-	-	-	-	0.0	-	13.5	-	-
93.3	55.0	0.0	-	10.0	-	-	-	-	0.0	-	0.0	-	-

Sebastes jordani

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	59.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	51.0	694.4	-	-	0.0	-	-	-	0.0	-	3.8	-	-
76.7	55.0	9.6	-	-	37.1	-	-	-	0.0	-	0.0	-	-
76.7	60.0	0.0	-	-	14.2	-	-	-	0.0	-	0.0	-	-
80.0	51.0	4.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
81.8	46.9	47.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Sebastes jordani (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 40.6	0.0	-	-	4.2	-	-	-	0.0	-	4.1	-	-
83.3 51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-
86.7 33.0	11.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 35.0	0.0	-	-	41.0	-	-	-	0.0	-	0.0	-	-
86.7 40.0	753.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 45.0	62.9	-	-	10.4	-	-	-	0.0	-	0.0	-	-
86.7 50.0	8.3	-	-	12.8	-	-	-	0.0	-	0.0	-	-
86.7 80.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0 30.0	0.0	-	-	10.7	-	-	-	0.0	-	0.0	-	-
90.0 35.0	0.0	-	-	62.7	-	-	-	0.0	-	0.0	-	-
90.0 45.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
93.3 28.0	0.0	-	10.2	-	-	-	-	0.0	-	4.8	-	-
93.3 30.0	0.0	-	16.2	-	-	-	-	0.0	-	0.0	-	-
93.3 35.0	0.0	-	16.6	-	-	-	-	0.0	-	0.0	-	-
93.3 45.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-

Sebastes paucispinis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 55.0	38.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7 60.0	10.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3 55.0	0.0	-	5.0	-	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	5.4	-	-	-	0.0	-	0.0	-	-

Zaniolepis frenata

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 51.0	4.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 33.0	4.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 50.0	4.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Zaniolepis latipinnis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 55.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
83.3 51.0	4.5	-	-	0.0	-	-	-	0.0	-	4.3	-	-

TABLE 4. (cont.)

Cottidae

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-

***Artedius* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 50.0	0.0	-	-	8.6	-	-	-	0.0	-	0.0	-	-

Artedius creaseri

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 42.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
83.3 51.0	0.0	-	-	36.3	-	-	-	0.0	-	0.0	-	-

Artedius harringtoni

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 51.0	0.0	-	-	13.6	-	-	-	0.0	-	0.0	-	-

Hemilepidotus spinosus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 49.0	4.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-

***Icelinus* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 50.0	4.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Scorpaenichthys marmoratus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-
93.3 35.0	0.0	-	5.5	-	-	-	-	0.0	-	0.0	-	-

Bathyagonus pentacanthus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 40.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-

Odontopyxis trispinosa

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 42.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-

Xeneretmus latifrons

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 51.0	4.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3 42.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
83.3 51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-
93.3 26.7	0.0	-	4.9	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

***Liparis* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 51.0	0.0	-	-	9.1	-	-	-	0.0	-	0.0	-	-

***Paralabrax* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 51.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
81.8 46.9	0.0	-	-	0.0	-	-	-	19.4	-	0.0	-	-
83.3 40.6	0.0	-	-	0.0	-	-	-	37.9	-	0.0	-	-
83.3 42.0	0.0	-	-	0.0	-	-	-	43.9	-	0.0	-	-
83.3 51.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-

***Paralabrax* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 55.0	0.0	-	-	0.0	-	-	-	31.8	-	0.0	-	-
86.7 33.0	0.0	-	-	0.0	-	-	-	97.5	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	-	65.7	-	0.0	-	-

***Howella* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 100.0	4.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0 120.0	0.0	-	-	0.0	-	-	-	0.0	-	4.2	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	0.0	-	4.5	-	-
93.3 120.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-

Trachurus symmetricus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 80.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
86.7 60.0	0.0	-	-	51.9	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	112.9	-	-	-	0.0	-	0.0	-	-
86.7 100.0	0.0	-	-	20.3	-	-	-	0.0	-	0.0	-	-
86.7 110.0	0.0	-	-	10.0	-	-	-	0.0	-	0.0	-	-
90.0 35.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0 53.0	0.0	-	-	15.6	-	-	-	0.0	-	0.0	-	-
90.0 80.0	0.0	-	-	62.2	-	-	-	0.0	-	0.0	-	-
90.0 90.0	0.0	-	-	10.3	-	-	-	0.0	-	0.0	-	-
93.3 40.0	0.0	-	5.1	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Trachurus symmetricus (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 45.0	0.0	-	52.2	-	-	-	-	0.0	-	9.1	-	-
93.3 50.0	0.0	-	5.3	-	-	-	-	0.0	-	0.0	-	-
93.3 55.0	0.0	-	55.0	-	-	-	-	0.0	-	0.0	-	-
93.3 60.0	0.0	-	25.8	-	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	10.8	-	-	-	0.0	-	0.0	-	-
93.3 100.0	0.0	-	-	9.7	-	-	-	0.0	-	0.0	-	-

Anisotremus davidsoni

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 33.0	0.0	-	-	0.0	-	-	-	3.9	-	0.0	-	-

Xenistius californiensis

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 51.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
86.7 33.0	0.0	-	-	0.0	-	-	-	7.8	-	0.0	-	-

Cheilotrema saturnum

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 55.0	0.0	-	-	0.0	-	-	-	8.0	-	0.0	-	-

Genyonemus lineatus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 49.0	0.0	-	-	0.0	-	-	-	0.0	-	4.4	-	-
80.0 51.0	78.5	-	-	4.1	-	-	-	0.0	-	4.1	-	-
80.0 70.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3 40.6	4.1	-	-	0.0	-	-	-	0.0	-	70.4	-	-
86.7 33.0	15.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3 26.7	0.0	-	0.0	-	-	-	-	0.0	-	10.4	-	-

Seriphus politus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
81.8 46.9	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
83.3 40.6	0.0	-	-	0.0	-	-	-	3.2	-	0.0	-	-
83.3 42.0	0.0	-	-	0.0	-	-	-	13.2	-	0.0	-	-
83.3 55.0	0.0	-	-	0.0	-	-	-	23.9	-	0.0	-	-
86.7 33.0	0.0	-	-	0.0	-	-	-	11.7	-	0.0	-	-
90.0 28.0	0.0	-	-	0.0	-	-	-	30.7	-	0.0	-	-

TABLE 4. (cont.)

Girella nigricans

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-

Hermosilla azurea

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	33.0	0.0	-	-	0.0	-	-	-	7.8	-	0.0	-	-

Chromis punctipinnis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	55.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	0.0	-	5.4	-	-
83.3	40.6	0.0	-	-	0.0	-	-	-	3.2	-	4.1	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	8.8	-	29.1	-	-
83.3	55.0	0.0	-	-	0.0	-	-	-	8.0	-	0.0	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	7.8	-	0.0	-	-
86.7	35.0	0.0	-	-	0.0	-	-	-	18.8	-	0.0	-	-
86.7	40.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-
90.0	45.0	0.0	-	-	0.0	-	-	-	5.0	-	0.0	-	-
90.0	60.0	0.0	-	-	0.0	-	-	-	9.6	-	4.9	-	-
93.3	26.7	0.0	-	0.0	-	-	-	-	0.0	-	17.3	-	-
93.3	28.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3	35.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-

Halichoeres semicinctus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
81.8	46.9	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-

Oxyjulis californica

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	60.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
80.0	70.0	0.0	-	-	0.0	-	-	-	8.5	-	0.0	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	24.3	-	5.4	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	74.6	-	0.0	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	11.7	-	0.0	-	-
86.7	40.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-

TABLE 4. (cont.)

Oxyjulis californica (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 55.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7 70.0	0.0	-	-	0.0	-	-	-	9.2	-	0.0	-	-
90.0 30.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
90.0 37.0	0.0	-	-	0.0	-	-	-	10.3	-	0.0	-	-
90.0 60.0	0.0	-	-	0.0	-	-	-	9.6	-	0.0	-	-
93.3 28.0	0.0	-	0.0	-	-	-	-	9.6	-	0.0	-	-
93.3 45.0	0.0	-	83.5	-	-	-	-	0.0	-	0.0	-	-
93.3 50.0	0.0	-	5.3	-	-	-	-	0.0	-	0.0	-	-

Semicossyphus pulcher

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 42.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-

***Rathbunella* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-

Stichaeidae

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 49.0	4.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Plectobranchus evides

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 51.0	0.0	-	-	4.5	-	-	-	0.0	-	0.0	-	-
93.3 26.7	0.0	-	4.9	-	-	-	-	0.0	-	0.0	-	-

Chiasmodon niger

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7 80.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 100.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 110.0	0.0	-	-	5.0	-	-	-	4.5	-	0.0	-	-
93.3 55.0	0.0	-	5.0	-	-	-	-	0.0	-	0.0	-	-
93.3 100.0	0.0	-	-	0.0	-	-	-	3.4	-	0.0	-	-

***Hypsoblennius* spp.**

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0 51.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-

TABLE 4. (cont.)

Hypsoblennius jenkinsi

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 40.6	0.0	-	-	0.0	-	-	-	0.0	-	4.1	-	-
83.3 42.0	0.0	-	-	0.0	-	-	-	8.8	-	0.0	-	-
86.7 33.0	0.0	-	-	0.0	-	-	-	3.9	-	0.0	-	-
86.7 55.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-

Coryphopterus nicholsii

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 55.0	9.6	-	-	0.0	-	-	-	0.0	-	0.0	-	-
80.0 51.0	0.0	-	-	0.0	-	-	-	4.3	-	4.1	-	-
80.0 55.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
81.8 46.9	0.0	-	-	0.0	-	-	-	9.7	-	0.0	-	-
83.3 42.0	0.0	-	-	0.0	-	-	-	0.0	-	4.8	-	-
86.7 40.0	9.5	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7 50.0	8.3	-	-	4.3	-	-	-	0.0	-	0.0	-	-
93.3 35.0	0.0	-	5.5	-	-	-	-	4.8	-	0.0	-	-
93.3 45.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3 80.0	0.0	-	-	5.4	-	-	-	0.0	-	0.0	-	-

Ilypnus gilberti

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0 28.0	4.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Lepidogobius lepidus

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3 40.6	4.1	-	-	0.0	-	-	-	0.0	-	4.1	-	-
86.7 33.0	23.8	-	-	0.0	-	-	-	0.0	-	4.2	-	-
93.3 26.7	0.0	-	9.9	-	-	-	-	0.0	-	0.0	-	-

Lythrypnus dalli

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
81.8 46.9	0.0	-	-	0.0	-	-	-	0.0	-	10.8	-	-

Lythrypnus zebra

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 30.0	0.0	-	0.0	-	-	-	-	0.0	-	4.7	-	-

TABLE 4. (cont.)

Typhlogobius californiensis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3	30.0	0.0	-	5.4	-	-	-	-	0.0	-	0.0	-	-

Sphyraena argentea

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
81.8	46.9	0.0	-	-	0.0	-	-	-	14.5	-	0.0	-	-
83.3	40.6	0.0	-	-	0.0	-	-	-	50.6	-	0.0	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	149.3	-	0.0	-	-
83.3	90.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	35.1	-	0.0	-	-
86.7	100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	56.9	-	0.0	-	-
93.3	26.7	0.0	-	0.0	-	-	-	-	4.0	-	0.0	-	-

Nealotus tripes

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3	90.0	0.0	-	-	0.0	-	-	-	4.9	-	0.0	-	-

Scomber japonicus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	40.6	0.0	-	-	0.0	-	-	-	6.3	-	0.0	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	57.1	-	0.0	-	-
83.3	55.0	0.0	-	-	0.0	-	-	-	23.9	-	0.0	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	27.3	-	0.0	-	-
86.7	35.0	0.0	-	-	0.0	-	-	-	9.4	-	0.0	-	-
86.7	60.0	0.0	-	-	15.6	-	-	-	0.0	-	0.0	-	-
86.7	70.0	0.0	-	-	10.3	-	-	-	0.0	-	0.0	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	35.0	-	0.0	-	-
90.0	45.0	0.0	-	-	0.0	-	-	-	5.0	-	0.0	-	-
93.3	28.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-
93.3	40.0	0.0	-	46.3	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	5.3	-	-	-	-	0.0	-	0.0	-	-

Icichthys lockingtoni

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
90.0	53.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Tetragonurus cuvieri

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	100.0	0.0	-	-	0.0	-	-	-	0.0	-	9.2	-	-
86.7	80.0	0.0	-	-	0.0	-	-	-	0.0	-	13.3	-	-
86.7	90.0	5.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
90.0	80.0	0.0	-	-	0.0	-	-	-	0.0	-	9.7	-	-
90.0	90.0	17.9	-	-	0.0	-	-	-	4.6	-	4.4	-	-
90.0	110.0	0.0	-	-	0.0	-	-	-	4.8	-	4.7	-	-
90.0	120.0	4.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	70.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
93.3	100.0	10.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Citharichthys spp.

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	0.0	-	-	0.0	-	-	-	69.4	-	4.4	-	-
76.7	51.0	0.0	-	-	0.0	-	-	-	137.7	-	22.7	-	-
76.7	60.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
76.7	70.0	0.0	-	-	0.0	-	-	-	4.7	-	0.0	-	-
80.0	51.0	4.4	-	-	0.0	-	-	-	43.2	-	16.5	-	-
80.0	55.0	0.0	-	-	0.0	-	-	-	37.7	-	109.9	-	-
80.0	70.0	4.9	-	-	0.0	-	-	-	0.0	-	9.9	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	392.8	-	43.1	-	-
83.3	40.6	0.0	-	-	4.2	-	-	-	22.1	-	0.0	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	61.5	-	0.0	-	-
83.3	51.0	0.0	-	-	0.0	-	-	-	4.3	-	4.3	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	70.2	-	0.0	-	-
86.7	35.0	0.0	-	-	0.0	-	-	-	0.0	-	9.4	-	-
86.7	40.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
90.0	28.0	0.0	-	-	4.9	-	-	-	0.0	-	19.4	-	-
90.0	37.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0	70.0	20.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	45.0	0.0	-	5.2	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	5.3	-	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Citharichthys sordidus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	51.0	0.0	-	-	0.0	-	-	-	113.4	-	53.1	-	-
76.7	55.0	38.4	-	-	13.9	-	-	-	0.0	-	9.2	-	-
76.7	60.0	0.0	-	-	4.7	-	-	-	33.3	-	13.8	-	-
76.7	70.0	4.9	-	-	0.0	-	-	-	0.0	-	4.8	-	-
76.7	80.0	9.4	-	-	4.7	-	-	-	0.0	-	0.0	-	-
76.7	90.0	0.0	-	-	4.8	-	-	-	-	-	0.0	-	-
80.0	51.0	0.0	-	-	0.0	-	-	-	4.3	-	24.8	-	-
80.0	55.0	0.0	-	-	0.0	-	-	-	131.8	-	36.6	-	-
80.0	60.0	0.0	-	-	3.8	-	-	-	0.0	-	0.0	-	-
80.0	70.0	9.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	24.3	-	10.8	-	-
83.3	55.0	4.6	-	-	0.0	-	-	-	0.0	-	14.1	-	-
83.3	60.0	0.0	-	-	4.1	-	-	-	0.0	-	0.0	-	-
83.3	70.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	35.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	40.0	14.3	-	-	4.7	-	-	-	0.0	-	0.0	-	-
86.7	45.0	4.8	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	60.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	0.0	-	4.9	-	-
90.0	30.0	0.0	-	-	10.7	-	-	-	0.0	-	0.0	-	-
90.0	37.0	0.0	-	-	9.8	-	-	-	0.0	-	0.0	-	-
90.0	70.0	40.7	-	-	0.0	-	-	-	0.0	-	0.0	-	-
93.3	35.0	0.0	-	33.3	-	-	-	-	0.0	-	0.0	-	-
93.3	40.0	0.0	-	10.3	-	-	-	-	0.0	-	0.0	-	-
93.3	50.0	0.0	-	5.3	-	-	-	-	0.0	-	0.0	-	-
93.3	60.0	4.8	-	0.0	-	-	-	-	0.0	-	0.0	-	-

Citharichthys stigmaeus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	51.0	0.0	-	-	0.0	-	-	-	16.2	-	15.2	-	-
76.7	55.0	9.6	-	-	0.0	-	-	-	0.0	-	27.5	-	-
76.7	60.0	0.0	-	-	4.7	-	-	-	19.0	-	13.8	-	-

TABLE 4. (cont.)

Citharichthys stigmaeus (cont.)

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	80.0	0.0	-	-	0.0	-	-	-	4.2	-	0.0	-	-
80.0	51.0	0.0	-	-	0.0	-	-	-	0.0	-	12.4	-	-
80.0	55.0	0.0	-	-	0.0	-	-	-	0.0	-	9.2	-	-
80.0	60.0	0.0	-	-	3.8	-	-	-	55.7	-	0.0	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	9.7	-	10.8	-	-
83.3	60.0	0.0	-	-	0.0	-	-	-	18.1	-	4.3	-	-
86.7	35.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	40.0	14.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	45.0	4.8	-	-	0.0	-	-	-	0.0	-	5.2	-	-
86.7	60.0	0.0	-	-	0.0	-	-	-	10.9	-	0.0	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	13.1	-	0.0	-	-
90.0	37.0	0.0	-	-	0.0	-	-	-	10.3	-	4.9	-	-
90.0	45.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
93.3	60.0	0.0	-	0.0	-	-	-	-	0.0	-	9.9	-	-

Hippoglossina stomata

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	51.0	0.0	-	-	0.0	-	-	-	0.0	-	4.1	-	-
80.0	55.0	0.0	-	-	0.0	-	-	-	0.0	-	4.6	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	4.4	-	0.0	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	3.9	-	4.2	-	-
86.7	35.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
90.0	28.0	0.0	-	-	0.0	-	-	-	8.8	-	0.0	-	-

Paralichthys californicus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	51.0	17.4	-	-	0.0	-	-	-	0.0	-	0.0	-	-
83.3	40.6	8.3	-	-	0.0	-	-	-	15.8	-	4.1	-	-
83.3	51.0	0.0	-	-	0.0	-	-	-	4.3	-	0.0	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	3.9	-	0.0	-	-
90.0	28.0	0.0	-	-	4.9	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Xystreurys liolepis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	40.6	0.0	-	-	0.0	-	-	-	0.0	-	12.4	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	0.0	-	4.2	-	-
93.3	26.7	0.0	-	0.0	-	-	-	-	0.0	-	13.8	-	-

Eopsetta jordani

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	45.0	4.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	53.0	5.2	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Lyopsetta exilis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	60.0	0.0	-	-	4.7	-	-	-	0.0	-	0.0	-	-
76.7	70.0	4.9	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	40.0	0.0	-	-	9.5	-	-	-	0.0	-	0.0	-	-
86.7	50.0	8.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-

Microstomus pacificus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
80.0	60.0	0.0	-	-	3.8	-	-	-	0.0	-	0.0	-	-
80.0	80.0	10.3	-	-	0.0	-	-	-	0.0	-	0.0	-	-
86.7	35.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
86.7	80.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-

Parophrys vetulus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	60.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-

Pleuronichthys coenosus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	50.0	0.0	-	-	4.3	-	-	-	0.0	-	0.0	-	-

Pleuronichthys ritteri

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
83.3	40.6	0.0	-	-	0.0	-	-	-	0.0	-	4.1	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	3.9	-	0.0	-	-

TABLE 4. (cont.)

Pleuronichthys verticalis

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	0.0	-	-	0.0	-	-	-	0.0	-	4.4	-	-
81.8	46.9	0.0	-	-	0.0	-	-	-	4.8	-	0.0	-	-
83.3	42.0	0.0	-	-	0.0	-	-	-	13.2	-	0.0	-	-
86.7	33.0	0.0	-	-	0.0	-	-	-	15.6	-	4.2	-	-
93.3	26.7	0.0	-	0.0	-	-	-	-	0.0	-	3.5	-	-

Symphurus atricaudus

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
86.7	33.0	0.0	-	-	0.0	-	-	-	3.9	-	0.0	-	-
86.7	40.0	0.0	-	-	0.0	-	-	-	0.0	-	4.7	-	-
86.7	45.0	0.0	-	-	0.0	-	-	-	5.0	-	0.0	-	-
93.3	30.0	0.0	-	0.0	-	-	-	-	14.0	-	0.0	-	-

Disintegrated fish larvae

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7	49.0	0.0	-	-	4.8	-	-	-	7.7	-	0.0	-	-
76.7	55.0	28.8	-	-	0.0	-	-	-	0.0	-	0.0	-	-
76.7	80.0	0.0	-	-	0.0	-	-	-	4.2	-	0.0	-	-
80.0	70.0	14.8	-	-	0.0	-	-	-	8.5	-	0.0	-	-
80.0	90.0	9.8	-	-	4.7	-	-	-	0.0	-	0.0	-	-
80.0	100.0	0.0	-	-	0.0	-	-	-	4.5	-	0.0	-	-
83.3	42.0	0.0	-	-	5.1	-	-	-	0.0	-	0.0	-	-
83.3	51.0	26.7	-	-	4.5	-	-	-	0.0	-	0.0	-	-
83.3	70.0	5.0	-	-	10.6	-	-	-	0.0	-	0.0	-	-
86.7	50.0	8.3	-	-	4.3	-	-	-	0.0	-	0.0	-	-
86.7	55.0	0.0	-	-	5.3	-	-	-	0.0	-	0.0	-	-
86.7	60.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
86.7	90.0	5.0	-	-	0.0	-	-	-	0.0	-	0.0	-	-
90.0	45.0	0.0	-	-	4.8	-	-	-	0.0	-	0.0	-	-
90.0	80.0	0.0	-	-	10.4	-	-	-	0.0	-	0.0	-	-
93.3	35.0	0.0	-	5.5	-	-	-	-	0.0	-	0.0	-	-
93.3	90.0	0.0	-	-	5.0	-	-	-	0.0	-	0.0	-	-

TABLE 4. (cont.)

Disintegrated fish larvae (cont.)

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
93.3 100.0	0.0	-	-	0.0	-	-	-	3.4	-	0.0	-	-
93.3 110.0	0.0	-	-	0.0	-	-	-	7.3	-	0.0	-	-

Unidentified fish larvae

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
76.7 100.0	0.0	-	-	0.0	-	-	-	570.6	-	0.0	-	-
83.3 90.0	0.0	-	-	5.2	-	-	-	0.0	-	0.0	-	-
93.3 28.0	0.0	-	0.0	-	-	-	-	4.8	-	0.0	-	-

PHYLOGENETIC INDEX TO TABLE 4

ALPHABETICAL INDEX TO TABLE 4

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